EMBRY-RIDDLE
AERONAUTICAL UNIVERSITY

Eleventh Annual Symposium on Teaching & Learning Effectiveness

Presented by the Faculty of Extended Campus
November 5, 2003

Table of Contents

Introduction

Our topic for Teaching and Learning Effectiveness Symposium-2003 centers on **maximizing the student learning environment**. The Faculty Development and Benefits Committee was particularly interested in receiving papers related to the methods and techniques utilized in creating a positive learning environment in a variety of settings and course deliveries.

Through the years, much has been written and discussed regarding the most appropriate teaching methodology for a given academic setting. Recently, there has been a gradual movement within academe towards an awareness of the learning of the student vice the teaching of the faculty member. This awareness and the tools to construct a positive learning environment for our students have been our twin foci.

Within the Extended Campus of Embry-Riddle, the combination of classroom settings and delivery timetables is so varied that the establishment of a positive learning environment takes on a particularly important meaning. Most of our courses last less than ten weeks, and are seemingly nearly over even as we start each new term. In this challenging andragogical environment populated by industry-successful working adult students, the focus on learning vice teaching becomes even more critical than in more traditional collegiate classroom settings.

The Faculty Development and Benefits Committee of Embry-Riddle Aeronautical University hopes that the information and techniques set forth in these papers will assist us all in becoming better learning facilitators. We sincerely hope that you will find these ideas from your colleagues both helpful and enjoyable.

These papers were selected by a jury of peers, in blind review. The views expressed in the papers presented are those of the authors. These views do not necessarily reflect the views of the Embry-Riddle Extended Campus Faculty Development and Benefits Committee, the Extended Campus administration or the University.

Jury:
Dr. Ronald Clark
Dr. Earl Wheeler
Dr. Ron Fitzgerald
Dr. Alan Bender
Dr. Bruce Rothwell
Dr. Dan Johnson

Editor and host: Dr. Ronald Clark
Proceedings production: Tracy Singer
Nancy Vanderschaaf
Karen Rose
Facilities/arrangements: Lil Hickman and
Nancy Vanderschaaf

Maximizing the Student Learning Environment:

A Positive Learning Environment for Evening and Weekend Students

Melvin J. Anderson, Ph.D.

June 2003

Abstract

This paper is not about the physical classroom, but about adult students approaching the difficult work that is learning. It is not about the classroom conditions schools provide, but about the actions teachers take that define the classroom learning environment.

Where there was once only the traditional classroom with chalkboards, tables and chairs, there are now two new learning environments: the upgraded classroom environment and the distance learning environment. The paper is primarily concerned with teaching in the modern classroom and creating a proper learning environment for students who come to class for long evening sessions or all-day weekend sessions, and who come from the ongoing postmodern culture in which entertainment seems to be omnipresent.

In searching for the proper classroom learning environment, teachers usually find that the challenges lie not so much in optimizing the physical learning environment, but in how to shape the *emotional* learning environment that determines how students feel and think, or more importantly, how well teachers influence how students feel and think. Creating a proper learning environment hinges on how teachers develop relationships that make students want to come to class, pay attention, participate and seek to understand the knowledge that is available. There are many obstacles to this endeavor.

The paper demonstrates that competent leadership is the primary process teachers must implement to effect an environment for adult learning. Virtually all of the challenges to successful

classroom teaching can be approached effectively using leadership skills that most teachers already possess but have underutilized because of various conditions involving the physical classroom and academic administration matters. By focusing on the cultural and attitudinal commonalities among students, a teacher who exercises sensible leadership methods will be able to bring the vast majority of students into a teamwork-based learning experience.

A checklist of fourteen proven straightforward actions for teachers culminates the paper, concluding that the key ingredient to an effective learning environment in the modern classroom is a good teacher who employs a leadership process that motivates students to learn despite long sessions, the distractions of the ongoing culture and numerous outside contentions for students' time.

Maximizing the Student Learning Environment:

A Positive Learning Environment for Evening and Weekend Students

Melvin J Anderson, Ph.D. June 2003

This paper is not about the physical classroom, but about adult students approaching the difficult work that is learning. It is not about the physical classroom conditions schools provide, but about the actions teachers take within it. It begins by examining the relationships between students and teachers that define the learning environment of the classroom.

First things first: Students must see that their work will lead to valuable outcomes. No amount of entertainment will replace that. Even before a teacher presents the course material, students develop perceptions about the learning environment that will affect their emotions, attitudes and actions throughout the session and the term. Many educators, including University of Edinburgh (U.K.) professor of cognitive psychology Martin Westhead (2002), acknowledge that a properly structured learning environment can allow the learner to focus on the material being presented, and that while some of the organizing techniques educators use are obvious, most are learned and developed over time.

In Search of a Proper Learning Environment

The academic world is changing fast, at least in appearances. Where there was once only the classroom learning environment, we now have two new learning environments: the "upgraded" traditional classroom environment and the innovative new distance learning environment.

In many respects, little seems to remain of the old ways of teaching college courses, and yet basic truths aren't going away; the academic content of most college courses moves ahead very gradually. Most textbook writers, publishers, course designers and teachers prefer to evaluate change carefully out in the "real world" before jumping in feet-first and adopting

educational fads that may soon fall by the wayside. Change does not always come quickly to academe, and for good reason.

At the same time, there is dramatic—perhaps overwhelming—change taking place in what teachers in traditional classrooms once considered their protected turf: the classroom learning environment.

That Was Then . . .

Ever since Socrates, the university professor has usually maintained a powerful influence on the nature of teaching and the characteristics of the learning environment where teaching occurred. Teachers of past eras were awarded great respect for their knowledge and skills; in some cultures today, that respect is still evident. Whether in the early one-room schools of rural America or the ivied halls of great universities, teachers of the past inspired learning in the non-changing classroom environments in which most of us grew up and felt comfortable in the process of observing, listening, thinking, speaking and learning.

Teachers of the past conveyed understanding and knowledge to their students in very modest surroundings that contained little more than desks, chairs, dusty chalkboards, bright natural lighting from wide windows, and perhaps a few large wall charts. Teachers and students alike were comfortable in that environment; it was predictable and it provided what they considered a proper forum for lecturing, discussion and experimenting. Even though few got A grades, student morale was good. Teacher enthusiasm was matched by student interest and performance. Open disagreement with the teacher was neither acceptable nor common. In that bland physical environment there was always a healthy, non-adversarial *emotional environment.* That was then—up until the beginning of what is commonly called the "postmodern era."

And This Is Now.

Everything has changed. The preceding cultural era—the so-called "modern era" of the past two centuries—has all but ended. During that earlier time, man developed a belief in reason, sober analysis, appropriate standards and values, and the notion that higher education formed the intellectual center of our culture. But as previously noted, that was then--and this is now. We have begun the "postmodern era" and it is here to stay.

We are now engulfed in an intellectual and cultural revolution in which a good-natured idiot, Forrest Gump, earns his actor-portrayer over 30 million dollars and in which Star Trek, angels and UFOs make for best-selling books and movies. People really fly to the moon and wars are conducted in real time on home TV screens. Most of Jules Verne's fantasies have become reality; fantasy and reality seem to have merged and both have become very entertaining. Students who grew up on *Sesame Street* and MTV place a very high value on being entertained. In one survey, half the students polled chose *entertainment* as the trait they valued most in a college teacher (Sacks, 1997, p. 55).

In the classroom, the academic culture has also undergone change. Where students once walked into the classroom wearing team sweaters and Eton jackets for 50-minute daytime sessions three or four times a week, they now arrive wearing work and leisure clothes—everything from business suits, military uniforms and flight suits to blue jeans and cutoff shorts--for four- and five-hour evening or all-day weekend sessions. The clothing isn't important, but the hours and the conditions under which these students come to class is both important and different from what the learning environment used to be. However, it's not so much about the tremendous changes in the physical classroom environment that must be reckoned with today. It's about the changes in the *emotional environment* that are precipitated by both the conditions under which these students come to class and the culture of which they are very much a part.

That Other Learning Environment

From the teachers' perspective, one could go on for weeks or months discussing "the learning environment," and never actually talk about a real classroom. A recent search on the worldwide web using the keywords *learning environment* revealed nearly three million listed sites under that category! Well over 90 percent of these references are not about a physical classroom environment with walls and desks, but about the literally millions (yes, millions!) of computer programs and web sites dedicated to the distance learning environment or its many aliases that include the "virtual learning environment," "multimedia learning environment," "virtual school," and "cyberschool." We have WebCT, Blackboard and many other online teaching tools to choose

from. Anyone with a personal computer can now create and market yet another version of distance learning. Anyone trying to research *learning environment* on the worldwide web is likely to think that virtually all higher education has been converted to online instruction. It is not.

This paper is not about distance learning, however. It is about the places where most students still attend college classes—the college classrooms at campuses and learning centers. No matter how much notice and interest are given the worldwide web and the electronic classroom, the fact remains that people still come to real classrooms to see and hear real professors lecture, discuss course material, conduct experiments and administer oral and written exams. There is something very important still going on where teachers can look students in the eye and differentiate between a glow and a glaze.

The Real Classroom

The "real" classroom still has walls and desks. But it has been endowed with new tools intended to create a better learning environment that offers students a richer assortment of data and information. We now have computers in the classroom, LCD projectors, videos, TVs and a handful of other audio and video devices that transform the drab physical classroom environment into a colorful display aimed at fulfilling the old Chinese adage that "one picture is worth a thousand words." Whiteboards and colorful markers have long since replaced most dusty chalkboards. PowerPoint slides with transitions, animations and sound effects provide a brilliant array of templates and formats. Classroom lighting to enhance on-screen displays is also gaining popularity, and teachers are learning how to use projected information interactively.

For students who come directly from work--hungry and tired--to attend a five-hour evening session, the teacher now has a fair chance of holding their attention and engaging them in interactive discourse and perhaps participation. Many teachers today would shudder at the thought of holding a five-hour session without these versatile (but expensive) and entertaining tools. But at least as many teachers may have reached their threshold of tolerance for new teaching tools. It appears we have indeed attained a stable balance between drabness and titillation. Everyone—student and teacher alike—is familiar with what is available and knows how to use the "electronic classroom" for learning and teaching.

The Classroom *Emotional* Environment

However they are used, the various elements of the *physical* learning environment clearly play a role in how a teacher develops the *emotional* learning environment that always exists and is even more critical to keeping students tuned in for long hours of mental work when they would rather be somewhere else. Sadly, comparatively little has been written about the emotional aspects of the learning environment. It is nevertheless obvious to anyone teaching in today's college classroom that there is a prevailing attitude among students that cannot be ignored.

Teachers must be aware of the emotional environment that exists in their classrooms every minute of every hour and be able to influence the human factors that affect learning. We can review the preceding in three simple observations:

1. The typical classroom learning environment doesn't really need any more new physical upgrades. These will come along as new or better such devices are made available, but most of the physical changes will likely be in degrees of performance, such as brighter projectors, better lighting and softer chairs. Therefore . . .
2. To improve the learning environment, we must now look toward the emotional environment that affects what students think and feel about being in the classroom. What people think and feel depends on their perceptions. No two people view reality and arrive at the same perceptions because perceptions depend on assumptions influenced by past experience, attitudes and personal needs--external factors that are out of a teacher's ability to control. But a teacher can still identify students' feelings by observing their attitudes in the classroom. Consequently . . .
3. Our ability to create a proper learning environment hinges on how well we are able to assess how our students feel and think, and then respond to them in ways that make them want to come to class, pay attention, participate and seek to understand the knowledge that is available.

A few authors have begun to describe how the external environment—the prevailing American culture—affects the learning process in this postmodern era. The students are different now; they are sharp and capable, but they bring with them the experiences of their primary and secondary educations and the greater culture to which they belong. Their music reflects both anger and the desire to rebel, and yet they conform closely to the postmodern culture's trends.

We might refer to them as "Generation X," but we must never underestimate their abilities and their potential to be enthusiastic about learning. Those who went to war in Iraq recently proved that with the right motivation, these young adults can learn difficult tasks and perform under dangerous and uncomfortable conditions. If anything, it is we who should learn from them about what it takes to create the right learning environment. We must therefore begin by learning what our students expect.

Matching the Learning Environment to the Existing Culture

Our students grew up being entertained sixteen hours a day. Grade schools and high schools have learned how to compete with big screen TV, video games and discordant music with angry lyrics. The learning environment in most of these schools includes an ample assortment of classroom audiovisual tools designed to enhance learning. But the children didn't bring these tools to the classroom; the schools did, and the children became accustomed to them. When these children head for college, they fully expect a similar physical learning environment. We must remember that the students know what they like or think is better for their individual learning experiences, even though the schools and teachers make the decisions about it.

My Culture Is Your Culture

For the most part, we are in the same culture as our students are in, whether we like it or not. It is not within our capacity to change it, and so we must recognize it and build on it rather than try to fight it. Perhaps, like fish who cannot see the water they swim in, we don't see the prevailing culture because we're immersed in it. When we fail to recognize what that culture is, we run the risk of being described as "out of it," or "just don't get it."

For too long, students have regarded themselves as "customers" who believe that since they spend the money and the time, they should have more to say about the rigor of a course or even what grading standards should apply. Teachers are often willing to bend to this "consumerism" view, not only to avoid conflict with students, but to avoid the wrath of administration when an unsatisfied student drops out. Students must be made to realize and accept that the marketing model doesn't extend to academic performance and grading.

Additionally, we can no longer ignore the distance learning world, even in our traditional classrooms. Many of today's students already have experience in using computers for learning; they are at least familiar with distance learning and they probably like the convenience of learning at their own speed and when they have time. For some, the traditional classroom's rigid schedules may seem like a forced intrusion into their lives that is revealed in how they react, sit, dress and participate. As more students experience online courses, traditional classroom courses are likely to be more difficult to conduct.

Teachers' Real Strengths

Most teachers are not trained psychologists. Our individual approaches to a better learning environment must therefore not rely on complex theories about learning or teaching. Whatever a teacher does to create a positive learning environment will have to be consistent with the students' vision for a good learning environment that is based on what they bring to the classroom emotionally and culturally.

The truth is that our strengths are in the knowledge of the disciplines we teach, along with some talent and desire for imparting that knowledge to others. But there are no formal standards or measurements for teaching methods and style; what works for one teacher doesn't necessarily work for another. It's all about relationships and how teachers manage them. Along with professional knowledge, teachers are also responsible for transferring knowledge to people who are still learning how to learn and who like to be entertained. Like it or not, today's teachers must recognize that to manage a better learning environment, they will have to accept a new role in the classroom. Is there an overlooked proven approach, or must we concoct yet another "flavor of the month?"

Organizational Classroom Leadership

We are far beyond the point of having to discover or invent new and exciting ways to create a positive environment for learning in the classroom. We already possess the needed skills; we only have to realize where our strengths lie and identify what students expect.

Even though college students enter the classrooms as individuals, their emotional and cultural backgrounds are very similar to one another. Nevertheless, they do not automatically become a learning organization. Learning is an individual, personal event, even when students learn in groups. However, group learning tends to be unbalanced; one student may learn while another may be either overwhelmed or bored. People as individuals don't support one another very well, nor do members of an undefined group. We see this in businesses; certain people tend to dominate and create informal group structures called "good ole boy networks." These are undefined groups that lack accountability as well as authority, and they usually fail to satisfy formal organization needs for a cooperative, enthusiastic work force. Moreover, there is a tendency for such group activity to address only situation-specific issues and gravitate to the level of a complaint department that runs mostly on emotional responses like "ain't it awful?" This is not how a learning organization functions.

A Learning Organization

A learning organization is (by definition, at least) organized. There are designated activities and measured outcomes for the individuals in the organization. In *The Fifth Discipline*, author Peter Senge (1990) holds that individual learning is enhanced greatly when it happens in a structured and interactive manner. The individual supports the organization and the organization supports the individual as they actually help each other learn. But it only happens when there is formal organization with specified outcomes and, above all, leadership. In an informal group without leadership, the same individuals would achieve very little. The key word is leadership.

Classroom leadership is much more than being in charge and getting students to recognize the teacher's authority based on grades. In fact, grade inflation has diluted that source of authority; teachers must now rely on something else. Even excellent knowledge may not serve a teacher's leadership needs well. Students today have access to enormous bases of data and information through books and the internet that may outshine teachers' specific backgrounds. Today's search and research tools can make students better students, but these tools do not directly enhance teachers' ability to lead them to knowledge. Likewise, impressive and entertaining audiovisual tools may enhance the delivery of knowledge, but they don't create a

leadership position for the teacher who wields them. Therefore, another approach to leadership is required.

Capitalize on the Stronger Similarities

Classroom teachers do not have enough time or ideas to deal with each student's individualities. Therefore, successful classroom leadership requires the ability to capitalize on the stronger similarities of culture and emotional need among students. Teachers must be able to bring students into an organizational relationship wherein their cultural similarities are exploited to achieve outcomes that they recognize as beneficial to each individual. Otherwise, they will revert to their differing personal needs and form unorganized groups or clusters whose behavior is unpredictable and possibly rebellious. In other words, classroom leadership means bringing them together using their commonalities, in order to avoid divergence because of their differences.

However, there is a difference between theory and process. Classroom leadership requires some straightforward leadership methods that most teachers already know how to do but haven't been utilizing--specific actions—that can bring the vast majority of students in any classroom together in a cooperative learning effort. These methods focus on getting students to work together through leadership and recognition of the learning goals and commonalities they possess. If this makes sense to the teachers, they will try it. And even if only some of these methods prove useful or successful for a teacher, they will still inspire a good emotional environment for learning. They are things that all teachers know how to do. We simply have to make them part of a continuous process.

A Continuous Leadership Process

The following checklist describes straightforward actions for exploiting the cultural commonalities of college students in a process that relies on the leadership abilities that most teachers already possess. Together, these actions can bring students into an organizational framework for learning that they will perceive as a very positive learning environment:

1. As much as possible, cause students to learn through discovery and invention. It takes too long to share knowledge with them and then have to persuade students to accept it.

2. Use Socratic teaching methods. Ask questions of the entire class, but look for opportunities to draw individual students into organized discussion. Never allow this method to cause one student to feel like s/he is being "picked on."

3. Work through organizations, not groups, individuals or situations. It takes too long to handle every individual problem, and left unresolved, issues devolve into unmanageable situations.

4. Keep the student organizations smaller than the entire class. The whole-class organization should only be used for Socratic lecture periods; everything else should be organized into teams small enough for students to collaborate without allowing slackers to hide. Two or three students per organization usually works best.

5. Specify small-team term projects where feasible. These will generate deeper, wider research as well as experience in subdividing work and sharing presentation load. Where there are common goals and no places to hide, students tend to rise to the occasion and reinforce each other's learning. They will also detect and curb others' use of fanciful or plagiarized sources of information.

6. For very small class sizes, assign every student the task of primary presenter and another student as assistant/backup presenter. The same team could then reverse roles with the backup becoming the presenter for a second report. Thus, an unforeseen absence will not result in a blank spot in the session, and students will still collaborate to accomplish the project.

7. Make the term project a major part of the course grade—so they don't trivialize it. Have students deliver their reports orally using audiovisual aids. You'll probably be surprised to note that the rest of the students respond better to a presenting student than they do to some of your own lecture questions--this is ample proof that the organizational leadership concept is valid.

8. Develop a way to get students to take competent notes. It has been noted by many teachers that students seem to have lost the art of traditional note taking. They expect handouts of the course materials including PowerPoint slides, which they will annotate during discussions, lectures and audiovisual presentations. Project slides that leave room for added comment and if possible, leave some detail out of the handout version to encourage added material from the slides and discussions.

9. Use simulation software that can be assigned to teams of students. Many textbooks now include CD-ROM software with operational or learning simulations that students can use cooperatively to create solutions for in-class presentation on LCD projectors. Remember that doing is learning.

10. When a formal term project is not the right thing for a course, require that students create and present chapter reviews using the team concept. To keep the course topics current, have them include a number of reviews of recent articles from relevant publications and online sources.

11. Avoid "canned" case study term projects as much as possible. Emphasize research projects that examine course concepts and methods in the real world. Allow students to test the validity of their ideas in actual application. This will reduce the tendency for students to feed back what they think the teacher wants to hear. Real-world information is much more useful than a haystack filled with data bytes, and it tends to be very surprising and worthy of discussion.

12. Teachers have a responsibility not only for sharing knowledge about course topics, but also about teaching students how to think. Make sure students know that the answers are usually not as important as learning how to ask the right questions and arriving at true cause-and-effect analysis.

13. Establish the rules of engagement at the start of the term. Let students know that what they bring through research and discussion will constitute a major part of the knowledge being presented. Let them know that sex, religion and politics are not suitable topics for comment or discussion. This includes citing sources or works by authors that some students might consider contrary to their political or religious beliefs. Reiterate the school policies and good sense concerning sexual harassment and other social issues. Above all, never criticize the current trends in music!

14. Remember at all times that the teacher is the leader, even when s/he delegates leadership to students for team activities. Students will not respect the teacher who constantly backs down on assignments, attentiveness, attendance and grades. Without respect, the teacher can no longer lead. If students sense that a teacher fears the student course critiques, they know s/he

can be intimidated. Finally, make sure the students know you are their ally when outside issues disturb the learning process.

Conclusions

Academics and authors agree that the college classroom learning environment is critical to a successful learning experience, especially when students attend long evening and weekend sessions. The physical classroom offers teachers some flexibility, but it is usually beyond teachers' ability to change. However, the classroom *emotional* environment is entirely within teachers' power to use if they implement a few simple leadership principles and methods.

In the current academic climate, much is being said about teachers' academic credentials. Accrediting agencies are bringing greater pressure on schools to verify teacher credentials and apply rigid certification methods for each teacher for each course. But there is still the need to motivate teachers about the intangible aspects of classroom teaching. Schools must never become complacent just because their faculties are duly certified, and schools should never allow administrative chores to interfere with the actual delivery of courses. In short: let the teachers teach.

University of California professor Dr. Clifford Stoll (1996), author of *Silicon Snake Oil*, asserts: "The most important part of every classroom is a good teacher and motivated students." He further maintains that there is no work-free learning and no "smart icon" on the computer screen—there is no shortcut to wisdom. He clearly decries any aspect of a classroom that gets between the student and teacher.

The learning environment is also the teaching environment. It's not all student-focused; effective leadership inspires a good learning organization in which teachers can feel good about what they do. When teachers feel good about their work, students perceive their confidence and concern, and are willing to follow.

Let us continue to lead and teach.

References

Sacks, P. (1997). *Generation X goes to college.* Peru, Illinois: Open Court Publishing Company,

Senge, P. M. (1990). *The fifth discipline: Mastering the five practices of the learning organization.* Toronto: Currency Doubleday/ Bantam Doubleday Dell Publishing Group Inc.

Stoll, C. (1996). *Silicon snake oil: Second thoughts on the information highway.* London: Pan Books.

Westhead, M. D. (2002). *EPIC: Building a structured learning environment.* University of Edinburgh, U.K, Retrieved May 14, 2003 from h*ttp://www.epcc.ed.ac.uk/t+lwkshp/ submissions/martin.html.*

Annotated Bibliography

Books:

Harvey, D. (1989). *The condition of postmodernity: An enquiry into the origins of cultural change.* Oxford: Blackwell Books. A review of the cultural changes that affect, among other things, the relationships between students and teachers in the postmodern era.

Himmelfarb, G. (1999). *The two cultures: a moral divide.* New York: A. A. Knopf. A noted historian and cultural critic argues that many of the ideas of the 1960s counterculture have become part of America's dominant culture, and that the nation is the worse for it. She advocates a return to civility and sees signs that there is an insurgent movement on the side of morality and virtue.

Lyotard, J. F. (1984). *The postmodern condition: a Report on knowledge.* Minneapolis: University of Minnesota Press. This book explores science and technology, and makes connections between cultural, educational and political trends.

Perelman, L. (1992). *School's out.* New York: William Morrow. The author offers some alarming predictions about the survivability of traditional classroom environments in the new "electronic classroom" era.

Reisman, D. (1981). *On higher education: The academic enterprise in an era of rising student consumerism.* San Francisco: Jossey-Bass. A sociological view of the problems of treating students as consumers.

Sacks, P. (1997). *Generation X goes to college.* Peru, Illinois: Open Court Publishing Company. A journalist-turned-professor describes postmodern scholars wearing bored looks and baseball caps turned backwards expecting high grades just for showing up.

Senge, P. M. (1990). *The fifth discipline: Mastering the five practices of the learning organization.* Toronto: Currency Doubleday/ Bantam Doubleday Dell Publishing Group Inc. Pathbreaking book draws on science, spiritual wisdom and psychology.

Stoll, C. (1996). *Silicon snake oil: Second thoughts on the information highway.* London: Pan Books. The first book that intelligently questions where the internet is leading us.

Articles and papers:

Mansfield, H. C. (2001, April 6). Grade inflation: It's time to face the facts. *The Chronicle of Higher Education.* This Harvard University professor offers some insight into the internal aspects of this phenomenon and some thoughts that bring out the seriousness of the problem.

Schneider, A. (1998, March 27). Insubordination and intimidation signal the end of decorum in many classrooms. *The Chronicle of Higher Education.* A review of the causes and effects of growing problems in evaluating student performance.

Michaels, J. W. & Smillie, D. (2000, May 15,). Webucation--Some smart investors are betting big bucks that Peter Drucker is right about the brilliant future of online adult education. *Forbes Magazine.* A challenging discussion of Drucker's analysis of higher education, the "e-learning" race, and the differences between the various learning environments.

Lenzner, R. & Johnson, S.S. (1997, March 10). Seeing things as they really are--College education as we know it is threatened (Peter Drucker). *Forbes Magazine.* Another strong warning that higher education faces formidable challenges to its very survival.

Prowse, M. (1995, November 20). Endangered species. Modern electronic technology could mean that the days of academics at higher-education institutions are numbered. *Financial Times.* A hard-hitting discussion about changing academic environments.

Westhead, M. D. (2002). *EPIC: Building a structured learning environment.* University of Edinburgh, U.K, Retrieved May 14, 2003 from h*ttp://www.epcc.ed.ac.uk/t+lwkshp/submissions/martin.html.* Article provides strong support for the importance of leadership in providing a structured learning environment.

Maximizing the Distance Education Learning Environment:

Using Technology for Mind Expansion

by

Gary R. Schornack

and

Charles E. Beck

Abstract

Administrators may believe that distance education merely involves taking existing readings, exercises, handouts, and posting them to the Web. Such an approach, while cost-effective, is not effective. A new world of distance education also demands new thinking. How the process is designed, delivered, integrated, and supported are key components to a complete distance education system. The meaningful transition to e-education has just begun. To determine measures of effectiveness and efficiency requires innovations in social and political thought, even more than mere technology. The distance education process requires feedback from the professor, from the student, and from the wider community, especially businesses who hire the graduates. E-learning and higher education are reaching new heights and are changing the functions of the university. E-learning has changed the ground rules of everything including time, distance, and pedagogy. We now have new ways to reach and interact with students, present rich-content in courses, and deliver the technologies of the smart classroom to students wherever they are in the world.

Maximizing the Distance Education Learning Environment:

Using Technology for Mind Expansion

by

Gary R. Schornack

and

Charles E. Beck

Introduction

The rapid changes in distance education as part of the information age have intensified the need for improved student communication and interaction. In a typical educational setting, students are required to present their ideas to the class. More and more students are incorporating technology into their learning experiences, breaking the limitations of projectors, screens, and flip charts. On the horizon is "Tele-immersion," which Jaron Lanier (2000) describes as "the 'advanced shared environment' that will one day create the illusion that you are in the same room with people at a distance."

The education sector is becoming more demanding. "The entire e-learning market is evolving quickly" (Aldrich, 2000). Some confusion stems from the conflicting terminology: "we have several names for essentially the same thing—for example, 'distance education,' 'distance learning,' and 'distributed learning'—while we sometimes

use one term, such as 'virtual university,' to refer to very different types of educational arrangements" (Wolf & Johnstone, 2001). Initial statistics indicate "an estimated 1,661,100 enrollments in all distance education courses, with most of these at the undergraduate level" (Heller Report, 2001). The rapid rise in distance education has lead some theorists into "confidently predicting the end of the university" (Neal, 2001). For example, Peter Drucker is quoted as saying, "The future is outside the traditional campus, outside the traditional classroom. Distance learning is coming on fast" (Gubernick & Ebeling, 2001). However, the evidence does not point that clearly toward the demise of traditional education. For instance, the development of Internet 2 as having great potential for networked undergraduates (Basch, 2001); and anecdotal evidence points toward a preference for traditional modes of delivery, particularly at the undergraduate level where "'brick' is preferable to 'click'" (Dyrud, 2001). The educational community must creatively customize this new environment.

The rapid growth of e-learning has taken many institutions by surprise (Carlson & Repman, 2002). Scholars and practitioners have begun to address this "rethinking" of the distance education process. The advent of digital technologies is now transforming higher education's culture and content; furthermore, the "technology of higher education is becoming as much a function of market mechanisms as digital media" (Schrage, 2001). As with any new approach, however, skepticism remains. A recent study by a career information and research firm suggests that employers may be cautious about hiring job applicants with "dot-com diplomas" (Jones, 2001). Such concerns recognize that overall, online learning is still in its infancy (Kuchment, Binlot, & Ferro, 2002).

New Courseware for Distance Education Learning

Administrators may believe that distance education merely involves taking existing readings, exercises, handouts, and posting them to the Web. Such an approach, while cost-effective, is not effective. Success requires creating new "courseware" representing a significant

capital expense (Goldstein, 2000). Beyond course development, further support includes equipment, support personnel, and training: "Support for faculty and staff is not limited to money and technical support, but must also include support for training, released time, acknowledgment of intellectual property rights, and academic credibility for tenure and promotion" (West, 1999). Lee identifies some of these conflicting perspectives on distance education:

* Distance learning is a new and universally desirable phenomenon.
* Distance learning will totally supplant campus-based learning in the future.
* Distance-learning methods are ineffective for most university-level learning goals.
* Distance-learning experiences are inferior to campus-based learning experiences.

(1998)

Ultimately, acceptance of distance education requires that institutional stakeholders overcome ingrained attitudes. "Online learning does not replace or minimize the importance of teachers or trainers, but rather removes the physical constraints of buildings and distance, thereby expanding the teacher's potential reach, efficiency and effectiveness" (Stoll, 2001). Some organizations may simplistically believe that merely adding computers will solve any communication problem. For example, "Online courses and degree programs open up higher ed to anyone with access to a computer and a modem" placing the " tools for obtaining a well-rounded education literally at the fingertips of anyone with Internet access" (Thomas, 1999); "You can now find the online equivalent of almost any brick-and-mortar learning environment" (Mangis, 1999). But as Greengard (2000) observes, "you can put information at people's fingertips, but you can't force them to use it effectively."

Not all institutions adapt to distance education "cheerfully and quickly"; among the reasons, "the greatest deterrents seem to be the faculty, the costs, and the reluctance to change their perception of themselves as the "only show in town" as purveyors of knowledge" (West, 1999). On the practical level, shifting to distance requires training people on equipment so they can use it effectively. Such training involves a significant change in attitudes. Patterson (2000) believes that becoming effective with an electronic medium means overcoming FUD: "fear,

uncertainty, and doubt." In particular, institutions must address how to "support faculty who worry about how to teach and learn in these new environments with these new tools" (Boettcher, 2000). From the student perspective, a shift to distance means more responsibility of the student for his or her education. "Learners need to develop personal learning contracts, targeting their own objectives for training rather than the instructional objectives of the course" (Masie, 1999).

Maximizing Distance Education Objectives

Many academic institutions consider "the prospect of increased revenue from distance education" as a significant factor in offering distance courses (Wolpert, 1998); however, planning for such an endeavor must consider "the intent of both pedagogical and financial success" (Robinson, 2002). Financial considerations tend to influence the selection of level of courses; according to the Heller Report (2000), institutions offer for-credit distance education courses more at the undergraduate than at the graduate/first-professional level. Although distance education focuses on both traditional and non-traditional student audiences, it usually attracts more of the non-traditional adult learner. Effective programs thus can benefit by creating a vision of adult development, accommodating "the special social, psychological, and political characteristics of adult learning" (Russell, 1999). To confront the significant conflicts in the objectives for a distance program, universities must ask themselves some probing questions, as outlined by Newman (2000):

* Will the same modes of socialization to the life of the mind work for an ever- broadening share of each age group of students?
* Which of these activities make an impact and which are cheerfully ignored by the students?

As these questions tend to clarify the market niche for the distance program, they may seem to focus only on the financial objectives of a program. However, this process implies that distance programs are tapping into a different group of students than the traditional target audience.

Faculty Development is Critical

Ultimately, the move into distance education highlights a major lack in higher education: People who do the majority of teaching at colleges and universities (professors, lecturers, TAs, etc.) get no formal training in teaching at all. Institutions assume that "a professor who cannot use a piece of chalk and a blackboard to teach effectively will be able to do better when we give him or her computers, VCRs, DVD players, PowerPoint presentations, video cameras, the Internet, and a smorgasbord of digital media" (Strauss, 2002). Cheryl White (2000) identifies the areas of faculty development needed for an effective distance education program. These recommendations appear in Table 1.

TABLE 1: FACULTY DEVELOPMENT FOR DISTANCE EDUCATION

Comfort and effectiveness with all technology used in the course

Ability to model use of technology

Ability to track student activities in the course

Willingness to be innovative in teaching methods

Willingness to be innovative in use of technology

Willingness to learn while doing

Willingness to work cooperatively with technical support/design staff

Tolerance of change

Ability to commit significant time to the course

Ability to handle a high amount of interaction with students

Being a good facilitator of communication

Being able to write clear, focused messages

Providing clear expectations of student responsibilities in the course

Ability to design discussions to involve the students

[White, 2000]

The Growing Potential Audience

Whether or not an institution considers potential students a "market" or not, educators must understand the audiences for their programs. Employers use such training based on its cost effectiveness: in addition to being less expensive than outside training, employers can offer employees "the chance to learn at their own pace and from any location" (Orubeonodo, 2001), thus giving employees the chance to complete their education while working full-time (Klor De Alva, 1999). This group, one of the fastest growing markets in higher education, needs institutions that can "design flexible, customized programs to meet their education needs and lifestyles" (Worley, 2000). According to West (1999), "The growing college population are adult students over the age of 25 who are non-residential, working full-time, perhaps with a family from diverse backgrounds."

Williams (2001) identifies the potential audiences for education in general, including the subset of distance education. Three models describe the student's role in learning: the student-as-product, the student-as-worker, student-as-consumer (Williams, 2001).

Student-as-product. This model emphasizes work in the classroom, tending to employ mostly lectures and discussions to deliver information to the student.

Student-as-worker. As learning mechanisms, this model employs inquiry, activity, and discovery strategies that emphasize exercises and projects, with students working either individually or in groups.

Student-as-consumer. This model is particularly popular among higher education administrators: sales of a particular product (i.e., credit hours generated) serve as the simplest way to manage budgets; and student enrollment and classroom evaluations provide the simplest way to evaluate faculty performance.

The student-as-product and the student-as-consumer models are instructor-centered (Williams, 2001). In fact, some skeptics see computer-based courses as "thinly veiled field trials for product

and market development," in which students "are studying their courses" while "their courses are studying them" (Noble, 1998).

Effective Online Course Development

Defining the course and creating the learning objectives for distance education is a time-consuming process: "Developing an effective syllabus and teaching style takes time. Email is a different medium from the classroom and requires different techniques to be used effectively by an instructor" ("Debating," 2000). Since the structure of the course must consider both the content material and the learner, the "goal should be to use the new technologies to enhance rather than diminish higher education's critical roles" (Connections, 2001). This redesign process also requires the students to take greater responsibility for their own education. "If the students aren't doing the work, learning is not occurring" (Strauss, 2002). Cini (1998) identifies the ways to design a course to meet the needs of the distance learner, as shown in Table 2.

TABLE 2: CRITERIA FOR DEVELOPING AN EFFECTIVE ONLINE COURSE

Assignments that require the learner to actively engage with the course work and one another

Discussions, activities, and projects that entail collaboration between learners

A format that fits students' schedules, career goals and learning styles

Access to faculty, resources, and classmates

Convenient access to the class anytime and from anywhere

[Cini, 1998]

The process of course development involves the sequence of ideas, types of examples, and word choice. The educator prepares for multiple repetitions to reinforce concepts, including previews, presentations, and reviews. When presenting an abstract concept, the educator needs

to build up to complex ideas through the simple, and to bring ideas to life with examples, metaphors, and analogies. The amount of variety in approaches will appeal to the multiple learning styles in the audience. The "one-text/one-test/one-delivery-mode-fits-all" approach to instruction is becoming less and less appealing (West, 1999). According to some educators, "a well-designed face-to-face course includes all of the positive aspects of a well-designed online course (e.g., interactivity among students, access to external sources of information)." However, those who rely on lecture tend to dampen, not promote, interactivity among students, since the "norms of face-to-face classroom militate against more active participation by students in the educational process" (Cini, 1998).

For distance educators, the aim is to reproduce the functionality and the "look and feel" of the classroom in a new operating environment (Weigel, 2000). Part of the feel is the sense of camaraderie and belonging among class members. "To foster the development of the online class as a learning team, students should be encouraged to assist one another when they confront obstacles rather than encouraged to ask the instructor for help" (Cini, 1998).

With the target audience of non-traditional students, most distance education programs want to provide meaningful learning for adults. This means creating instruction based on an authentic model of adult learning and development. Constructing such a model would build on four general principles:

- plan for learning across the lifespan;
- identify the distinctive characteristics of adult learners,
- emphasize the goals of adults,
- create adult-situated contexts for learning (Stites, 1998).

An adult-focused model would also incorporate an inquiry-based curriculum, whose objectives include life skills as well as "basic" ones, performance-measured outcomes, and a learner-centered locus of control (Russell, 1998). Within these adult-focused principles, educators would do well to follow the Seven Principles for Good Practice in Undergraduate

Education as published by the American Association for Higher Education (Merisotis & Phipps, 1999):

- encourage contacts between students and faculty;
- develop reciprocity and cooperation among students;
- use active learning techniques;
- give prompt feedback;
- emphasize time-on-task;
- communicate high expectations; and
- respect diverse talents and ways of learning.

Ultimately, faculty and administrators must create the mix of technology and process that comprise the method of distance education: "The expense of creating highly interactive and pedagogically rich content is another challenge" (Johnstone, 2002).

The Virtual Classroom

To expand the ways people learn in our Information Age, institutions increasingly turn to Internet-based education and to virtual classrooms. For some thinkers, such a change represents a minor adjustment: "a virtual classroom is not a special form of distance learning environment, but just another form of classroom" (Williams, 2001). Internet-based programs become attractive as a way to meet diverse needs with flexibility. Further, the increasing use of the Internet has brought adaptation in traditional distance-education formats, especially based on the type of institution. For instance, two-way interactive video was more likely to be used by public 4-year institutions than by any other type of institution (Heller Report, 2000). In using the full potential of distance media, educators can select modalities to fit the need of the user.

Using Internet programs "has the potential to revolutionize the way people learn – not only in terms of the medium used, but by making continuing education a life-long activity" (Robb, 2000). Proponents of virtual universities point out that networked computing permits us to replicate the classroom experience by creating "virtual groups" of students (Neal, 1999). Also teachers can efficiently reach all students through general e-mail answers to common questions

(Wang & Newlin, 2001). The virtual classroom can bring out the Internet's full potential by including diagnostic tutorials, voice-overs, animated graphics, online text and a tutor who can be contacted (Stoll, 2001). According to David Frabotta (2000), "The virtual classroom is more than a buzzword. It represents a classroom furnished with the Internet, e-mail, digital cameras, instant messaging and videoconferencing, enabling students to talk to professors, instructors, industry experts and other students from anywhere in the world using audio and visual components."

Multi-media Coordinator

Distance education has the potential to foster anonymity. "In the virtual classroom, instructors are recognized solely by the fact that their screen names are different from their students' (Wang & Newlin, 2001). While such an arrangement may create a non-intimidating environment with a level playing field, it may also create role playing and gamesmanship with the student (Wang & Newlin, 2001). High tech remedies may solve some issues while compounding the problem (Noble, 1998). And a focus on the media may change the role from educator to technology coordinator:

The teacher becomes, in many settings, a multi-media coordinator, for other delivery systems will be in use: videodisk, videotext, audio and videocassette recorders, telephone, videophone, radio, newspaper, closed circuit television, open broadcast television, learning packages including print and non-print materials, home computers, two-way interactive classrooms (Hankin, 1999).

Virtual Classroom Expectations

To expand the ways people learn in our Information Age, organizations increasingly turn to Internet-based education and to virtual classrooms. Internet-based programs meet diverse needs with flexibility. According to Drew (year), "In addition to the time and geographic flexibility, its modalities can be changed to fit the need of the user." But even more significantly, use of Internet programs "Has the potential to revolutionize the way people learn - not only in terms of the medium used, but by making continuing education a life-long activity" (Robb, 2000). Beyond just the Internet itself, the virtual classroom brings out the Internet's full potential. According to

David Frabotta, "The virtual classroom is more than a buzzword. It represents a classroom furnished with the Internet, e-mail, digital cameras, instant messaging and videoconferencing, enabling students to talk to professors, instructors, industry experts and other students from anywhere in the world using audio and visual components" (2000).

Both educators and adult learners are using the Internet, "learning to ride the technological wave of the future." On this wave, the Internet can help educators communicate with colleagues, pursue professional development, search online databases, interact with students in the classroom, and search for new jobs (Rosen, 1996). Ultimately through the modern educational process, we are leading toward a knowledge-based social order, interweaving homes, schools, offices, and communities into a web of intelligent communication services offering unparalleled opportunities for accelerating scientific progress, economic development, education, and other revolutionary changes (Halal, 1992).

Although students tend to seek out distance education opportunities, educators must help students clarify their own expectations for taking such a program. Additionally, students need to learn skills to succeed: How to take notes, how to get organized, and how to deal with the universe of data that obscures the information they actually need to understand. Through the Internet, students have access to millions of books and billions of Web pages, but they need to learn how to use them effectively (Strauss, 2002). Table 3 (Short, 2000) outlines some of the questions students need to ask. These questions have implications both for the student and for the faculty member.

TABLE 3: STUDENT QUESTIONS FOR ONLINE LEARNING

Student's Questions
What are the computer specifications required for this program?
Am I prepared to deal with the technology and time management demands of online education?

How experienced is the university faculty at offering the course or curriculum, both in subject matter and in dealing with an online curriculum?

How willing are faculty to spend time communicating with students?

Does the online course or program facilitate student interaction in any way?

Am I someone who can learn online? [Short, 2000]

Faculty Effort

Plan for learning across the lifespan;

Identify the distinctive characteristics of adult learners,

Emphasize the goals of adults,

Create adult-situated contexts for learning. [Russell, 1999]

To determine the overall purpose of distance education, institutions must recognize the need for "smart learners, not smart classrooms"; by themselves, smart classrooms will not be enough. For the process to succeed, faculty need an environment that reduces the teaching-related administrative tasks so they can focus on developing courses and presenting materials (Strauss, 2002).

Instructional Technology Delivery

Media covers the specific technology components for the instruction, the capacity of the hosting system, and the ability of the student's equipment to interface with the host system. Such consideration usually falls under the domain of the Instructional Technology professionals available to work with the faculty. In addition to providing course content, however, these systems must address security issues, especially with test administration (Mirabito, 1996). Conversion to electronic media impacts both the instructor and the student.

From the student's view, the distance approach brings new difficulties, like "Navigating a course's options and jargon – various folders, forums, study guides....The ideas are great, the people are great, it's the technology that can be overwhelming if you don't have a background in it" (Loftus, 2001). Table 7 identifies key instructional issues related to selection and use of technology.

TABLE 4: MEDIA IMPLICATIONS FOR DISTANCE EDUCATION

Identify new technologies
Become competent with a variety of technology approaches
Demonstrate multiple visual tools
Become comfortable using multiple technology tools
Reinforce new technological tools for communicating Information
Be able to sequence ideas in a logical presentation sequence
[Beck & Schornack, 2001]

Learning technologies have revolutionized the traditional classroom, created new possibilities for eLearning, but technology alone is not the point (Grush, 2002). Technology provides the means of accessing and using knowledge. Inaccessible information remains of little value (Feldon). Using the information in a distance mode requires developing such a level of trust between the instructor and the student that the student can freely voice doubts and can depend on the instructor to provide guidance in how to use the process ("Debating," 2000). Used properly, both the computer and the Internet permits nonlinear learning strategies where students can move between subjects in their own time and order (Armstrong, 2000). Rather than the

medium making the difference, according to Strauss, "It's the particular way in which you use it" (2002). An Internet-based course can hold visitors, bring them back, and becomes a favorite of the users (Masie, 1999). Done properly, distance education can blend powerful new technology: the Internet, intranets, and e-delivered courses – with traditional media such as instructor-led courses, audio- and videotapes, articles, and books. The result yields a powerful, accessible learning information source" (Boxer & Johnson, 2002).

Educator's Web Site

A website is an important tool in today's student learning environment. It is important that the student can find what they are looking for in order to help them feel part of the course and the learning experience. The following list of items includes the key sections that every educational website should contain:

1. **Homepage:** This should be an introduction to the site and also include easy-to-find navigational buttons to the rest of the site. A picture of the educator is always nice to help put a face with the name. Additional information that can be provided on an educator homepage includes:
    - Discipline
    - Name
    - Title(s)
    - Phone
    - E-mail
    - Office Location
    - Web site
    - Courses Taught (Can link to syllabi or course Web sites)
    - Areas of Expertise
    - Teaching Philosophy
    - Education
    - Professional History

- Selected Publications
- Current Research

2. **Courses:** This section is very important especially if the educator teaches more than one course. Each course should have a dedicated page that includes an online course syllabus, including all course materials, handouts, and course links. These items can either be embedded in this one page or they can be accessed via links. It is very important that each item included in the syllabus have links to them (i.e. online sample exams, note pages, resources, etc.).
3. **Links:** The educator's favorite links divided into categories are also common and show what the educator values. These could be other professional links or could be personal interests (i.e. online grade calculator, thesaurus, dictionary, favorite search engines (including advanced searching technology), link to campus library resources, style manuals for required written projects, etc.).

Students look to their professor for guidance in their journey through life. Therefore there are other sections that could be added to an educator's site to help extend the reach of the professor's influence. These following items are not necessities but can be included in the site to provide students with a feeling of inclusion in the educator's world:

1. A vita or profile consisting of the educator's teaching philosophy, educational and professional experiences. This page is usually linked to from the homepage and lets the student know what the educator's background is and what experiences they have had.
2. Primary teaching and research interests along with any professional activities.
3. A section on study skills outlining the steps and methods that the educator believes the student should follow to be effective in performing well in his/her courses.
4. Ideas that the professor has on securing a job in the specific industry covered by the course are also considered to be helpful to students who need a good place to start

their job search preparation. This can feature useful career tips, resume and career links and job hunting sites.

Despite these significant variations, faculty can benefit from some practical guides that can help them develop a methodology effective for online students. Table 5 identifies these practical methods.

TABLE 5: PRACTICAL METHODS FOR DEVELOPING EFFECTIVE DISTANCE EDUCATION

View your role as coach, facilitator, and coordinator

Listen to your students

Don't give answers – ask questions

Allow students to learn by making mistakes

Encourage students to solve their own problem

Encourage students to do things their own way

Provide guidance and instruction at first – then decrease direction over time

Be open and honest – share pertinent information with students

Provide learning opportunities

Measure your success through the success of your students.

- Adapted from Cini, 1998

Teaching methods in general, however, must adapt to the distance media, where faculty do not have the traditional contact time with students. As a result, faculty need to adapt their

methods to the distance media, following the specific online strategies identified in Table 6 (Brown, D. 2002).

TABLE 6: SPECIFIC ONLINE STRATEGIES

Let students know when and how you prefer to be contacted, including how often you intend to access e-mails.
Create online forums, threaded discussions, and chats.
Use the Internet to access experts and ideas from "beyond the classroom."
Form student study groups with specific intent.
Keep groups small, suggested optimal size no larger than eight.
Assign teams to work together on projects.
Link each student with a mentor or a specialist in the field.

[Brown, D. 2002]

Combining teaching method with technological skills can help students reach the higher cognitive levels. Such a process requires that a faculty member becomes a "facilitator, collaborator, and guide who makes instruction learner centered" (Notar, Wilson & Ross, 2002).

Online Syllabus

Considering the new role of the educator as a provider and facilitator of knowledge, the student can have the primary resources available with a "click" to a link. An online syllabus that links the following makes learning easier for the student and eliminates most, if not all, of the paper handouts. See Table 7.

TABLE 7: LINKS FOR ONLINE SYLLABUS

- Educator's E-mail address
- Current style manuals
- Study skill guidelines
- Student note pages for each unit
- Sample test questions with computer scoring
- Many texts have 1st three chapters available free online
- Essay test questions
- Class speaker note pages and vita
- Project outlines and guidelines
- Sample projects
- Links to improve speaking and free backgrounds and tips for PowerPoint presentations such as Presenter's University
- Library guide developed for specific courses
- Peer evaluation forms
- Key contacts for students

The opportunity for teams to communicate with Yahoo groups, Hotmail groups, etc. provide the communication tools for student support which can answer many questions outside of the classroom.

Effective Visualization Online

To be effective written presentations must also integrate appropriate visual reinforcement. As Hill (2000) indicates, "the American attention span isn't what it used to be, and the competition for people's hearts, minds and time has never been fiercer." Since the audience is accustomed to sound bites, the writer must reinforce information with visuals to re-direct their attention. Visuals must be designed for impact: few words on each visual reinforcing one main idea. Table 8 provides general guidelines for use of visuals.

TABLE 8: GENERAL GUIDES FOR VISUALS

Keep visuals simple - too much detail confuses and distracts.

Adapt visuals from books, magazines, web sites, and clip art – remove portions not relevant for your audience or your emphasis.

Use sharp, primary colors for contrast - pastels and yellow wash out to gray when projected in a large room.

Use minimal words and short labels - too many words counteract the effect gained by visual reinforcement.

If you need a complex visual - build toward it by presenting smaller parts, then showing how the pieces fit together.

- Adapted from Beck, 1999

Essential Visual Guidelines

After selecting the type of visual, the presentation online must follow guidelines, such as those shown in Table 9.

TABLE 9: GUIDES TO SPECIFIC TYPES OF VISUALS	
Lists	Follow the rule of sixes - NO MORE THAN 6 words per line 6 lines per slide 6 "word" slides in a row
Photographs	Use simple photos with labels to highlight information. Photos may confuse - they usually contain more than the speakers wants to deal with.
Drawings	Use simple schematics for visual emphasis. Schematics emphasize concepts or equipment better than photographs. Simple schematics serve as visuals;

	complicated diagrams belong in a handout or report appendix.
Tables	Use simple tables for comparison or contrast. Complex tables present data rather than illustrate key points, so keep complex tables for handouts, simple tables for visuals.
Graphs	Use graphs to visualize relationships among data. Simplify the graphs for visuals, with few items compared on the same graph. Place exact scientific plots in a handout or report appendix; use simplified graphs for visual reinforcement. - Adapted from Beck, 1999

Student Feedback is Critical

Student feedback on distance education begins with practicality. "Students were taking distance learning courses for their convenience in helping them cope with the demands of busy schedules and to meet the requirements of their programs of study" (Bower, 2000). Research on student response often focus primarily on the technology involved; however, the "results seem to indicate that technology is not nearly as important as other factors, such as learning tasks, learner characteristics, student motivation, and the instructor" (Merisotis & Phipps, 1999). Through use of student chat rooms and instructor feedback through e-mail, "most university graduates would likely agree that such opportunities for discussion were among some of their most meaningful educational experiences" (Lee, 1998).

Though often overlooked, student feedback is central to effective communication. "Communication refers to the message ***perceived*** rather than to the message ***sent*** in an organization" (Beck, 1999). Unless we know what that message was, we really have no idea what communication has occurred. As Stephen Manes (1996) puts it, "E-mail often causes problems that the sender is the last to know about." But the result is not all negative; through

feedback, writers draw connections to others. According to Mary Furlong (2000), "You go online because of information. You stay online because of the relationships that form."

Online Delivery Outcomes

Informal and anecdotal evidence about online education finds that "basic demographic characteristics such as gender and age are not reliable predictors of cyber-student performance," and that students who were members of a cyberstudy group had higher final grades in our class than those who preferred to study alone (Wang & Newlin, 2002). Instructors must become more aware of differences to identify at risk students, because the usual cues associated with student anxiety, inattentiveness or apathy are not present in the virtual classroom. Specifically, instructors need to examine low hit rates to the course home page and inactivity writing or reading forum postings (Wang & Newlin, 2002). More formal findings appear in the results of a survey of faculty in distance education, as shown in Table 10 (Perez & Foshay, 2002).

TABLE 10: SIX BEST OUTCOMES OF ONLINE DISTANCE DELIVERY

Tutorial functions	Learners are able to use the system for study of basic math concepts and review/remediation functions, allowing more time for individual faculty/learner contact and discussion
Flexibility	Adult learners, who have significant professional and personal time constraints, have the option of working anytime, anywhere.
Self-paced	Learners are not stalled by predetermined course schedules; they may complete assignments in as little or as much time as necessary.
Privacy	Learners can operate in a private environment, interact in a computer-adaptive environment, and efficiently focus on concepts and areas they need.
Cutting edge	Developmental education learners, traditionally offered second-rate services, were being offered an attractive state-of-the-art option.

Interactive feedback	Through a computer-adaptive environment, learners receive immediate constructive feedback after each response rather than having to wait for lesson or test results to monitor progress.

[Perez & Foshay, 2002]

Implications

Through this process of change, educators need an increasing range of skills so that they can become innovators and remain in the forefront of the educational process. Most importantly, technology alone will never be the solution to improved education. Rather, educators who can incorporate technology can bring the best out of the learning process and inspire the best out of each student. Thus, schools must implement extensive professor training, improved curricular materials, and major changes to educational models before it can benefit from increased use of computers.

A new world of distance education also demands new thinking. How the process is designed, delivered, integrated, and supported are key components to a complete distance education system. The meaningful transition to e-education has just begun. To determine measures of effectiveness and efficiency requires innovations in social and political thought, even more than mere technology. The educational process requires feedback from the professor, from the student, and from the wider community, especially businesses who hire (and more importantly, fund) graduates. These stakeholders should expect to become involved in continuous feedback.

Conclusion

The primary goal of education at all levels is providing students with skills on how to learn how to learn. The process does not mean merely mastering a body of knowledge. In contrast to earlier education, "students learn best and most usefully not by being asked to master the conclusions of scholars about questions the students only dimly comprehend, but when they are given raw data, learn to ask their own questions, and come to their own conclusions" (Brown, R. 1996).

E-learning and higher education are reaching new heights and are changing the functions of the university. E-learning has changed the ground rules of everything including time, distance, and pedagogy. We now have new ways to reach and interact with students, present rich-content in courses, and deliver the technologies of the smart classroom to students wherever they are in the world. In evaluating the learning process, educators must get feedback from their students and potential students. An exchange in the "Virtual Roundtable" captures this need:

> Schaff: "You've suggested that educators have not traditionally looked for feedback from the learner."
>
> Schank: "That's exactly right, because they don't give a damn about students. But we do. You have to because people are going to be able to vote finally [take virtual course at another school]" [2000].

Although educators may see distance education as a "rethinking" or a "paradigm shift," the "Virtual Roundtable" addresses this process in a more succinct fashion. As the second-half of the title states, "the e-Learning Revolution Is Not about Computers; it's about Communication." While we have used a communication-bases systems model to examine the process, Mary Furlong makes the communication aspect alive ("Virtual Roundtable," p. 72):

> You go online because of information.
>
> You stay online because of the relationships that form.

References

Aldrich, C. (2000). Customer-Focused e-learning: The drivers. *Training and Development, 54*(8), 34+.

Armstrong, L. (2000). Distance learning: The challenge to conventional higher education. *Change, 32*(6), 20.

Beck, C. E. (1999). *Managerial communication.* Upper Saddle River, NJ: Prentice-Hall.

Beck, C. E. & Schornack, G. R. (2001). Electronic communication: The challenge to innovate. *Journal of American Academy of Business, Cambridge, 12*(1), 122-130.

Basch, R. (1997). The next net. *Computer Life, 4*(9), 48-49.

Boettcher, J. (2000). How much does it cost to put a course online? It all depends. In M. Finkelstein & *et al.* (Eds.), *Dollars, Distance, and Education* (pp. 172-197). City: Oryx Press.

Bower, B. L. (2000). Community college student satisfaction with the online and teleclass experience. *Academic Exchange Quarterly, 4*(2), 54.

Boxer, K. & Johnson, B. (2002). How to build an online learning center: Online learning centers may be the new construct for training and development. *T&D, 56*(8), 36.

Brown, D. G. (2002). Connecting with Students. *Syllabus, 16*(3), 24.

Brown, R. H. (1996). Learning how to learn: The Amherst project and history education in the schools. *The Social Studies, 87*(6), 267-273.

Carlson, R. & Repman J. (2002). Show me the money? Rewards and incentives for e-learning. *International Journal on E-Learning, 1*(3), 9.

Cini, M. A. (1998). Learning leadership online: A synergy of the medium and the message. *Journal of Leadership Studies, 5*(2), 103+.

Connections for a new millennium. (2001). *Change*, *33*(1), 4.

Debating distance learning. (2000). *Communications of the ACM*, *43*(2), 11.

Drew, X, (Year). . . . .

Dyrud, M. A. (2000). The third wave: A position paper. *Business Communication Quarterly*, *63*(3), 81.

Frabotta, D. (2000). Continuing education: Cornell University's dean-elect plans to focus on research, technology-based learning. *Hotel and Motel Management*, *215*(10), 7.

Furlong, M. (2000, September). Quoted in: A Virtual Roundtable: Why the e-learning revolution is not about computers; It's about communication. *Training*, 64-76.

Goldstein, M. B. (2000). To be [for-profit] or not to be: What is the question? *Change*, *32*(5), 25.

Greengard, S. (2000). Going the distance. *Workforce*, *79*(6), 22.

Grush, M. (2002). Editor's note. *Syllabus*, *16*(2), 3.

Gubernick, L. & Ebeling, A. (1997). I got my degree through e-mail. *Forbes*, *159*(12), 84-89.

Halal, W. E. (1992). The information technology revolution. *The Futurist*, *26*(4), 10-15.

Hankin, J. N. (1999). Alice the college teacher and the Rottweiler in wonderland: The prospects and problems of distance education. *Executive Speeches*, *14*(2), 18.

Heller report on educational technology markets. (2000). NCES reports on use of DL in higher ed. *11*(4), 9.

Hill, J. (2000). *Presentations*, (April), 38.

Johnstone, S. M. (2002). U.S. distance learning: A 'cottage industry.' *Syllabus*, 15(7), 18.

Jones, C. (2001). Out of a Cracker Jack box? As online degrees start showing up on people's resumes, what will the business world think of them? *Online Learning*, 5(4), 51.

Klor De Alva, J. (1999). Remaking the academy in the age of information. *Issues in Science and Technology*, 16(2), 52.

Kuchment, A., Binlot, A., & Ferro, C. (2002, June 10). Acing Oxford – from home. *Newsweek International*, 68.

Lanier, J. (2000, September). Quoted in: A Virtual Roundtable: Why the e-Learning revolution is not about computers; It's about communication. *Training*, 64-76.

Lee, C. (1998). Vurtual U. *Training*, 35(8), 81.

Loftus, M. (2001, October 15). But what's it like? *U.S. News & World Report*, 56.

Masie, E. (1999, June 7). Creating stickier online learning sites, classrooms. *Computer Reseller News*, 56.

Manes, S. (1996). E-Mail troubles? You have no idea! *PC World, 14*(7), 39.

Mangis, C. A. (1999, October 5). Back to e-school. *PC Magazine*, 36.

Merisotis, J. & Phipps, R. (1999). What's the difference? *Change, 31*(3), 12-17.

Mirabito, M. (1996). Establishing an online education program. *T H E Journal (Technological Horizons in Education) 24*(1), 57-60.

Neal, E. (1999). Distance education. *National Forum, 79*(1), 40-43.

Newman, F. (2000). Saving higher education's soul. *Change, 32*(5), 16.

Noble, D. F. (1998). Digital diploma mills: The automation of higher education. *Monthly Review, 49*(9), 38-52.

Notar, C., Wilson J., & Ross, K. (2002). Distant learning for the development of higher-level cognitive skills. *Education, 122*(4), 642.

Orubeondo, A. (2001). Take charge of training. *InfoWorld, 23*(16), 100.

Patterson, J. C. (2000). Building the virtual classroom. *Curriculum Administrator, 36*(7), S14.

Perez, S. & Foshay, R. (2002). Adding up the distance: Can developmental studies work in a distance learning environment? *T H E Journal (Technological Horizons in Education) 29*(8), 16.

Robb, D. (2000). At home with internet-based training. *Risk Management, 47*(7), 27.

Robinson, E. T. (2002). E-Commerce in distance education. *Syllabus, 15*(7), 22.

Rosen, D. J. (1996). Learning to ride the wave of the future: How adult students and teachers are 'surfing' the internet. *Adult Learning, 8*(1), 15-17.

Russell, M. (1999). Online learning communities: Implications for adult learning. *Adult Learning, 10*(4), 28.

Schaff, X. (2000, September). Quoted in: A Virtual Roundtable: Why the e-Learning revolution is not about computers; It's about communication. *Training*, 64-76.

Schank, X. (2000, September). Quoted in: A Virtual Roundtable: Why the e-Learning revolution is not about computers; It's about communication. *Training*, 64-76.

Schrage, M. (2001). Brave new world for higher education. *Technical Review (Cambridge Mass.), 104*(8), 90.

Short, N. (2000). Online learning: Ready, set, click. *RN, 63*(11), 28.

Stites, Reggie. (1998). *Assessing Lifelong Learning Technology (All-Tech).* NCAL Report PG98-01.

Stoll, J. (2001). No time for class? Log on to Internet. *Automotive News, 75*(5915), 28.

Strauss, H. (2002). New learning spaces: Smart learners, not smart classrooms. *Syllabus, 16*(2), 13.

Thomas, S. (1999). Adult learning goes online. *Computer Shopper, 19*(10), 331.

Wang, A. & Newlin, M. (2002). Predictors of performance in the virtual classroom: Identifying and helping at-risk cyber-students. *T H E Journal (Technological Horizons in Education) 29*(10), 21.

Weigel, V. (2000). E-Learning and the tradeoff between richness and reach in higher education. *Change, 32*(5), 10.

West, G. B. (1999). Teaching and Technology in Higher Education: Changes and Challenges. *Adult Learning, 10*(4), 16.

White, C. (2000). Learn online. *T H E Journal (Technological Horizons in Education), 27*(9), 66.

Williams, D. (2001). The virtual classroom in relation to educational models. *International Journal of Educational Telecommunications, 7*(1), 23.

Wolf, D. B. & Johnstone, S. M. (1999). Cleaning up the language: Establishing a consistent vocabulary for electronically delivered academic programs. *Change, 31*(4), 34-39.

Wolpert, A. (1998). Services to remote users: Marketing the library's role. *Library Trends*, *47*(1), 21.

Worley, R. B. (2000). The medium is not the message. *Business Communication Quarterly*, *63*(3), 93.

MAXIMIZING STUDENT LEARNING THROUGH THE CREATION OF A POSITIVE CLASSROOM ENVIRONMENT

by

Ronald Earl Clark

and

Douglas Eugene Beck

Embry-Riddle Aeronautical University
Extended Campus

A Paper Submitted to Embry-Riddle
Teaching and Learning Effectiveness Symposium-2003

ABSTRACT

Researchers: Ronald Earl Clark and Douglas Eugene Beck

Title: Maximizing Student Learning Through the Creation of a Positive Classroom Environment

Institution: Embry-Riddle Aeronautical University; Extended Campus

Presentation: ERAU Teaching and Learning Effectiveness Symposium-2003

Year: 2003

The ERAU Extended Campus has short academic terms, a multimodal delivery system, a highly mobile student body, and some 3,000 faculty teaching. They face a more challenging task of creating a positive classroom environment than most traditional universities and programs. The researchers sought to both assess the presence of a positive learning environment and to bridge the gap between the present EC classrooms and a "world class" learning environment. Five graduate and three undergraduate classes at six locations in three states in ERAU Southwest Region were sampled using a researcher-designed survey. Fifty-three respondents indicated that Embry-Riddle's Extended Campus is providing them a very positive learning environment, identified best-practices desired in the classroom environment, and offered constructive criticism. The researchers recommended that the ERAU EC Center for Teaching and Learning Effectiveness create a "positive learning environment" module based on this research for dissemination to all Extended Campus faculty.

Chapter I

Background

With a large, international student body of some 20,000 adult learners and almost 3,000 full-time and part-time faculty, Embry-Riddle Aeronautical University's (ERAU) Extended Campus constantly faces unique time, organization, and faculty development and training challenges. Utilizing a multimodal delivery system of classrooms, distance learning, and hybrids of those models, the Extended Campus exists primarily at night and on the weekends. Of necessity, classroom academic terms are eight or nine weeks, with two-to-five hour "blocks of instruction" the norm. Distance learning courses are normally 12 weeks long, and are primarily asynchronous. The researchers chose to look at the classroom portion of this multimodal delivery system, but will show that many of the tenets and components of positive "classrooms" also apply to distance learning delivery.

It is "almost intuitive" that positive learning environments provide students of all ages maximized opportunities for learning. The researchers sought to remove the subjectivity from that statement by conducting this research study to more scientifically determine the "truth" about how to create and maximize student learning in positive academic environments.

At this time in the history of ERAU's Extended Campus, the administrative and academic model for over 130 centers and teaching sites in the US and Europe has been extensively reorganized. Even though this reorganization is easily the most comprehensive in the 31 year existence of the EC, it also provides an opportunity to transform what many consider the premier aviation university in the world into a truly "world class" academy. One way this transformation from outstanding to "world class" might to happen is for the academy to develop and maximize positive learning environments for faculty and students alike.

The education and training literature speaks of learning, teaching, motivating, the education process, and positive learning environments from preschool through adult education. Not too amazingly, the core principles of positive learning environments (PLE) do not differ that much from "cradle to grave" applications, both in and out of traditional classrooms. While

classroom and distance learning each have their differences, they are easily more alike than different in PLE demands.

Faced with the same time challenges that characterize most large extended campuses, the researchers chose to concentrate on looking at classroom, rather than distance learning data. Working as a research "team", they reviewed current PLE literature, developed a student survey, and chose a random and representative sample of undergraduate and graduate "adult learner" students across three states in the Southwest Region of the ERAU Extended Campus.

Assumptions and Limitations

The researchers were limited by a very small budget and time constraints which did not allow for a campus-wide population survey. They limited their sample to 53 undergraduate and graduate students in some six centers in three states. The demographic and PLE-experiential characteristics of this sample may not be representative of the international EC. While experienced as both aviation practitioners and adult learner faculty, with over 50 years of combined adult classroom experience, this was the initial formal research done by either researcher on creating a positive learning environment.

Chapter II

Literature Review

Introduction

The researchers began this research study by personally perusing the ERAU Hunt Memorial Library CD-ROM collection, requesting a literature review from the Hunt Library staff, and initiating a query with the *search.com* search engine. The literature review was confined to the past five years, and was principally limited to a review of the classroom environment. Distance learning environment literature was sampled, but this was clearly not the researchers' concentration. Following the literature review, the documents were reviewed and arranged into the following outline for this chapter: distance learning, motivating students, teaching, the learning process, learning styles, and positive learning environments. Following this outline, research questions are stated.

Distance Learning Environments

Longmire (2000), an instructional designer for an e-learning development firm, states that "object-oriented learning" facilitates competency-based learning, an adult learning tenet. Perhaps the greatest benefit that adults can derive from reusable learning objects (RLO) is through the timeless application of this knowledge in different situations. Likewise, classroom "building blocks" such as RLOs can facilitate additional learning and be used over and over again. It appears that E-learning programs utilizing RLOs can help create a positive learning environment.

The Alabama Center for Research on Online Learning (2003, p.1) indicates that the lack of adequately designed research does not allow rating online instruction as "better, or even the same, as traditional forms of classroom instruction." They also found that certain pedagogical practices, such as adequate and timely feedback, student-student and student-teacher interaction, and a safe and supportive climate for learning enhanced online learning. The researchers will show that these "best practices" of online learning also apply to traditional classroom settings.

The Department of Computer Science of the University of York (Na Ubon, 2003) presents the idea of the "online learning community" (OLC), wherein the use of community is seen as a

part of the change in paradigm of "teaching" to "learning." They describe OLCs as virtual places, with formally and systematically organized learning environments. They see that the OLC connects the participants emotionally and socially, forming a sense of belonging to the community. This concept is seen by the researchers as also present in positive classroom learning environments.

From the three brief descriptions of online learning environments, the reader can see that many of the pedagogical tenets of creating a positive learning environment apply as much, or more, to online learning as well. The concepts of "reusable learning objects", "best practices of online learning", and "online learning communities" appear to have value for classroom applications as well.

Motivating Students

Davis (1999, p.1) indicates that, while some students are naturally enthusiastic about learning, many need their teachers to "inspire, challenge, and stimulate them." Suffice it to say that teachers must at least maintain the level of intellectual curiosity and enthusiasm students bring to the classroom. According to Davis, researchers have identified aspects of the teaching environment that maintain and enhance students' self-motivation, including the following:

- Give frequent, early, positive feedback that supports students' beliefs that they can do well.
- Ensure opportunities for students' success by assigning tasks that are neither too easy nor too difficult.
- Help students find personal meaning and value in the material.
- Create an atmosphere that is open and positive.
- Help students feel that they are valued members of a learning community.

Davis (1999) mentions that good everyday teaching practices are more important than directly working to enhance students' motivation. She indicates that most students respond positively to a well-organized course taught by an enthusiastic teacher who has a genuine interest in his/her students and what they learn. The researchers wish to emphasize this continuing paradigm shift from teaching to learning.

As general strategies for motivating students (creating a positive classroom environment), Davis (1999) lists the following:

- Capitalize on students' existing needs.
- Make students more active participants in learning.
- Ask students to analyze what makes their classes more or less "motivating"

Eight characteristics from recent research emerge as major contributors to student motivation:

- Instructor's enthusiasm
- Relevance of the material
- Organization of the course
- Appropriate difficulty level of the material
- Active involvement of students
- Variety
- Rapport between teacher and students
- Use of appropriate, concrete, and understandable examples

Concluding her excellent paper on motivating students, Davis (1999) adds that faculty should: incorporate instructional behaviors that motivate students, structure the course to be motivating, de-emphasize grades, respond to students' work, and insist that students do the reading. The researchers wish to emphasize that motivating students is an integral part of creating a positive classroom environment.

According to Luce (2003), some adult learners, lacking study skills, struggling to work jobs, raise families, and deal with financial responsibilities and limited funds, are likely to perceive themselves as outsiders when they enter the teacher's world. Their social identity is challenged, their confidence shaken, and they do not usually realize that they have a right to ask for anything other than what they are given. These struggling adult learners have strong opinions about what they want from their academic experience. They want:

- Individualized instruction, based upon who they are
- Teachers who are real people and approachable
- To be challenged, not decimated

- Caretakers who check on them regularly, and support their individual learning
- Teachers who talk at their level, and who can joke and take a joke
- Clear, complete explanations and concrete examples (Luce, 2003, pp. 1-2)

There are basic principles of motivating learning that seem to exist in any situation. The basic learning principle involved is that success is more predictably motivating than failure (*General principles*, 2003). Included in the list of learning motivators are the following:

- The environment can be used to focus the student's attention on what needs to be learned.
- Incentives motivate learning.
- Internal motivation is longer lasting and more directive than is external motivation, which must be repeatedly reinforced by praise or concrete rewards.
- Learning is most effective when an individual is ready to learn, that is, when one wants to know something.
- Motivation is enhanced by the way in which the instructional material is organized (*General principles*, 2003, p.1)

Instructors must be skilled in assessing student readiness and progress, as learning produces some anxiety. Teachers must help students set goals and provide positive feedback, motivating through affiliation and approval, both strong motivators. Important considerations for faculty interested in motivating student learning are time, student and faculty attitudes, and specific motivational strategies (*General principles*, 2003).

Positive Teaching Styles

To help teachers establish a positive learning environment in the classroom, Povlacs (n.d., p.1), who works at the Teaching and Learning Center of the University of Nebraska-Lincoln, has come up with what she calls "101 things you can do the first three weeks of class." Her list is based on the concept that students will decide very early, possibly on the first day (or night), whether they will like the course, its contents, the teacher, and their fellow students (Povlacs, n.d.).

To start off right, and create a positive learning environment, Povlacs (n.d.) counsels that faculty should help students make the transition from their pre-course lives to their current course involvement. She considers directing students' attention important, especially when class begins and not everyone is ready to learn. Povlacs advises faculty to challenge students, then provide the support necessary for them to take up the challenge. Encouraging students through active, "hands on" learning is advised, and all activities mentioned above are designed to build a sense of community among the teacher and the students.

In selecting their teacher of the year for 2002, the Providence, Rhode Island school district chose a fifth grade teacher at Iima School (Clement, 2002). Mary Aquino-Dacy creates a positive learning environment in the classroom by making learning fun, being well-organized, and by always encouraging her students to be the best that they can be. Ms. Aquino-Dacy is described by Clement as putting her heart and soul into teaching. She has high expectations for her students, and encourages them to be big stars when they grow up.

This teacher of the year takes risks and is always trying something new in the classroom. She believes in teamwork, conferencing and collaborating with other teachers and staff. It has been noted that her students are happy to be there (Clement, 2002). She attempts to instill trustworthiness, respect, responsibility and fairness in her students. Her students work to their highest abilities, then they share and give assistance to one another as needed. It is clear to the researchers that Ms. Aquino-Dacy is adept at building a sense of community and family, and that her classroom environment tenets will work in higher education classrooms as well.

In developing a positive classroom learning environment, care must be taken to sustain the momentum gained on opening day. One way to achieve this continuing momentum is through the inquiry model of teaching and learning (Blasie, Milne, & Dai, 2001). These researchers used the Socratic, or inquiry method of teaching and learning, not only in the classroom, but amongst faculty and staff as well. They typically began with an initial question, then sought to answer this question from existing information (Blasie et al., 2001).

Armed with the information gathered, Blasie et al. (2001) then moved into a process of reflection and organization, so as to make sense of what they had gathered. Armed with the

results of reflection and organization, they went through a process of peer review before arriving at the completed body of work. In this manner, they were able to use the inquiry method in their research process, the classroom, and amongst their peers. The researchers view Socratic questioning, or inquiry-based teaching and learning, as a key element in sustaining positive classroom environments.

Learning and Teaching as a Process

To more thoroughly appreciate the process of teaching, learning, and evaluation, teachers should become familiar with what is commonly and incorrectly referred to as Bloom's Taxonomy. This taxonomy, derived from the need to determine what to evaluate, is organized along three dimensions: the cognitive, affective and psychomotor "domains" (*Learning domains*, 2003).

The cognitive domain is organized along three practical instructional levels: fact, understanding, and application (*Learning domains*, 2003). There is also a lower and higher order within this domain, with knowledge, comprehension and application "inferior" to analysis, synthesis, and evaluation (Bloom's taxonomy, 2002). While the cognitive domain appears to lend itself to a lecture and objective measurement paradigm, use of the Socratic, or inquiry method of teaching and learning is of much more value over time.

The affective domain pertains to faculty and student beliefs concerning teaching and learning (Bloom's taxonomy, 2002). Key words are awareness, distinction, and integration, by both faculty and students. Faculty should be aware of the dynamics of this affective domain in order to establish and maintain a positive classroom environment.

The third and last of the "Bloom's taxonomy" teaching and learning domains is the psychomotor domain (Bloom's taxonomy, 2002). This domain normally focuses on students producing products. Key concept words are imitation, practice, and habit. It is easy to see that in establishing a positive classroom environment from the start, it will be imitated by the students. Good learning tenets will become practice, and the strong sense of community established will become a habit, and will benefit both faculty and students in the future. Follow-on faculty will be

challenged to produce similar classroom environments or move on, and students will desire positive learning environments to keep their motivation and enthusiasm alive.

Interest in the material to be learned seems to be the best stimulus to learning (*The process of education*, 2003). In the process of education, teachers, not teaching tools or devices, are of principal importance. The first object of any act of learning is that it can serve our students in the present and future. More important than any acquisition of specific knowledge is the development of an attitude toward learning and inquiry. All of the aforementioned are integral parts of the process of education, or, better stated, of teaching and learning (*The process of education*).

Unless detail is placed within a structure, it will be quickly forgotten (*The process of education*, 2003). Students' views of the world are characteristic of their intellectual, psychological and social development, and teachers must base learning upon this precept. Learning is approximately three simultaneous processes: acquisition of knowledge, transformation to make it fit, and evaluation to see if it fits. In designing classroom environments, it is important to challenge, yet not diminish students' self esteem and motivation.

An arousal state somewhere between apathy and wild excitement is ideal for the aroused attention necessary to optimize the learning that might take place (*The process of education*, 2003). Films and visual aids may produce a more passive student who waits to be taught, instead of creating knowledge within him/herself. In the process of teaching and learning, the teacher is seen as an excellent communicator, role model and identification figure for the majority of the students.

In addition to the teaching and learning process of Bloom's taxonomy, and the general educational process "dos and don'ts" discussed above, the process of instructional systems design (ISD) is worth mentioning here. When attempting to create a positive classroom environment, an ISD flow through the needs assessment, objectives development, planning the instructional program activities, implementation of those activities, and evaluation of the program or course or class (Hiemstra, 2003).

In the slightly more sophisticated systems analysis model, the building blocks are need, objectives, constraints, capabilities, alternatives, analysis/selection of alternatives, selection criteria, development and pilot testing, and evaluation (Hiemstra, 2003). The feedback and modification loop is important for this model, as the system is rotated as needed while developing the program.

The Hiemstra and Sisco Individualizing Instructional Process model developed in 1990 follows these steps:

- Activities of various types are performed or designed prior to the first lesson with the learners.
- A positive learning environment is created throughout the learning process.
- An instructional plan is developed based on learners' needs and interests.
- Appropriate learning activities are identified.
- Learning is put into action and the process is monitored.
- Individual learner outcomes, as contracted, are evaluated (Hiemstra, 2003, p.2)

Adult Learning Styles

In understanding the establishment of a positive classroom environment, one of the last pieces of the puzzle is a look at adult learning styles, or the process of andragogy. Zemke and Zemke (1984, p.1) postulated some "30 things we know for sure about adult education". They sorted their list of 30 into three "things we know about groups": adult learners and their motivation, designing curriculum for adults, and working with adults in the classroom (Zemke & Zemke, 1984). The researchers find that their work is still relevant today.

Generally, adult learners are motivated to learn. Unlike their younger peers in residential campus programs, adult learners are self-motivated, and thrive on intrinsic, rather than extrinsic rewards. Course material must be relevant to the position adult learners see themselves in several years in the future. Adult learners thrive on Socratic discussion, interaction between themselves and the instructor and their classmate peers, and on their "hands on" interaction with class and course materials. Field trips to factories and places where their future lies are especially rewarding, and maximize learning opportunities.

In constructing a positive classroom environment for adult learners, focus on their years of experience and the wealth of information they bring to the classroom, not on the gaps in their knowledge (*Principles*, 2003). In the classroom, respect differing beliefs, styles, opinions, and work hard to protect minority opinions. The following short list is helpful:

- Use a variety of teaching strategies, especially for longer classes.
- Assess adult experience and learning needs early on, and make all material relevant, and based on those needs.
- Teach in shorter intervals, or teach interactively, but in no case, for more than 45-50 minutes.
- Work on building self-esteem, as adults are often "out of the box" just being in classrooms.
- Strive for mutual and individual inquiry, offering assistance as needed.
- Teaching to individual differences is especially important, as adult students may range from post-teens to grandparents.
- Always apply learning to a practical, rather than abstract, setting.

Felder (1996) indicates that students different learning styles must be understood, and that program, course and classroom design must take these difference into account. The Myers-Briggs Type Indicator (MBTI) model classifies students according to their preferences on scales derived from psychologist Carl Jung's theory of psychological types: extraverts, sensors, thinkers, and judgers. Felder discusses Kolb's Learning Style Model, which classifies students along two continuums: concrete experience or abstract conceptualization, and active experimentation or reflective observation.

In the Hermann Brain Dominance Instrument (HBDI), students are classified into four different models based on the task-specialized functioning of the physical brain (Felder, 1996). These four models take into account the logical, emotional, analytical, quantitative, visual, etc. combinations that affect learning. Last, Felder looks at his own Felder-Silverman Learning Style Model, which classifies students as sensing, visual, inductive, active, and sequential learners. In these four models of individual learning style differences, Felder poses that teaching must be

performed to elicit learning, and that the adult learning style continuum is perhaps more complex than meets the eye.

Gardiner (1996) takes faculty to task in his paper on student learning and faculty teaching. He insists that faculty teach as they are taught, even though they are knowledgeable regarding principles of adult education. In one national study, he states that only 35 percent of the faculty strongly emphasized their institution's goals, only 12 percent utilized feedback from students, and only 8 percent used expert viewpoint. Involving students in discussion is a highly regarded and mentioned tenet of adult education, yet 70 to 90 percent of the faculty used traditional lecture as their primary instructional strategy.

In another study, Gardiner (1996) points out that the questioning of students comprised .2 percent to 9.2 percent of class time. In only .3 percent to 2.5 percent of class time, were students required to use the much more complex skill of evaluation. Only 17 percent of 1,700 faculty respondents at a research university said they used essay tests. Only 13 percent of their questions involved problem solving.

In rounding out this section on adult learning styles, the researchers feel it is appropriate to discuss active learning, as modeled by Fink (1999). In his Active Learning Model, Fink sees the need to move past passive learning, to active learning. In his model, he suggests that all learning activities involve some kind of experience or some kind of dialogue. He divides experiencing into doing and observing, and dialogue into self and other dialogue.

Creating a Positive Learning Environment

The State of Kansas is creating a positive learning environment by enhancing education through technology. The Kansas State Board of Education hopes to improve student achievement, enhance teaching quality, and reinvent the learning environment (*Responses*, 2003). They quote the National Educational Technology Plan, which states that the latest research and evaluation studies demonstrate that school improvement programs that employ technology for teaching and learning yield positive results for students and teachers (*Responses*, 2003). They feel that teachers who teach with classroom technology will be able to draw upon

extensive course content knowledge, pedagogical (andragogical) knowledge, in combination with technological knowledge.

Riley (2000) discusses the concept of creating a responsive or invitational learning environment to accommodate gifted and talented students. He sees that classroom environment created by both the teacher and physical classroom environment. Riley presents material from Maker and Nielson which describes this ideal classroom: learner-centered, teacher independent, open to new people, complex, open to acceptance, open to varied groupings, flexibly managed, and tolerant of mobility of movement, in and out of the classroom.

The researchers have presented a review of literature from distance learning environments, motivating students, positive teaching styles, learning and teaching as a process, adult learning styles, and creating positive learning environments. In all of these areas of literature review, the area with the fewest material was, unfortunately, the last area: creating positive learning environments. It could be successfully argued that by using distance learning technology's learning community approach, motivating students, adopting a positive teaching style, understanding teaching and learning as a process, and understanding adult learning styles, teachers will tend to create a positive learning environment.

Statement of the Research Questions

There were three research questions of great importance to this study. The first, and probably the most important, was: Does the ERAU Extended Campus provide adult learners with a Positive Learning Environment in the classroom? The second research question was: Which PLE elements are considered most important in the classroom? The last research question was: Which adult learning classroom environment elements detract the most?

Chapter III

Method

Research Design

With the usual limitations of time, funding and distance, the researchers chose a descriptive research model for this study. They collected informational data through a literature review and directly sampled adult student input through a survey. This study was conducted over some six months, three states, and seven adult education classrooms.

Population Sample

Conducted by two researchers over a six month period at two geographically separated locations, the sample for this study consisted of 53 undergraduate and graduate students in the Southwest Region of Embry-Riddle Aeronautical University's Extended Campus. Selected by cluster sampling, the 27 graduate students and 26 undergraduate students had an average age of 34. The 27 graduate students were all enrolled in the Master of Aeronautical Science Program, while the 26 undergraduate students were a mix of Professional Aeronautics (21), Aviation Maintenance technology (4), and Bachelor of Science in Technical Management Operations (1).

Only five respondents, or nine percent, were female. All students combined averaged six courses with Embry-Riddle, with a range from one to 32. On average, all students combined needed some 33 more hours to complete their degree programs. The average grade point average (GPA) of all 53 students was an amazing 3.75, which was startling to the researchers.

Data Collection Device

The researchers were unable to locate a suitable existing survey for this study, and consequently designed and developed a Student Learning Environment Survey (SLES), which is attached to this study as the Appendix. The SLES contains eight demographic questions, three Likert Scale items, a prioritized 26-item five-choice sort, and two open-ended questions at the end of the survey. The survey was pilot tested on a graduate class taught by one of the researchers, and changes were made to the survey.

The SLES was administered in class, at seven ERAU Extended campus centers in three Southwest Region states, over a 60 day period. Completion of the survey took approximately 15 minutes, and all surveys were filled out completely.

Chapter IV

Results

The respondents answered all three research questions through their cumulative survey responses. They overwhelmingly indicated that the Extended Campus of Embry-Riddle provides adult learners with a Positive Learning Environment in the classroom. They indicated which PLE elements are considered most important in the classroom. Next, they indicated which adult learning classroom environment elements detract the most. Last, they offered additional PLE observations and insights. The following portrayal of result data will begin with the three Likert Scale items on the SLES, present the prioritized PLE components, and then list the PLE detractors and other comments pertaining to maximizing the student learning environment.

Likert Scale Items

Item nine stated, "I am satisfied with the 'average' ERAU Extended Campus learning environment in my classes." The 53 respondents' average response on a seven point Likert Scale was 5.98/7, or a 85 percent rating. The graduate students' isolated response was 6.15/7, or a 88 percent rating. The undergraduate students' isolated response was 5.81/7, or a 83 percent rating.

Item 10 stated, "My ERAU professors work hard to provide me with a maximized learning environment." The 53 respondents' average response on a seven point Likert Scale was 6.10/7, or a 87 percent rating. The graduate students' isolated response was 6.46/7, or a 92 percent rating. The undergraduate students' isolated response was 5.73/7, or a 82 percent rating.

Item 11 stated, "Compared to other colleges attended, ERAU's Extended Campus provides a maximized learning environment." The 53 respondents' average response on a seven point Likert Scale was 5.86/7, or a 84 percent rating. The graduate students' isolated response was 5.87/7, or a 84 percent rating. The undergraduate students' isolated response was 5.85/7, also a 84 percent rating.

PLE Sort Items

Item 12 on the SLES stated, "Please arrange the following components of a positive learning environment according to your first priority, etc. Feel free to add other components that do not exist on this list." The items on the list consisted of 26 possible PLE components decided on by the researchers, as follows:

communication before class
clear academic goals
warm, caring instructor
great classroom
open discussion
challenging class/program
computers in the classroom
easy to understand syllabus
open communication throughout the class
accessibility to the instructor
academic support outside of the classroom
great classmates
great instructor
great personal growth
great class
feeling of belonging
feeling of "family"
great textbooks
fair testing and grading
adequate homework
great field trips
trusting environment
respecting environment
entertaining environment
humorous environment
instructor storytelling

The 53 respondents indicated that their choices for the "top five" components of a positive learning environment were as follows, based on a score of "5" for first choice, four for second choice, etc:

Great instructor	**115**
Clear academic goals	**103**
Challenging class/program	**88**
Open communication throughout the class	**79**
Fair testing and grading	61
Open discussion	60
Respecting environment	39
Great personal growth	33
Accessibility to the instructor	32
Warm, caring instructor	22
Great class	21
Academic support outside of the classroom	21
Entertaining environment	20

Trusting environment	16
Adequate homework	8
Great textbooks	8
Instructor storytelling	8
Feeling of belonging	7
Feeling of "family"	5
"Hands-on" training	4
Critical thinking skills	4
Humorous environment	4
Computers in the classroom	3
Easy to understand syllabus	3
Great field trips	3
Great classroom environment	2
Great classmates	2
Industry experience	2
Great syllabus and materials	1
Modern subject matter	1
Great oral communication practice	1

Re-sorting the PLE-Sort items into "human-centered", and "academic-centered" categories produced some very interesting results. Note that, while the "sort" was subjective, the "human-centered" items received 65 percent of the point total, while the "academic-centered" items received 35 percent of the point total.

Human-centered

Great instructor	**115**
Open communication throughout the class	**79**
Fair testing and grading	61
Open discussion	60
Respecting environment	39
Great personal growth	33
Accessibility to the instructor	32
Warm, caring instructor	22
Entertaining environment	20
Trusting environment	16
Instructor storytelling	8
Feeling of belonging	7
Feeling of "family"	5
Humorous environment	4
Great classmates	2
TOTAL:	**503**

Academic-centered

Clear academic goals	**103**
Challenging class/program	**88**
Great class	21
Academic support outside of the classroom	21
Adequate homework	8
Great textbooks	8
"Hands-on" training	4
Critical thinking skills	4

Computers in the classroom	3
Easy to understand syllabus	3
Great field trips	3
Great classroom environment	2
Industry experience	2
Great syllabus and materials	1
Modern subject matter	1
Great oral communication practice	1
TOTAL	273

Open-ended Questions

The SLES ended with two open-ended questions designed to elicit respondent comments regarding detractors from a positive learning environment and any other aspect of maximizing their student learning environment not covered. In response to question 13, "Please list all of the detractors from a positive learning environment that you have ever experienced, at any age, at all schools, it was interesting that 51 of 53 respondents listed detractors. A synopsis of question 13 responses is presented below. The detractors are grouped by subjectively-selected categories of detractors, with some noticeable overlap between categories.

Positive Learning Environment Detractors	Frequency
In-Classroom Detractors	
poor or disruptive classmates	**17**
noise inside and outside the classroom	6
poor classroom environment	5
classroom interruptions	4
high student-teacher ratio	3
cell phones in the classroom	2
profanity allowed in the classroom	1
boring and unchallenging environment	1
dull class	1
boring distance learning course	1
negative people	1
student afraid to ask questions in class	1
TOTAL:	**43**
Instructor-based Detractors	
know-it-all instructors	**8**
incompetent instructors	**7**
unprepared instructors	6
no/little student/instructor interaction	5
uncaring instructors	5
boring instructor	4
instructor wanders off the subject	3
poor teachers	3
one-way communication	3
instructor late	3
preferential treatment of classmates	3

storytelling not on course topic	2
poor instructor communication skills	2
no open discussion in the classroom	1
instructor mispronouncing words	1
closed-minded instructor	1
inflexible instructor	1
instructor not fluent in English	1
covering the same material over and over	1
not fulfilling student expectations	1
flight instructor teaching style	1
instructor profanity	1
tenured professors failing students	1
unfocused instructor	1
confused instructor	1
instructor expects too much	1
no out-of-class contact with instructor	1
different rules for instructors	1
lazy instructor	1
instructor prejudiced against women in aviation	1
instructor not interested in teaching	1
inadequate explanation of complex material	1
TOTAL:	**73**

Classroom Technology Detractors

classroom technology breakdown/obsolescence	3
training aids outdated	1
TOTAL:	**4**

Course or Class-Related Academic Detractors

poor textbooks	3
unclear course objectives	2
expensive textbooks that are not used	2
too much homework	1
rote memory tests	1
term paper/PowerPoint presentations in every class	1
term papers in technical courses	1
outdated course materials	1
unattainable course goals/assignments	1
homework for the sake of homework	1
bell curve grading	1
test on uncovered material	1
classes too long	1
poor syllabus	1
tests too difficult	1
unrealistic grading standards	1
too much travel time to class	1
classes too long	1
TOTAL:	**22**

Outside-Classroom Detractors

not enough time in the day	3
work detractors	2
outside detractors	2

TDY schedule	1
TOTAL	**8**

There were approximately 150 positive classroom learning environment detractors mentioned by 51 respondents, for an average of three per respondent. Of the 150 detractors mentioned, 73, or 49 percent , pertained to "instructor-based" detractors; 43, or 29 percent, pertained to "in-classroom" detractors; 22, or 15 percent, pertained to "course or class-related" detractors; 8, or 5 percent, pertained to 'outside classroom" detractors; and 4, or 3 percent, pertained to "classroom technology" detractors.

The last question on the SLES asked students to feel free to comment about any other aspect of maximizing their student learning environment not covered so far. Twenty-nine of the 53 respondents, or 55 percent, offered additional comments. A brief synopsis of their responses is presented below, separated into positive and negative comments. The 35 separate comments were seen as 71 percent positive, 29 percent negative.

Positive Comments

enjoy discussing current trends in the course
enjoy discussing future developments in courses
courses should be demonstrative
good instructor professional experience
great instructors (2)
instructor professionalism
focused classroom environments
classroom interaction valuable
networking is great
interweave computers into the classroom work
caring instructors/professors
open class discussions
ERAU brings classes to you (on base)
stress computer skills
current events
effective and interesting coursework
instructors who are enthusiastic, passionate and mentoring
enjoyable/fun learning environment
comfortable learning environment—human factors designed
clear goals
clear objectives
caring instructor
computers in the classroom
class organization

Negative Comments

hate $100 textbooks
not all students are the same; treat us differentially
give the ERAU faculty body an enema—flush out the poor ones

poor ERAU instructors—bottom of the barrel
more diversity needed in the classroom
poor center-to-center continuity for student advisement
let all ERAU students know of local job fairs, especially at ERAU residential campuses
loud noises distracting
Blackboard is NOT student friendly
Update textbooks to post-911

Results Summary

The 53 respondents, considered a small, but representative, sample from 58 percent of the centers in the ERAU Extended Campus Southwest Region, overwhelmingly indicated that the Extended Campus of Embry-Riddle provides adult learners with a Positive Learning Environment in the classroom. They indicated that great instructors, clear academic goals, challenging classes and programs, and open communication throughout the class were the four PLE elements considered most important in the classroom. Last, they indicated that poor or disruptive classmates, know-it-all instructors, and incompetent instructors were the adult learning classroom environment elements that detract the most. In response to the last question in the survey, the 53 respondents offered some 35 additional observations concerning PLEs, of which 71 percent were seen as positive, and 29 percent were seen as negative.

Chapter V

Discussion

Research Questions Answered

The 53 respondents answered all three research questions through their cumulative survey responses. They overwhelmingly indicated that the Extended Campus of Embry-Riddle provides adult learners with a Positive Learning Environment in the classroom. They indicated which PLE elements are considered most important in the classroom. Last, they indicated which adult learning classroom environment elements detract the most, and most offered additional observations concerning positive learning classroom environments. From the Likert responses, it was obvious that a small, yet representative sample of both undergraduate and graduate students in the Southwest Region of ERAU's Extended Campus felt that ERAU provides a positive classroom learning environment.

Likert Scale Items

In answering survey item nine which stated, "I am satisfied with the 'average' ERAU Extended Campus learning environment in my classes", the 53 respondents' average response on a seven point Likert Scale was 5.98/7, or 85 percent. Graduate students indicated a mean response of 6.15/7, or 88 percent, while undergraduate students indicated a mean response of 5.81/7, or 83 percent. It is apparent that both undergraduate and graduate ERAU Extended Campus students are satisfied that the university provides them with a PLE in the classroom. While the mean score of 5.98 can be considered a very positive indication, there is also obviously room for Improvement.

Survey Item 10 stated, "My ERAU professors work hard to provide me with a maximized learning environment". The 53 respondents' mean response on a seven point Likert Scale was 6.10/7, or 87 percent. The graduate students' mean response was 6.46/7, or 92 percent. The undergraduate students' mean response was 5.73/7, or 82 percent. Of the three Likert Scale items on this survey, this item had the most favorable response. On this item, the graduate students were significantly more satisfied with their instructors than the undergraduate students.

The researchers feel that enhancing undergraduate instructors' PLE-creation skills is the most significant effect of this research study.

Likert Scale item 11 stated, "Compared to other colleges attended, ERAU's Extended Campus provides a maximized learning environment". The 53 respondents' mean response on a seven point Likert Scale was 5.86/7, or 84 percent. The graduate students' mean response was 5.87/7, or 84 percent. The undergraduate students' mean response was 5.85/7, also a 84 percent rating. This Likert Scale item produced the lowest mean response of the three items. Unlike the other two items, both the undergraduate and graduate students' mean responses were practically identical.

PLE Sort Items

Of a possible total of 776 points, using a rating scale ranging from 5 points for selecting an item first, to one point for selecting it last, the top five items; **great instructor, open communication throughout the class, fair testing and grading, clear academic goals, and challenging class/program**, received a combined total of 50 percent of the points. It can be argued that, of these five, only "great instructor" pertains directly to the instructor. It can also be successfully argued that all five are closely tied to instructor-related variables, indicating, in both cases, that establishing positive learning environments in at least existing classrooms must be accomplished by the instructors.

Open-ended Questions

Question 13, "Please list all of the detractors from a positive learning environment that you have ever experienced, at any age, at all schools", produced some 150 PLE detractors from 51 of 52 respondents. While there were approximately 68 slightly or greatly different detractors mentioned, most detractors were people-centered, pertaining to people such as classmates or instructors. The top three PLE detractors mentioned were: **poor or disruptive classmates, know-it-all instructors, and incompetent instructors.** Most surprising to the researchers were the "top of the list" detractor, "poor or disruptive classmates", and the fact that nearly all (51/53) respondents took the time to write down a response to this question.

Discussion Summary

While the satisfaction with past and current Embry-Riddle positive classroom environments was appreciably high with both undergraduate and graduate students, the undergraduate students were significantly less satisfied with their instructors than the graduate students. Both groups of respondents offered insightful input when asked about detractors from PLE classrooms. Future research will involve looking at the difference between undergraduate and graduate respondents, between Extended Campus locations, and between military and civilian students.

Chapter VI

Conclusions

From the data gathered through the Student Learning Environment Survey, it was indicated that, overall, ERAU Extended Campus students from Southwest Region centers were very satisfied with their classroom environment. It was concluded that undergraduate students were significantly less pleased with their instructors' PLE skills. Respondents indicated that great instructors, clear academic goals, challenging classes and programs, and open communication throughout the class were the most important PLE components.

It was concluded that nearly all respondents had been exposed to PLE detractors somewhere in their academic preparation. PLE detractors mentioned most often were: poor or disruptive classmates, unprepared instructors, and incompetent instructors. It was also concluded that most of the PLE detractors mentioned were human-centered, with classmate and instructor detractors mentioned the most.

The researchers concluded that additional research in determining PLE indices and parameters is necessary. They intend to expand this research study into a more comprehensive and overarching research design.

Chapter VII

Recommendations

The researchers recommend that Embry-Riddle's Extended Campus fund additional PLE research. They recommend that the Faculty Senate Research Committee and the Center For Teaching And Learning Effectiveness (CTLE) be tasked to oversee this research.

The researchers recommend that immediate research be conducted to determine why ERAU EC undergraduate students are significantly less pleased with their instructors than graduate students are. Last, the researchers recommend that the basic thrust of this research study be expanded to look at : (1) additional undergraduate and graduate student PLE differences, (2) differences in PLE perception and satisfaction between military and civilian students, and (3) Extended Campus-wide PLE data.

In their review of current related literature and research, the researchers saw that an educational paradigm shift from teaching to learning has already begun. They recommend that ERAU provide this paradigm-shift training to all faculty, and especially to all EC adjunct faculty.

References

Alabama Center for Research on Online Learning. (2003). *Discussion of research.* Retrieved March 18, 2003 from http://www.bamaed.ua.edu/sciteach/ROLL/discussion_of_research.htm

Blasie, C., Milne, C., & Dai, H. L. (2001). Inquiring into the teaching and learning of science : An initiative from a research university. *Almanac 47.* Retrieved March 18, 2003, from http://www.upenn.edu/almanac/v47/n19/TAT-science.html

Bloom's taxonomy. (2002). Retrieved May 27, 2002 from http://www.che.wsu.edu/~millerrc/bloom.html

Clement, K. M. (2002, March 27). "Teacher of the year" encourages pupils to be "big stars". *Providence Journal.* Retrieved March 15, 2003 from ProQuest Database.

Davis, B. G. (1999). *Tools for teaching.* San Francisco: Jossey-Bass.

Felder, R. M. (1996, December). Matters of style. *Prism, 6*(4), 18-23.

Fink, L. D. (1999). *Active learning.* University of Oklahoma Instructional Development Program. Norman, OK: U of Oklahoma.

Gardiner, L. F. (1996, Spring). Why we must change: The research evidence. *Thought & Action,* (2), 52-77.

General principles of motivation. (2003). Retrieved March 15, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/motivate.htm

Hiemstra, R. (2003). *The process of the design of instruction.* Retrieved March 18, 2003, from http://home.twcny.rr.com/hiemstra/instproc.html

Learning domains. (2003). Retrieved March 16, 2003, from: http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/domains.htm

Longmire, W. (2000, March). A primer on learning objects. *Learning Circuits.* Retrieved March 18, 2003, from http://www.learningcircuits.org/mar2000/primer.html

Luce, R. W. (2003). *Motivating the unmotivated.* Hocking Technical College, Nelsonville, Ohio. Retrieved March 18, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/ teachtip/unmotiva.htm

Na Ubon, A. (2003). *Online education, online learning communities.* University of York. Department of Computer Science. Retrieved March 12, 2003, from http://www-users.cs.york.ac.uk/~adisornn/research.htm

Povlacs, J. T. (n.d.). *101 things you can do the first three weeks of class.* Retrieved March 18, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/101thing.htm

Principles of adult learning. (2003). Retrieved April 23, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-1.htm

Responses to consolidated application. (2003). Retrieved March 18, 2003, from http://www.rtec.org/setda/index.php?screen=sample_kansas

Riley, T. (2000). Creating a learning environment for differentiation. Retrieved March 18, 2003, from http://www.tki.org.nz/r/gifted/pedagogy/ create_environ_e.php

The process of education. (2003). Retrieved March 18, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/process.htm

Zemke, R., & Zemke, S. (1984). 30 things we know for sure about adult education. *Innovation Abstracts, 6*(8), 1-2. Retrieved April 12, 2003, from http://www.hcc.hawaii.edu/intranet/committees/FacDev Com/guidebk/teachtip/adults-3.htm

APPENDIX

STUDENT LEARNING ENVIRONMENT SURVEY

Student Learning Environment Survey

For items 1 through 8,
either **Circle one of the answers provided** or **Fill in the blank**

1. graduate undergraduate

2. ERAU Academic program enrolled in: _____

3. Age: _____

4. Gender: _____

5. Number of courses taken with ERAU: _____

6. Semester hours remaining to degree completion: _____

7. Occupation: _____

8. Approximate ERAU GPA: _____

For statements 9 through 11, **CIRCLE A NUMBER** from 1 to 7 that **BEST DESCRIBES** your opinion or experience.

Completely Disagree	**Strongly Disagree**	**Disagree**	**Undecided**	**Agree**	**Strongly Agree**	**Completely Agree**
1	**2**	**3**	**4**	**5**	**6**	**7**

9. I am satisfied with the "average" ERAU Extended Campus learning environment in my classes. **1 2 3 4 5 6 7**

10. My ERAU professors work hard to provide me with a maximized learning environment. **1 2 3 4 5 6 7**

11. Compared to other colleges attended, ERAU's Extended Campus provides a maximized learning environment. **1 2 3 4 5 6 7**

12. Please arrange the following **components of a positive learning environment** according to your first priority, etc. **Feel free to add other components that do not exist on this list.**

communication before class
clear academic goals
warm, caring instructor
great classroom
open discussion
challenging class/program
computers in the classroom

easy to understand syllabus
open communication throughout the class
accessibility to the instructor
academic support outside of the classroom
great classmates
great instructor
great personal growth
great class
feeling of belonging
feeling of "family"
great textbooks
fair testing and grading
adequate homework
great field trips
trusting environment
respecting environment
entertaining environment
humorous environment
instructor storytelling

A. 1st choice: _____

B. 2nd choice: _____

C. 3rd choice: _____

D. 4th choice: _____

E. 5th choice: _____

13. Please list all of the detractors from a positive learning environment that you have ever experienced, at any age, at all schools:

_____

_____

_____

_____

_____

_____

_____

14. Please feel free to comment about any other aspect of maximizing your student learning environment not covered so far.

_____

_____

_____

Creating a Positive Classroom Environment

Frances Johnson, EDD

Embry-Riddle Aeronautical University

Abstract

Creating a positive classroom environment has long been a topic of research at the kindergarten through high school levels. However, less research is available at college/university level despite evidence that suggests its importance to the successful delivery of course content. Relevant information from the *Faculty Academic Orientation Manual* has been summarized to provide the backdrop for two paradigms. The journalistic paradigm *Who, What, When, Where, How and Why* is useful for assessing the characteristics of students and the challenges they face. A more recent paradigm *Situation, Purpose, Audience, and Method* (SPAM) presented by Dr. Laurie Rozakis has been adapted to facilitate utilization of data from the first paradigm. The use of such background data enhances the development of a positive classroom environment. Furthermore, the flexibility inherent in both paradigms permits the instructor to extrapolate additional information on an as needed basis. The expeditious delivery of course content to a focused, goal-oriented population in a positive classroom environment is deemed desirable. The paradigms expand available choices to faculty striving to achieve that goal.

Creating a Positive Classroom Environment

Introduction

Creating a positive classroom environment at the university level is almost universally considered the responsibility of the instructor whether full time or adjunct as a matter of professional courtesy as well as for pragmatic reasons. Veteran faculty members with or without pedagogical backgrounds have long since resolved the problem for themselves. However, first time ERAU Extended Campus instructors may experience anxiety when confronted with the reality that creating a positive classroom environment accompanies creating a syllabus, preparing lectures, activities, and examinations for the course content. Those who were hired for professional expertise but lack an instructional background and/or actual teaching experience also may be intimidated by the task. New faculty members are provided a variety of sources to turn to for assistance. Course monitors make available to the classrooms, sites and centers the course outlines that are the basis for the syllabus. The *Faculty Academic Orientation Manual* (*FAOM*) provides *Tips for New Faculty* as well as guidance for developing both syllabi and lesson plans online, in hard copy and on CDs (*FAOM*, 2003). Plans are moving forward to make CDs available to adjunct faculty (Clark & Valley, 2003). Center Directors and/or faculty advisors generally provide individual or group orientation meetings for new faculty members. Staff meetings provide opportunities for faculty to meet one another as well as to discuss issues. An observation conducted during a session may provide insights that promote the enhancement of the classroom environment. Student evaluations at the end of a session provide feedback to faculty members. Such offer needed assistance to new faculty members but may not allay underlying anxiety related to preliminary planning necessary for creating a positive classroom environment. Trial and error may become the model with somewhat unpredictable results for delivery of course content. Other aspects of a positive classroom environment are predetermined for a variety of administrative, maintenance, economic or other background decisions/reasons over which the instructor has little control. However, there exist paradigms that have been adapted to allow faculty members to

quickly assess relevant background information necessary to creating a positive classroom environment.

Background

Charting the course upon which a university embarks is a function of numerous factors that are considered administrative in nature with input from a variety of concerned groups, schools and departments. This in no way negates the need to recognize that underlying structure and organization of the university can impact the classroom environment. A brief summary of the background provided in the *FAOM* (2003) follows to assist the new faculty member who is preparing for the opening of his/her first class and subsequent sessions.

1. The organizational structure with its administrative hierarchy;
2. A clear sense of purpose expressed in the university's mission statement;
3. The provision of support services including type and accessibility;
3. The location of campuses, classrooms, sites, and centers;
4. Specific purpose(s) for which such are established;
5. Students whose profiles began changing with the introduction of the GI bill decades ago;
6. Current knowledge of the characteristics and needs of students to be served;
7. The viability and feasibility of course content;
8. The incorporation of technological advances in a rapidly changing world both in the classroom and for staff;
9. The demand for accessibility to university programs designed to maintain and improve skills necessary in a changing workplace;
10. The provision of staff prepared to deliver the course content in a positive classroom environment;
11. Ongoing provisions for professional growth and development of faculty;
12. Integrating adjunct faculty into the collegial community;
13. The economic feasibility of each program offered or dropped; and,
14. Concerns related to the economic health of both the university and the country.

Those aspects over which the faculty member has direct control are recognizing the challenges faced by today's students, maintaining a professional approach to course content, establishing appropriate academic standards, delivering course content in a meaningful context, measuring the outcomes of students' learning, and providing a positive intellectual classroom environment.

The University's Role

As indicated, the university provides the general direction and purpose for which it was established (*FAOM*, 2003). Governance, financial matters, curriculum development, support systems for students and faculty, and other administrative functions such as admitting students

and hiring qualified faculty are reviewed and updated according to demonstrated needs. Provisions for fixed campuses and non-fixed classrooms, sites, and centers are implemented. Periodic reviews determine whether the locations of classrooms, sites and centers continue to meet students' needs in a given area. Parameters are defined for programs, certificates, and degrees as well as the scope and sequence in which such shall be delivered. Provisions exist by which faculty members may offer comments, suggestions or proposals. Technological advances that affect access to libraries and professional publications as well as the delivery of meaningful course content are integrated across the university system to support both students and faculty. The university's role is multifaceted and engaged in overseeing the entire operation. In addition, the announced purpose, support, and function of each facet of the university is within the purview of the system. The new faculty member reaps benefits that are in place and will be made aware of opportunities to contribute suggestions, proposals, etc., to the ongoing assessment of the university's role.

The Problem

With administrative decisions forming the backdrop and support services providing the framework, the task of creating a positive classroom environment for a recently hired faculty member can be daunting. How does one deliver course content, evaluate student learning, and record the results in a positive classroom environment? Furthermore, what constitutes a positive classroom environment?

Available research which addresses the issue of creating a positive classroom environment is abundant at the pre-school, primary, junior high and high school levels but is less available at the college and university levels.

Issues presented in research about the creation and maintenance of a positive classroom from kindergarten through high school levels involve but are not limited to the factors that follow:

1. Safety from violence and bullies (Indicators, 2001);
2. Caring and supportive relationships with teachers and peers;
3. The use of teaching strategies "that meet students' basic and affective/motivation needs;" (Ridley & Walther, 1995) and,
4. "...Using student-directed form of discipline that teaches them how to make better choices" (Ridley & Walther, 1995).

Research topics that loosely parallel the preceding issues include the following:

1. Civility in the classroom (Richardson, 1999)
2. Surviving as an adjunct professor (Lyons, Kysilka, & Pawlas, 1999);
3. Large scale classroom scheduling (Mooney, Bardin, & Parmenter, 1996); and,
4. Helping students overcome their apprehensions about course content are available at the college and university levels (Richardson, 1999).

The importance of physical space in creating supportive learning environments (Chism & Bickford, 2002) clearly has applications at all educational levels. Such issues as the physical facility, furniture, etc., and the human comfort factor as components for creating a positive learning environment are addressed. However, many changes in the physical facility are often outside the instructor's sphere of influence for a variety of reasons. The most common reason involves the terms of the arrangements negotiated by the provider of space with the Extended Campus.

ERAU Extended Campus delivers quality programs to train professionals in the aeronautical industry in locations that span the globe. Therefore, questions arise:

1. Where are the classrooms, sites, and centers located?
2. Who controls the heating, cooling, lighting, number of electrical outlets, and, perhaps, the furnishings?
3. What is required to obtain needed technological training and appropriate equipment?
4. What do the classrooms look like?
5. Does the instructor have the ability to modify the physical arrangement of the classroom?
6. Finally, and more importantly, how does an instructor provide a positive classroom environment in such a global situation?

This is but a representative sample of questions that arise. Classrooms, sites, and centers are located anywhere that there exists the need to provide services to those who will pursue higher education in their chosen fields in the aeronautical industry. Determining need and making arrangements for suitable facilities are generally considered functions of the administrative arm rather than the instructional staff for obvious reasons. In addition to the preceding factors, the establishment of classrooms, sites and centers may involve negotiations with government agencies, bases, public schools and other universities as well as negotiations with businesses and existing public schools. The evidence indicates that much must be done before the instructor becomes involved with the physical classroom environment. Furthermore, there may exist external constraints that limit the manner in which the physical environment may be modified or

changed. However, rearranging the furniture and adding pictures, posters, charts, etc., related to course content can create a more casual environment or, if needed, a more formal environment.

Certain classrooms are fully equipped with state of the art technological hardware as an integral part of the physical facility. Others are equipped with only the most basic equipment. However, the instructor determines what equipment is needed for delivery of course content and requests that it be made available. Timeliness of the request is essential for procuring needed equipment.

Creating a Positive Classroom Environment

Creating a positive classroom environment is no less important at the college or university level than it is in kindergarten through high school although, as noted earlier, there are fewer current research resources available to those engaged providing instruction in institutions of higher learning. Generally, however, there exists more academic freedom with regard to choosing how to create a positive classroom environment that is conducive to intellectual growth and development. Distance learning presents an altogether different set of challenges for providing a positive learning environment. However, I defer to in-house sources of reliable information regarding the challenges of delivering instruction in a positive environment through distance learning.

Therefore, let us begin with an examination of three major factors within the instructor's sphere of influence that impact a positive intellectual classroom environment. The factors are the students, the instructor and the course content. It follows that the more information one has about each of these factors the more likely it is that one will provide the appropriate classroom environment.

Two Paradigms

Relevant factors may be examined by utilizing an existing paradigm, by combining selected items from two or more paradigms or by creating a paradigm specifically for this task. The journalistic paradigm *Who, What, When, Where, How, and Why* employs specific questions to extrapolate data. It is an effective tool for obtaining information regarding the characteristics of the student population. A significant benefit derived from analysis of data obtained through use of the journalistic paradigm is the enhancement of the classroom environment. Analysis of the data can

be expedited by using a modified version of SPAM (Rozakis, 1999) paradigm appropriate to course content.

The use of the journalistic paradigm elicits questions about students that follow:

1. Who are the students?
2. What are their characteristics, goals and objectives?
3. When do they have access to the classroom?
4. Where are they?
5. How do they learn?
6. Why do they choose to obtain a college education in this manner?

Answers to the preceding questions are obvious to long-term adjuncts or full-time instructors for Embry-Riddle Aeronautical University's Extended Campus. This likely is not true for the newcomers to the teaching staff lacking background knowledge of the military forces or of aeronautics. Nor are the ramifications for creating a positive classroom environment immediately apparent to those who have little experience with either.

Characteristics frequently shared by such students include but are not limited to the following:

1. Most are self-motivated;
2. Such students often possess, technical and/or managerial skills;
3. Most demonstrate a strong work ethic;
4. The majority of them have goals that they wish to achieve;
5. Many, if not all, recognize the need to develop a higher level of skills, training and education;
6. Most believe that they can and should develop such skills;
7. There exists dissatisfaction with their current possibilities for advancement; and,
8. Many believe that they can do certain jobs better than they are being done but are denied the opportunity to prove themselves because they do not meet required educational standards.

The goals and objectives of the student body often include the following:

1. To find an appropriate program in an accredited institution of higher education which can provide the needed skills, training, certificates and/or degrees;
2. To enroll in a program which can be completed while working full time;
3. To maintain family and/or community life (not an easy task); and,
4. To complete the degree in the same or less time than offered by more traditional educational settings with the flexibility to take longer should life intervene.

Extended Campus students find that access to the classroom is governed, not only by the schedule for classes, but such things as the number of hours worked as well as the shift worked. Work related travel sometimes interferes with the student's ability to attend all scheduled classes

during a given session. Often family and community commitments must also be considered. Although certain family and community commitments may be scheduled to fit the necessary time frame for participation in a classroom, hours on the job may not be negotiable. Hence, ERAU offers options to assist students. Courses are scheduled for evenings or weekends. Distance learning is available as well.

Where are the students who embark on such an educational journey? The number of classrooms, sites and centers located around the world that comprise the Extended Campus of Embry-Riddle Aeronautical University provide ample evidence that the students are also located around the world.

How do such students learn? They learn from practical experience, from classroom interaction and activities, from textbooks, labs, and through research as well as through electronic media and distance learning. Indeed, they learn in much the same manner as students in a more conventional setting. The difference is they bring an array of experiences that more traditional college freshmen often do not have.

Why do students choose to obtain a college education in such a challenging manner? Schedules at work and home, money, time for study and research, distance traveled, and financial resources must be juggled and budgeted. Unexpected emergencies must be dealt with whether or not they interfere with the educational process. As might be expected, the answers are many and varied. Experience and maturation provide the impetus to make positive changes through appropriate higher education for almost all such students. A sense of accomplishment as well as being prepared to accept greater responsibility on the job, better pay, better benefits, and a higher standard of living enter the equation. Whatever the reasons, most such students are ready to work and are focused on their goals. Therein lies the both the reward and the challenge for the instructor charged with delivering course content in a positive environment.

Instructors who create a positive classroom environment deliberately or intuitively consider the aspects of the classroom found in the paradigm SPAM. The situation is assessed to determine whether one or several of the previously discussed challenges should be addressed. Other factors to consider are time, place, and duration of the delivery of course content. Such

assessment provides the foundation for clearly establishing the purpose(s) for which students arrive in the classroom. Communicating purpose to students necessarily involves a concise statement of requirements and procedures. Included are the following: goals and objectives for the course of study, expected student outcomes, attendance requirements, expected level of involvement in classroom activities, tests, exams, special projects, grading procedures used for determining grades and late work policies as well as applicable penalties. Traditionally, such information is available to students through inclusion in the course outline and the course syllabus that is based on the course outline. Instructor initiated informal discussions and questionnaires provide ongoing monitoring of the utility of the syllabus. Such information is useful when revising, editing, and updating a syllabus to make it more "user friendly."

Learning as much as possible about the audience, i. e., students who are enrolled in the class, is key to determining the methods of delivery of instruction to the students. Certain general characteristics already have been presented but do not address individual differences. The opening session lends itself to using index cards or short questionnaires to obtain e-mail addresses and/or brief biographical sketches of information that students may wish to share. When asked, most are willing to share with the instructor what they wish to obtain from the course. Such information often serves as a guide for the inclusion of relevant in-class discussions, activities, and research topics or project and the subsequent selection or modification of method(s) of delivery of instruction.

A variety of background issues that are not directly related to the delivery of course content or the creation of a positive classroom environment occasionally impact both. The instructor must determine how to address such issues to prevent or minimize negative impact within the classroom. Such commonly occurring issues follow. Occasionally, students question the necessity for mastery of goals and objectives. Such remarks necessitate reminding them that mastery addresses the issue of credibility. Because students generally arrive after a day at work as well as having begun the day with responsibilities at home, the underlying cause of confusion regarding mastery of course objectives may lie elsewhere. Therein lies the problem as well as the solution. The students may arrive tired, frustrated by the day's events or because they are not as

well prepared as they wish to be. Or they may be hungry having skipped a meal to arrive on time. However, they have arrived. Some issues lie outside the realm of the instructor's ability to change, alter or solve. Acknowledge that and begin with one that can be alleviated such as one or more missed meals. Determine through a brief class discussion whether it is possible to solve the problem as a group or individually by permitting food in the classroom. Include the provision that the room be left in its original condition. Hunger satisfied often diminishes the feeling of fatigue and sets the stage for learning. Discussions and activities that involve individual or group responses at or near the beginning of the class develop awareness among students that participation is expected. Such activities also serve to refocus attention on long-term personal goals thereby relieving some stress that originates from external sources. On rare occasions, it may be necessary to provide a few minutes for quiet reading or review. Another enhancement to a positive classroom environment is to recognize the individuality of each student by providing occasional, brief opportunities for each to share with the class and the instructor personal information of his/her choosing.

Busy students occasionally need to be reminded to contact the instructor and/or the office should an emergency arise whether it is job related or otherwise. E-mail with the address included on the cover sheet of the syllabus is now an accepted and convenient way to contact the instructor. It also provides to both students and instructor a venue to discuss assignments, ask questions regarding missed assignments, late work, etc., as well for other aspects of a given course of study. E-mail has the added advantage of permitting students to turn in assignments on time when job related travel or emergencies might impede that effort. Ignoring these and other background issues is generally non-productive with regard to creating a positive classroom environment.

Armed with information regarding the situation, purpose and audience, the instructor is ready to select the appropriate methods of delivery of course content from an array of possibilities that includes but is not limited to the following:

Instructor directed/facilitated

1. Traditional lecture;
2. PowerPoint presentation;

3. Summaries, quizzes, discussions;
4. Use of interactive media, audio, video, CDs, charts, graphs, demonstrations, drawings, photographs, etc.;
5. Writing/speaking activities--summaries, parodies, creative writing assignments, interviews, memos, evaluations, plans; etc. and/or,
6. Assignments requiring additional research.

Group learning or cooperative activities—may be teacher directed or student initiated

1. Small group activities completed in class with reports back to the class;
2. Longer term cooperative learning activities involving research, demonstrations, presentations, etc.;
3. Student directed panel discussions, presentations, demonstrations, etc.; and,
4. Interactive group activities—discussions, analyses, evaluation, proposals, justifications, refutations, etc.

Assessment of Students' Progress

Key to creating a positive classroom environment is fair and accurate assessment of students' progress in the course using a variety of assessment tools. Ideally, selection of evaluation tools is determined before the course begins. However, the instructor should reserve the right to adjust the scope and type of evaluation based on students' needs. Many textbook publishers provide multiple choice, true-false, short answer or other basic tests used for measuring vocabulary and basic concepts. Guidelines exist for assessing oral presentations. Rubrics exist that may be adapted to focus on overall objectives. Instructor developed short essay and long essay examinations provide opportunities to evaluate students' progress at the basic or core knowledge as well as at the higher critical thinking levels of intellectual growth. Certain courses lend themselves to assessment through performance of specified tasks within the context of the field or laboratory. Research and presentation of the results through written and oral presentations individually or as a cooperative effort expand the scope of assessment of students' progress. Portfolio assessment is another alternative that may used for larger ongoing projects such as that of graduate level research projects. Finally, clear, concise communication with students regarding purposes and methods of assessment is crucial to maintaining a positive classroom environment.

Desirable Instructors' Attributes

What are desirable instructor attributes? Both appropriate educational training and/or work experiences are primary attributes. It follows that the instructor refine expertise regarding

course content. More importantly, it is necessary that the instructor possess the ability to adapt delivery of instruction to meet the needs of students. Often, formal educational backgrounds are varied and have been interrupted by family matters, work-related activities, community involvement and/or military obligations. Recent enrollees in entry level courses often require short reviews of study skills, basic vocabulary and concept review and/or building, and historical background where applicable. This applies to requisite courses as well as elective courses. One needs also to consider the learning modalities as well as the cognitive, psychomotor and affective domains of students enrolled in the class (Johnson, 2002). Striving to deliver instruction through the use of activities that address the various learning modalities and domains is a crucial aspect of providing a positive learning environment. Delivery of course content has moved beyond the traditional lecture that demands little of students beyond listening to lectures and responding to examination questions. Nor should the instructor disregard the very real possibility that one or several students may possess expertise related to technological advances or to other aspects of the course content. Incorporating such expertise into class activities and assignments provides many benefits to the students as well as the instructor. Such exchanges of information, techniques and expertise enhance the classroom environment by providing opportunities for students to play to their strengths while overcoming deficits.

Enthusiasm for course content inspires students to strive for a better understanding of subject matter. Compassionate professionalism provides a role model that will influence future student behaviors whether or not it appears in the syllabus. Other desirable instructor attributes include the following. Acknowledge the sacrifices made by the students, their families, friends, coworkers and supervisors. It bolsters their commitment and drive when it falters. Clearly stated directions for presentations, examinations and projects ensure a more thorough and consistent effort on the part students. Entertain questions about assignments. Engage students in finding answers. Facilitate discussion, cooperation and teamwork. Of such a positive classroom environment is made.

Summary

Faculty members engaged in creating a positive classroom environment for the first time have little need for detailed flow charts to establish the university's hierarchy and role in day to day classroom operations. However, it is advisable to have a general overview of the underlying organizational structure and its mission. Such background factors do influence but are not the final arbiters for creating a positive classroom environment. Ideally, physical space, choice of furniture, lighting, temperature, etc. are integral components in a positive classroom environment. The reality is that faculty members deliver course content in existing classrooms over which they may have little control. Creative arrangements of furniture in classroom space offer alternatives to the existing arrangement. The addition of appropriate posters, charts and pictures may enhance the environment. Lighting and temperature controls may be fixed with little that can be done to modify either.

Other, initially, more important factors needed for the creation of a positive classroom environment are as follows:

1. Background knowledge of the students and their characteristics;
2. Empathy for the challenges facing adults as they reenter the world of academia;
3. An appreciation for the support provided to them by family, friends, and employers;
4. Enthusiasm for both teaching and course content;
5. Current knowledge of the course content;
4. A delivery plan that utilizes a variety of methods and techniques;
5. A fair and consistent plan for evaluation of student learning using a variety of measurement instruments;
7. A well-planned syllabus to guide the students; and,
8. A willingness to strive to encourage and inspire students to succeed in their academic endeavors.

Conclusion

Resources are available at the local and university levels to assist both the new and veteran faculty members with delivery of course content and/or research projects. The use of resources is encouraged with ongoing communication from the university to classrooms, sites, and centers. Such information is typically forwarded to instructors via office mail or e-mail. Both adjunct and veteran faculty members are encouraged to share their expertise by submitting papers for the annual symposium related to teaching effectiveness. From such come research, paradigms, models and suggestions used successfully in classrooms to deliver course content in a

positive intellectual environment. The adaptation of both the journalistic paradigm and SPAM exist because ERAU actively encourages professional growth and development of its adjunct and full time faculty. What better milieu exists for a faculty member to begin a college level instructional career in which to create a positive classroom environment?

References

Chism, N., & Bickford, D. (Eds.). (2002). *The importance of physical space in creating supportive learning environments.* San Francisco: Jossey-Bass.

Clark, R., & Valley, P. (2003). *Developing extended campus part time faculty through the use of faculty orientation CD.* Paper presented at the 2003 Society for Information Technology & Teacher Education Conference.

Faculty Academic Orientation Manual. (2003). Embry-Riddle Aeronautical University. Retrieved June 10, 2003 from http://www.ec.erau.edu/cce/faom/faom.shtml

Indicators of School Crime and Safety 2001. (2001). Retrieved June 14, 2003 from http://nces.ed.gov/pubs2002/crime2001/

Johnson, F. (2002, October 30). *Measuring outcomes of students' learning involving the learning modalities, domains, critical thinking skills levels, and right and left-brain thinking.* Paper presented at the College of Career Education Tenth Annual Symposium of Teaching Effectiveness Evaluating Student Performance, Daytona Beach, FL.

Lyons, R., Kysilka, M. & Pawlas, G. (1999). *The adjunct professor's guide to success surviving and thriving in the college classroom.* Boston: Allyn and Bacon.

Mooney, E. L., Bardin, R. L, & Parmenter, W. J. (1996). Large-scale classroom scheduling. *IIE Transactions, 28*, 369-378.

Richardson, S. M. (Ed.). (1999). *Promoting civility: A teaching challenge.* In S.M. Richardson & M. Svinicki (Eds.), *Civility, leadership, and the classroom* (pp. 77-86). San Francisco: Jossey-Bass.

Ridley, D., & Walther, B. (1995). *Creating responsible learners: The role of a positive classroom environment.* Washington, D. C.: American Psychological Association.

Rozakis, L. (1999). *The complete idiot's guide to public speaking* (2nd ed.). New York: Pearson Education Macmillan Company.

USING SPECIAL TEAMS FOR TEACHING

AND NOT TEAM TEACHING

by

Roger D. Lee, Ph.D.
Professor
Salt Lake Community College

Introduction

Undoubtedly, teaching at the college level requires professors to orchestrate and play a diverse set of roles which require the performance of different tasks and which depend on a variety of talents and temperaments. Historically, it has been almost universally accepted that all the diverse roles to which a college teacher must play, should be assumed by one teacher. James L. Bess and his associates (2000) challenge this long held assumption and suggest that special teams for teaching should be established, whereby the various teaching roles are unbundled and differentiated with separate faculty fulfilling the individual roles. Rather than team teaching in which different faculty teach a particular portion of the course content, Bess argues that different faculty should be used to perform the diverse roles of a teacher in each specific course. Bess suggest seven specialist's roles that faculty should perform: (1) pedagogue; (2) researcher; (3) lecturer; (4) discussion leader; (5) mentor; (6) integrator; and (7) assessor. An explanation of each teaching role follows.

Pedagogue

This role refers to the primary, traditional role of a teacher to understand the subject content and become the creator of learning for the students in the classroom. To be effective, the pedagogue must possess, not only curricular knowledge but also, knowledge of the learners in the classroom.

A few of the specific tasks of the expert pedagogue in higher education, as postulated by J. G. Donald (1992), include the following:

1. Explaining the educational goals, purposes and values and their epistemological grounds.
2. Clarifying the institutional and faculty educational objectives, governance, and financing with respect to the institutional context.
3. Providing an overview of the discipline as to how the subject matter is organized and the methods used to validate this knowledge.

4. Instilling within the students a sense of the importance of scholarly learning and providing personal collaborative contact.
5. Explaining to the students that their learning depends primarily on the quality of effort they put forth in their work.
6. Interpreting critically the baseline knowledge level of students before they enroll in a particular class, designing topics and concepts to be learned, and measuring the results within the context of learning outcomes.
7. Using alternative ways in which to represent concepts and skills to impart the knowledge of the discipline.
8. Responding to student questions and needs and adapting the teaching strategy to achieve learning outcomes.
9. Aligning the instruction in manner that enables the instructor to interact with and receive feedback from the students.
10. Monitoring and evaluating the students' competence and understanding of the material during and at the conclusion of the class to assess overall students= performance.

Researcher

The researcher role does not suggest advancing the common body of knowledge of a particular discipline, particularly at two-year college institutions. Rather, this role refers to making content decisions about a particular course. The faculty member assuming this role would survey the same courses taught at other similar college institutions by reviewing the printed material and finding relevant content knowledge to include in the course, given the learning objectives and outcomes of the course.

The profile of the researcher, according to Barzum and Graff (1985), is the trait that facilitates creativity. Researchers tend to be focused on an objective world rather than a social world. They possess high levels of cognitive ability and the skill to manage a highly objective

world. Their primary concern is to identify topics related to the focal course and to provide recommendations for course content and organization.

Lecturer

Lecturing as suggested by Bess does not merely mean presenting material and transferring information. This role requires excellent communication skills in which the ability to motivate, inspire, and expand the understanding of the students is clearly demonstrated. A high-powered faculty member would be illustrative of someone fulfilling this role. Thus, of all the factors that have an impact on the manner in which a lecture is delivered, a dynamic, motivated personality is the single most important trait according to Bess. Research by Murray, Rushton, and Paunonen (1990) reveals that extroversion and liberalism are also two dominant personality traits associated with successful lecturers. Qualities such as being friendly, lighthearted, colorful, and charismatic are considered to be manifestations of extroversion, while aesthetic sensitivity, flexibility, and non-authoritarianism are expressions of liberalism. Research has borne out the fact that lecturers who performed well in classes scored high on both the extroversion and liberalism factors.

Discussion Leader

Students can and should learn from and with each other. Accordingly, a faculty member, who is skilled in group learning environments, can significantly contribute to the learning process of students. This role of creating, executing, and assessing learning in a group context constitutes a significant set of skills and knowledge beyond merely the course content.

The task requirements of an effective discussion class leader, as suggested by Richard Tiberius (1990), are as follows. First, the discussion leader must encourage and maintain class discussion. This presupposes chosen topics that provide an interest in and a stimulus for discussion. The discussion leader must create an informal climate of acceptance to promote freedom of expression. Second, the discussion leader must keep the discussion on the topic. This is accomplished by clarifying the goals of the topic and summarizing when appropriate. Third, the discussion leader must promote sharing among the learners in the classroom. Ground

rules have to be set to encourage members to listen to one another, hear the viewpoints of others without judgment, and ensure balanced interaction among the students. Fourth, the discussion leader must encourage the awareness of the group process of learning. Pointing out the process issues to the class members is sometimes more important than the actual course content. Fifth, the discussion leader must deal promptly and appropriately with disruptive students. Students tend to be more accustomed to the lecture style of teaching, and therefore, they must be trained in the discussion style of teaching in order to reduce destructive conflict by and competition among the class members.

Mentor

Perhaps this could be considered a new role for a faculty member to play since it means far more than merely setting an hour aside daily for student consultation. Similar to mentors in the workplace, faculty mentors would enrich their role of faculty advising and become involved with their students personal growth and development. Research has borne out the positive impact of role modeling and mentoring on work associates and students.

Golian and Galbraith (1996) suggest the following six mentoring functions:

1. Building and establishing relationships.
2. Providing information and support.
3. Facilitating change.
4. Challenging and confronting ideas.
5. Modeling appropriate behavior.
6. Developing a vision for the students.

Moreover, an in-depth analysis and research of mentoring by Golian and Galbraith revealed that there are similar themes imbedded in the process of mentoring. These common themes of mentoring include the notion that mentoring is a process within a controlled contextual setting. Mentoring involves a relationship between a more knowledgeable and experienced individual and a less experienced and educated individual, and thereby provides professional networking, counseling, guiding, instructing, modeling, and sponsoring. Moreover, mentoring

establishes and develops a personal, professional, and psychological support mechanism and builds a social and reciprocal relationship. Finally, mentoring provides an identity transformation for both the mentor and the protégé or mentee.

Integrator

Learning is a holistic experience, and therefore, college educators should focus on educating the whole person in an age of specialization and high technology. Integrating the material learned in the classroom with what occurs outside the classroom is indeed a formidable challenge, but worth pursuing. According to Bess, this role builds a collegiate learning environment, and places the faculty member in the position of a manager, overseeing learning in a much larger context. Also, the integrator role involves merging the traditional separation or bifurcation between academic affairs and student affairs.

The primary function of the integrator is to link curricular and co-curricular experience. Learning does not occur entirely within a singular isolated domain such as a classroom. Rather, learning according to Rhoads and Black (1995) is an integrated and evolving process in which academic and non-academic experiences are inherently interconnected. Student life outside the classroom is an important venue, whereby the opportunity to synthesize and integrate the material introduced in the formal academic environment is nurtured. The intent is to enable the students to understand and interpret knowledge gained in the classroom, and apply this knowledge to subsequent non-classroom experiences. Thus, students are empowered to interpret what is learned in the class from their own cognitive structure and to make their own decisions about the meaning, value, and validity of the material.

Assessor

Traditionally, a college teacher has always had the responsibility of evaluating students= performance and assigning grades at the end of the course. However, this role goes well beyond generating grades at the end of each semester. This role consists of integrating both the formal and informal learning experiences into a comprehensive outcome assessment with respect to how well the students have learned upon graduation from the institution.

The Assessor as envisioned by Speck (1998) has a six fold task:

1. Analyzing, with the other team members, what should be evaluated.
2. Designing and establishing an evaluation process of the students.
3. Managing and controlling the evaluation process effectively and efficiently.
4. Evaluating the data derived from the previous tasks in the assessment process.
5. Interpreting and reporting those data to the other team members.
6. Using the data to create a common body of knowledge about effective teaching and learning based upon valid empirical research.

Some may argue that the approach of using special teams for teaching as an organizational structure in higher education as presented herein would be inefficient and costly. If seven faculty members were required to teach a single course formerly taught by one, then indeed colleges would price themselves out of business by having to raise tuition to pay for the additional faculty members. However, for specialized team players to work collaboratively as a single team, the new methodology of faculty specialists would have to involve teaching more than one course at a time. Thus, a matrix organization structure would be most appropriate. The seven faculty specialists would be arrayed with various courses as shown below.

Table 1

Matrix Organization Structure of Teaching

Specialist	Course #1	Course #2	Course #3	Course #4	Course #5
Pedagogue					
Researcher					
Lecturer					
Discussion Leader					
Mentor					
Integrator					
Assessor					

Conceivably the faculty specialists would have some familiarity with the discipline, and therefore, would provide their expertise in the preparation and delivery of each course. Thus, a pedagogue, for example, would still be teaching five different courses, of which some of them would be the same but a different section. Moreover, it is likely that the specialization in research would be rotated so that all faculty members would have the opportunity to enlarge and sharpen their core knowledge of the discipline. Accordingly, there would be numerous faculty members who specialize in specific areas and who would teach according to their specialization to various sections of the same courses during a particular semester. Thus, the teams formed would be composed of different combination of specialists, who are not only knowledgeable of the subject material, but also who have the interpersonal compatibility and skill to maximize the fruitfulness of the joint teaching venture.

The critical issue with matrix organization structures in the academic environment is the management of communication with the team members and their challenges to their task authority. The pattern of professional authority is unquestioned in the traditional classroom settings. Because of the interdependent complexity of the teaching with team specialists, the psychological dynamics of team behavior must be well understood. According to Bess, team members must be learners within the learning community in which double-loop learning is engaged. This implies correcting ineffective practices by questioning fundamental organizational beliefs and challenging long-standing perspectives, rather than relying on the past routines and habits. Teams do not become effective and self-managing instantly after they are created. Thus, there is a necessity for phasing in the process. Initially, as envisioned by Bess, faculty development consultants would be needed to work with the teams collectively and with faculty members individually. The consultants would function as interim leaders, gradually relinquishing their consultive roles for delegated ones, as the team specialists learn how to manage themselves.

Conclusion

In summary, Bess argues that the foregoing faculty roles require such a mix of tasks, talents, and temperaments that the faculty "sub-roles" must be performed by more than one faculty member. To quote Bess: "In all work organizations, for successful outcomes to emerge, in addition to proficient workers performing the required tasks, there must be a compatibility among the three elements--the tasks to be performed, the talents needed for the tasks, and the temperaments that are likely to result in satisfaction and motivation" (Bess, 2000, p. 8). Accordingly, faculty should consider assembling teaching teams, whereby individual faculty members would be assigned different roles, and they would collaborate to create more effective teaching and learning outcomes.

The notion of faculty members assuming different specialized teaching roles within a collaborative team environment is truly unique. If the approach were implemented, it would significantly transform higher education in the twenty-first century. Successful implementation of such an approach turns on two basic questions: First, can the faculty roles be unbundled within the present traditional college teaching environment? Second, can faculty members make the cultural shift from "my work" to "our work" and begin teaching together rather than teaching alone? The future of the faculty role within higher education is predicated on the answers to those two questions.

References

Barzum, J. & Graff, H. F. (1985). *The modern researcher* (4th ed.). Orlando, FL: Harcourt Brace.

Bess, J. L. and Associates. (2000). *Teaching alone, teaching together: Transforming the Structure of Teams for Teaching.* San Francisco: Jossey-Bass.

Donald, J. G. (1992). The development of thinking processes in post-secondary education: Application of a working model. *Higher Education, 24*(4), 413-430.

Golian, L. M. & Galbraith, M. W. (1996). *Effective mentoring programs for professional library development.* In D. William & E. Garten (eds.). Greenwich, CT: JAI Press.

Murray, H.G., Rushton, J., & Paunonen. S. V. (1990). Teacher personality traits and student instructional rating in six types of university courses. *Journal of Educational Psychology, 82*(2), 250-261.

Rhoads, R. A. & Black, M. A, (1995). Student affairs practitioners as transformative educators: Advancing a critical cultural perspective. *Journal of College Student Development, 36*(5), 413-421.

Speck, B. W.(1998). *Grading student writing: An annotated bibliography.* Westport, CT: Greenwood Press.

Tiberius. R. G. (1990). *Small group teaching: A trouble-shooting guide.* Toronto: Ontario Institute. Studies in Education/University of Toronto Press.

Paper Abstract: ERAU TEACHING AND LEARNING EFFECTIVENESS SYMPOSIUM

2003 Daytona Beach, FL

Tracking ESL Students

A major multicultural issue facing college instructors is how to deal with the increasing numbers of students whose home language is not English. These students typically finish an intensive ESL program, pass the TOEFL and enter regular or on-line classrooms where they face difficulties with academic English. This presentation will discuss and propose some solutions, which include higher TOEFL requirements, transition courses and orientation programs.

Douglas Magrath
Daytona Beach Community College-English
Embry-Riddle University-Distance Learning
magrathd@erau.edu

November 3, 2003

Mr. Magrath teaches writing and Middle East Studies on line for Embry-Riddle University. He also teaches college prep reading and writing at Daytona Beach Community College.

Tracking ESL Students

Introduction

A major multicultural issue facing college English instructors is how to deal with the increasing numbers of students whose home language is not English. A common question is what drives the course choices for language minority students? Do they take the courses they need for a good education? Or do they try to avoid those classes that have a large written component?

1. The Problem as Reported in the Literature

Students who have just exited ESL programs or who have not done ESL or the TOEFL may feel submerged. This is the typical "sink or swim" model of L2 acquisition. Students are placed in regular classrooms with no language support. The theory is that students will just pick up English by being around it. This theory has a design flaw however as reported by Clair (1994):

> Although intuitively appealing, this hypothesis is based on naive notions of language proficiency within a school context, lacks research support, and disregards the importance of first language in second language acquisition.(Clair, 1994, p. 5)

In regular classes, the predominant activity in mainstream classes is teacher-led discussion, but ESL learners have particular trouble understanding input that is sarcastic, ironic or contained puns. Learners are also frustrated with teachers who speak fast or who often departed from the topic at hand.

One student said of a teacher who frequently digressed and talked about his Navy days," I don't want to spend my time to listen to something I don't understand...When my words come through my brain, and I couldn't, like, have time for me to understand? And then, when I take the time to understand, then he is speaking another stuff" (Harklau, 1994, p. 249).

Regular teachers often seemed to be at a loss in dealing with L2 learners' grammatical and vocabulary errors. They lacked the linguistics background that would let them explain to the learners why their language was wrong. In this case, they ignored the students' errors. On one paper, the teacher wrote, "Syntax needs work-you lose clarity because of your expression"(260). Another teacher told the student, "Just don't write too long in one sentence" (261). Submersion does not lead to proficiency as some advocates think. Mere exposure to the language may facilitate rudimentary social communicative skills, but it is not sufficient for the acquisition of academic language skills. The L2 input is this situation is not comprehensible. The result will be a pidgin or an interlanguage.

There are the three basic demands placed upon the second language (L2) student:

1 .Interactional demands: The ability to comprehend and participate in the social demands of the classroom and the school. The knowledge of the norms to initiate, sustain and close communication with teachers, staff and other students. Norms of turn taking, following the appropriate behavior and demonstrating knowledge.

2. Instructional-task demands: These require the ability to grasp the nature of learning and classroom work and are present across the curriculum. There are 4 essential tasks 1) memory, 2) procedural or routine tasks, 3) comprehension/understanding and 4) opinion.

3. Cognitive demands: These require the ability to assimilate concepts and schemata that are essential to different school subjects. There are two key areas: 1) assimilating concepts and information according to subject area and 2) using and understanding the language employed and modes of inquiry within the subject area.(For example-each subject area has a" jargon.") The term "minority rights" will be understood by US born students but L2 speakers may understand the term differently.

2. The problem as observed at ERAU

Here are some notes from instructors who had internationals in college courses:

> Due to the different cultural attitudes, it was very stressful for me as their instructor. Many ESL students do not think they need to abide by any time set or deadlines. Many are very argumentative. Some feel that they don't need to do the complete assignments, they feel part is good enough. I am sure that for the students learning these sets of rules may be difficult. I told them that college is preparing them for the "real world" and they have to take responsibility for what they "do" or don't "do".
>
> I feel that instructors need a short workshop on how to approach these students and what methods of teaching have been successful in the past.
> (Phil Jacowitz, Instructor, Embry-Riddle Aeronautical University, Personal communication, October 1, 2001)

> The good news is that many of my international students perform very well in my classes. Indeed, over the years I have come to expect the highest grades in my classes to be assigned to international students who have reached that level via "objective" type tests. The bad news is that some of my international students are clannish. This can be both a social and a class-related concern. In terms of the latter, outside assignments that are supposed to be completed by the individual may, in fact, be accomplished by the group. (Dr. Jim Libbey, professor Embry-Riddle Aeronautical University, (Personal communication, October 1, 2001)

> International students are a gift to my 345 class as they tend to come from or have experience with other religions. The only problems they have are with their language deficiencies. Cultural issues are rare because they have already adjusted and are very open. (Dr. Nancy Parker, Acting Chair, Humanities Embry-Riddle Aeronautical University, (Personal communication, October 1, 2001)

3. Problems with Reading and Culture

The Importance of Background Knowledge and Culture

Language and culture are intertwined, and the question of cultural bias in reading often arises. Some would like to purge cultural content from all teaching, but culture is a part of life and students need to understand the cultural implications of reading material whether they agree with

it or not. Language and culture are connected and are dimensions of each other. "Language, in fact, both reflects and affects one's world view, serving as a sort of road map to how one perceives, interprets and thinks about, and expresses ones view of the world." (Fantini, 1997, p. 4) The teacher is a cultural resource especially if one is a native speaker teacher. Here are some comments from international students referring to teachers:

> [They represent] their country's culture from the way they speak down to the way they use their fork (Barratt & Kontra, 2000, p. 20).

Reading is a difficult matter. Even when students know the meanings of the separate words, they may not get the meaning of the text. Many factors are involved in reading: readers' familiarity with conventions of written texts in L1 and L2, awareness of cultural differences and awareness of the structures in the text. Added to this mix is the emerging concept of interculturalism which is a knowledge of, rather than acceptance of, the new culture as contrasted to biculturalism where the learners adopt the new culture (McKay, 2000, p. 8).

> ...English today is being used globally by bilingual speakers, who have chosen not to internalize the norms of native-English speaking countries (10).
> English is perceived to be culturally neutral and "...provides the basis for promoting cross-cultural understanding in an increasingly global village" (11).

Cultural understanding and background knowledge are indeed significant factors affecting reading performance. In fact, non-native students who have reading difficulties may not have a reading problem as much as a background knowledge deficit. Earlier practices viewed reading as deriving meaning from print without recognizing the full importance of background knowledge. Reading is interactive, and the knowledge that readers bring to the process is as important as the information found in the text (Melendez & Pritchard, 1985, p. 399). Current research into "schema theory" shows that students interact positively with material whose content is familiar even though the language may not be. A familiar frame of reference is vital to comprehension. This is "an interactive model of reading, which maintains that the background knowledge readers bring to the reading act is as important as the information residing in the text" (Melendez & Pritchard, 1985, p. 399). The teacher needs to ask if the learners have prior knowledge of the subject or a related one. When the schema includes a whole event such as a trip or process, a chain of events is recalled in the reader's mind concerning the situation (Hadley, 200x, p. 147). An unfamiliar situation such as a reading on lasers may be difficult if the students are not from a scientific background. A solution would be to bring in related technology, i.e. television, microwaves or even CD players, which work on the laser principle.

Specific Cultural Considerations

A passage may be linguistically understood, but the real meaning may depend upon a cultural concept, a common proverb or saying for example, that the language learner may not fully comprehend (Pfister & Poser, 1987, p. 3).

Readers have certain expectations about text structure held over from home language. When they can not identify what they are reading, they tend to formulate their own schemata. "Any one individual's interpretation of a message will be heavily influenced by his or her personal history, interests, preconceived ideas, and cultural background" (Hadley, 200x, p. 148). If students understand a text's structure, they can use it to guess unfamiliar words.

Types of texts and tone

Tone refers to how the author appears to the readers and how he feels about the topic. The writer's word choice needs to match his tone. A memo to technicians would be direct and no-nonsense while a memo to customers would be upbeat and enthusiastic. Tone lets the reader know the author's attitude and feelings. A few words that describe tone: admiring, sarcastic, flattering, angry, frightened, humorous, praising, worried, ironic, cruel, etc. The common levels of register discussed earlier are part of the overall tone. For example the dialogue in Mark Twain's short stories is informal with a lot of regional slang. (See Twain's short stories for examples of informal western slang mixed with formal speech.)

The following is from a reading skills book and is used to illustrate a "scornful" tone. What are the cultural considerations?

> Spam-that slimy canned pork product-is surprisingly still around after more than fifty years. Despite its high fat content (more than three and a half teaspoons per two-ounce serving) and high calorie count (171 calories per serving), more than four billion cans have been sold since 1937. Spam's greasy, rubbery consistency and salty flavor have made it the butt of may jokes-such as David Letterman's suggestion of Spam-on-a-rope for people who want to eat and shower at the same time....(Langan, 1997, p. 298)

In addition to the obvious theme of "Spam", the author refers to items common to North American culture such as a TV talk show, obsession with fat and calories and the popular soap-on-a rope-products.

English courses often require students to analyze the tone of a passage and to use different tones in their own writing. Other courses, sciences such as, biology or physics for example, have their own systems for presenting information that include style, tone and specialized vocabulary. Learners need to be able to differentiate between the sub cultural styles in order to fully comprehend (Dubin & Bycina, 1991, p. 200).

> Cultures are powerful human creations, affording their members a shared identity, a cohesive framework for selecting, constructing and interpreting perceptions, and for assigning value and meaning in constant fashion...things that fit into this cultural framework are given the labels "human nature,' "instinct," "common sense," "logic." Things that don't fit are different, and therefore either illogical, immoral, nonsensical, or the result of a naïve and inferior stage of development of "human nature" (Galloway, 1992, p. 88).

Realize that for some items there are no equivalents. For example humor may not cross the language barrier. Students otherwise competent in English may feel left out when jokes go over their heads.

Help students realize that their view of the world is culturally bound, and both teachers and learners need to begin to appreciate the different cultural frameworks used to perceive the world (Hadley, 2001, p. 383).

4. Suggested Solutions

A: Orientation and Transition Programs

The "adjunct model" can sere as a transitional orientation course for L2 students already enrolled in an academic program. A related ESL support course is set up that helps students develop their academic English skills using material from the regular class or classes that they are taking (Iancu, 1993, p. 20). Combining ESL courses such as reading, grammar, writing, communication and study skills-note-taking with a regular course allows the students to see what academic courses are like while they are working on language skills. In addition, since the language material is taken from the academic course, it provides a transition from the sheltered environment of an ESL institute or school-based ESL class to the regular classroom with native speakers. Another advantage is that it allows the content instructor to teach without worrying about non-native speakers who may have difficulty and even fail because of language problems. In one program in Oregon, students with 450 TOEFL level enrolled in the paired content/ESL classes. Professors were then able to view the ESL students in their classes more as a source of enrichment through diversity than as an impediment to classroom interaction since the adjunct class addressed the language problems and allowed the ESL teacher to review and restate material (Iancu, 1993, p. 22). This model also helps develop relationships across disciplines on campus and provides encouragement to students to continue their studies in a major field. They get immediate intellectual nourishment when they take the introductory adjunct courses in the humanities and social sciences (Sudermann & Cisar, 1992, p. 296). Students working with content material are motivated more than they would be with the typical ESL materials alone. In

addition content-based instruction increases learners' self-confidence and cultural literacy in addition to their language proficiency (Leaver & Stryker, 1989, p. 273). A strong network of tutors for both writing and content area is also helpful.

Such a course takes careful planning and coordination with the departments involved. For example, while the content instructor is presenting and overview of the course and introducing terminology, the ESL instructor can cover definitions and introduce study skills such as listening and note-taking and academic reading. (Snow & Brinton, 1988, p. 559).

Student Comments. The following are student comments on the Freshman Summer Program at the University of California at Los Angeles where they attended paired content area and ESL courses:

> "FSP gave me an edge in fall quarter. I knew roughly
> what to expect at UCLA."
> "I grew up more mature after spending seven weeks
> in FSP and was very confident to work hard to overcome
> all the barriers."
> "Knowing where to get help, tutoring, and to set aside time to talk to professors. Time management was also
> a great benefit." (Snow & Brinton, 1988, p. 564)

B: ESL Sections

Some colleges offer a series of ESL writing classes to assist L2 students who are making the transition from SL to regular classes. Students enroll in a series of courses similar to the 'college prep" or "fundamentals" courses offered to the native speakers who are weak in their reading and writing skills. These courses are taught by ESL instructors and use texts designed for ESL students or college prep texts supplemented by teacher-made handouts.

Once students have finished these prerequisite courses, they take special sheltered sections of college composition and literature courses which are taught by trained ESL specialists. The requirements are the same as in the regular sections, but the books and supplemental materials are designed for international students and contain extra work in grammar and style. These courses may be supplemented by a lab section or a writing/tutoring center.

C: Textbooks and Aids

More and more "mainstream texts are including sections for the ESL writer. For example, *Keys For Writers,* a popular handbook, has notes for ESL students scattered throughout the text., and it contains a section for ESL writers from pages 403-434 that address topics such as "Cultural, rhetorical and linguistic differences... verbs followed by an infinitive...verbs followed by –ing" (Raimes, 2002).

Another text, *Focus* (Campbell, 1996), designed for college prep courses, includes an ESL appendix called "Tips for ESL Students" (pp. 278-284). Even the non-ESL sections look at times like an ESL text as *Focus* provides conjugations of simple present (p. 116) simple past and "to be" pp. 122-123) and exercises that resemble those found in ESL texts (p. 127).
finder

References

Barratt, L. & Kontra, E. H. (2000, Autumn). Native English-speaking teachers in cultures other than their own. *TESOL Journal, 9*(3), 19-23.

Campbell, M. E. (1996). *Focus: Writing paragraphs and essays.* New Jersey: Prentice Hall.

Clair, N. (September, 1994) Informed choices: Articulating assumptions behind programs for language minority students. *ERIC/CLL News Bulletin 18*(1), pp. 1, 5-8.

Dubin, F. & Bycina, D. (1991). Academic reading and the ESL/EFL teacher. In M. Celce-Murcia (Ed.), *Teaching English as a second or foreign language* (pp. 195-209). Boston, MA: Heinle & Heinle.

Fantini, A. E. (1997). Language: Its cultural and intercultural dimensions. In A. E. Fantini (Ed.), *New ways in teaching culture.* Alexandria, VA: TESOL.

Galloway, V. B. (1992). Toward a cultural reading of authentic texts. In H. Byrnes (Ed.), *Languages for a multicultural world in transition: Reports of the Northeast Conference on the Teaching of Foreign Languages* (pp. 87-121). Lincolnwood, IL: National Textbook Company.

Hadley, A. O. (2001). *Teaching language in context* (3rd ed.). Boston, MA: Heinle & Heinle.

Harklau, L. (1994, Summer). ESL versus mainstream classes: Contrasting L2 learning environments. *TESOL Quarterly 28*(2). Retrieved September 10, 2001 from http://www.ncbe.gwu.edu/miscpubs/tesol/tesolquarterly/harklau.htm.

Iancu, M. (1993, Summer). Adapting the adjunct model: A case study. *TESOL Journal 2*(4), 20-24.

Langan, J. (1997). *Ten steps to improving college reading skills.* (3rd ed.).Marlton, NJ: Townsend Press.

Leaver, B. L. & Stryker, S. B. (1989, May) Content-Based instruction for foreign language classrooms. *Foreign Language Annals 22*(3), 269-275.

McKay, S. L. (2000, Winter). Teaching English as an international language: Implications for cultural materials in the classroom. *TESOL Journal 9*(4), 7-11.

Melendez, E. J. & Pritchard, R. H. (1985, October). Applying schema theory to foreign language reading. *Foreign Language Annals 18*(5).

Pfister, G. & Poser, Y. (1987). *Culture, proficiency and control in FL teaching.* Lanham, MD: University Press of America.

Raimes, A. (2002). *Keys for writers* (3rd ed.). New York: Houghton Mifflin Company.

Snow, M. A. & Brinton, D. M. (1988, December). Content-Based language instruction: Investigating the effectiveness of the adjunct model. *TESOL Quarterly 22*(4), 553-574.

Sudermann, D. P. & Cisar, M. A. (1992, Autumn). Foreign language across the curriculum: A critical appraisal. *The Modern Language Journal 76*(3), 295-308.

Bibliography

Cadinas, J. (1977). Response I. In N. Edstein (Ed.), *Language, ethnicity and the schools.* Washington, DC: Institute for Educational Leadership.

Dunkel, P. (1986). Developing listening fluency in L2: Theoretical principles and pedagogical considerations. *Modern Language Journal, 70*(2), 99-106.

Katz, A. & Lucas, T. (1994, Autumn). Reframing the debate: The roles of native languages in English-only programs for language minority students. *TESOL Quarterly 28*(3), 469-487.

Krashen, S., Terrell, D., & Tracey, D. (1983). *The natural approach.* Oxford: Pergamon.

Peyton, J. K. et al. (1994, Autumn). Implementing writing workshop with ESOL students: Vision and realities. *TESOL Quarterly 28*(3), 537-561.

Shrum, J. L. & Glisan, E. (1994). *Contextualized language instruction.* Boston: Heinle and Heinle.

Quality Assurance and the Extended Campus

LeRoy A. Trusty

Embry-Riddle Aeronautical University

Abstract

In today's market when companies are concerned for the fading dollar, the same can be said about academic institutions. Universities and colleges are being affected by the current economic downturn. But not only is funding an issue but also the prospective student. An equally important concern that schools of higher learning must contend with is that of accreditation.

This paper will discuss a process that can be formal or informal but must be considered by faculty and administration in the extended campus to ensure that how the courses are established and the method of delivery is of a quality that will bring in the students and provide an outline to justify accreditation.

Quality Assurance

Quality assurance for many extended faculty is a familiar term because of the various backgrounds we come from. In the military and in the aviation community, quality assurance was the department within an organization that was charged with ensuring that all work met the required standards before a technical manual would be published, a vehicle would leave the motor pool, or an aircraft could be launched. The individuals were trained to look for incorrect procedures or inappropriate parts. The goal of quality assurance was to make sure that the quality of the work was bar none.

In manufacturing and in the service industries, organizations experienced the move towards establishing quality assurance to provide quality to the customer, whether the customer was internal or external to the organization. Total Quality Management (TQM) was established following Deming's concepts of quality and processes used to ensure quality (Walton, 1988). As the TQM movement progressed, we have seen the incorporation of the International Organization for Standardization or ISO as it is known. The ISO web site describes what ISO is about:

> "When the large majority of products or services in a particular business or industry sector conform to International Standards, a state of industry-wide standardization can be said to exist. This is achieved through consensus agreements between national delegations representing all the economic stakeholders concerned – suppliers, users, government regulators and other interest groups, such as consumers." (ISO, 2003)

What makes the University any different from the industries in which we send students out to in order to perform what we have diligently instructed them? Quite frankly, there is no difference in that the University provides a service of education to the communities where our students will be performing. What we have to decide as a faculty and administration is that we must establish a quality process to ensure a quality education.

According to the Quality Assurance Agency for Higher Education (2003), "Academic standards are predetermined and explicit levels of achievement that must be reached for a qualification to be awarded. Academic quality is the effectiveness of procedures and provisions that enable students to achieve a qualification."

I believe that what we at ERAU and the extended campus provide to our students is of quality and is of high standard. But what am I basing that idea on? Is it the way I teach? Is it the

response of the students? Or is it by measuring the number of enrollments in the center? All of these are significant indicators that we are performing to a standard. But again, what is quality and what is an academic standard that we can measure up to? The bigger question would be, can we improve even more? Yes we can. But we need to establish a quality assurance process within the extended campus community.

Why Quality Assurance

What makes ERAU and the extended campus unique? For one, not only is the student population diverse in backgrounds and experience, it is the diversity of the faculty that are instructing courses in the classroom and on-line. The diverse backgrounds of each instructor provide an insight to what can be expected in the "real world." Even though many of our students are performing in the communities, the variety allows the student to gain more knowledge for the field. However, there comes a challenge to the delivery of the course because each instructor is different, and with the case of the center or on-line, some independence to how the course will be presented and students assessed. Is this a problem? It can be if there are no academic standards established and students do not know what to expect in the overall completion for a degree. Faculty members should be adhering to a process that ensures that each student is provided the same information, format, and the same resources to complete a course or series of courses of study, whether the course is taken in on-line, at Cheyenne, or Bahrain.

Another issue for why a quality assurance process is that of accreditation. The Southern Association of Colleges and Schools (SACS) is the organization that ERAU must satisfy to maintain our accreditation. The mission statement of SACS is quite clear, "the improvement of education in the South through accreditation" (SACS, 2003). SACS reviews the University's programs for quality in enhance learning as well as the engagement of continuous program improvement.

If the desire of the University is to be a competitive force in the community of extended campuses and on-line educational services, plus maintaining accreditation, then there is enough reason to indicate why ERAU should implement quality assurance in education. Parallel to the quest of excellence is that of the student. As faculty and administration we must ensure the

quality education that each one has expected is the same whether the student is in Germany, Alaska, or Cheyenne, Wyoming. How many times has a faculty member encountered the comment that "you guys sure do things different here than the center I just came from"? Does that need to happen?

Are there other reasons to justify a quality assurance process within the extended campus besides improving teaching and delivery of the course? We need to improve the relationship of the University and the communities we are associated with. The community might be the military post or base, but what is happening outside those gates? Is there a student base that has been untapped because of our limited association with the military? Can we improve on that? By ensuring we have a quality process, the student can expect that the information can be equally applied to the commercial operation as well as to the military hanger operations.

Implementing Quality Assurance

Ross, Batzer, and Bennington (2002) wrote a paper dealing with the subject of quality assurance and the implementation of faculty peer review in the *TechTrends* journal. This is what they stated with regards to quality assurance in education.

> "With fast emerging delivery systems and broader access, a major need in distance education today is quality assurance, both in academic content and student support. Broad (1999) states "Providing adequate academic and student services to students at a distance is a critical issue for all forms of distance education" (p.6). Institutions are becoming more responsible for managing and substantiating the quality of their instruction to students, as direct purchasers, and to government and businesses, as indirect purchasers.
>
> Quality control is essential with this responsibility. Agreement of faculty toward this path of action is also critical."

Their statement can also be applied to the classrooms in the extended campus. The quality of our product and the agreement of the faculty are very important to ensuring that we attract and keep the students, and maintain our accreditation.

The authors identified two steps that have to be considered. Step one is that it has to be agreed upon by the faculty to be held accountable for the course and the objectives and, step two is to ensure the processes of the peer review are non-judgmental. Faculty have to be willing to allow for a peer review and that review has to be such that it is not threatening to the faculty

members involved in the assessment of the course. Why this is necessary is that if there in not the agreement, continuous improvement will be derailed.

How can this be accomplished? The authors have outlined five characteristics of a faculty peer review. These are: "1) it must be safe and protect the individuals and institution from unpredictable or arbitrary outcomes, 2) it must use explicit criteria, 3) it must be manageable using only available resources, 4) it must provide developmental feedback of a formative nature, and 5) it must satisfy the demands of the environment for quality" (Ross, Batzer, & Bennington, 2002).

When does this need to take place? This should be considered with each new faculty hired and with each existing faculty teaching at our centers and on-line. As the authors stated: "Formative evaluation helps the instructor provide a more successful experience for students by considering teaching strategies, learning tasks, instructional materials, and the role of technology in the instruction" (2002). When the faculty is successful, the school will be successful as well.

The Tools

As with the public sector demanding "accountable management," it is time that higher education incorporates these same demands in the classroom. There are a number of processes that can be implemented. For a beginning, there is a paradigm that might provide guidance as to how we should look at quality assurance. The model has been used in the healthcare industry for training. Robert Maxwell (Storr & Hurst, 2001) developed six dimensions of quality that we must review to evaluate our own process of quality. The six dimensions are:

(1) Effectiveness
(2) Acceptability
(3) Efficiency
(4) Accessibility
(5) Equity
(6) Relevance

Let's take a look at each element or dimension beginning with effectiveness. What is the effectiveness of our course development or delivery? One measure has been the student evaluation of the teaching effectiveness. Initially as a new faculty I have reviewed the evaluation and comments with an open mind and considered each comment. But as time has progressed, I

spend little time evaluating a student's opinion. Recently this has been because the student evaluations are not returned to the center or the faculty member in a reasonable time. So besides the student evaluations, what other methods or processes are used? The faculty evaluation completed by the center faculty chair is another tool to determine effectiveness of the faculty, course, or delivery.

The second dimension is acceptability (Storr & Hurst, 2001). Again the student evaluations provide some feedback as to the acceptability of the course. Did the class satisfy the student and their expectations of the course? Did the course meet the needs of the student? Also, the faculty can determine if the course has been acceptable and provide necessary feedback.

Efficiency is the third element that Maxwell has addressed. Efficiency can be related to cost or return on investment. Here is where we might ask ourselves if the course that we have developed or delivered has provided a sound investment for the student and in turn the school. Where we see this coming into play is with the student that is not sure what course he or she should take and as we direct them to a specific one we find that they might not be ready to engage in. We measure efficiency by whether the student returns or withdraws.

Access is an issue that has been raised significantly with the advent of internet courses because there is a movement to ensure potential students have access to classes. Accessibility to what the University has to offer must continuously reviewed and improved upon. But besides the internet, security measures at some military installations where the extended campus is have limited the accessibility of the school. Students that have been deployed have limited access to a class and are we in tune with those limitations.

The fifth dimension is of equity. Is there a fair share for everyone? Are we treating our potential student base equally? With a class of mixed military and civilian which group gets the greater attention? Are the courses offered open to all perspective students? With the recent move to allow students in that did not have an aviation background have been given to more equal representation in the classroom.

The last dimension is relevance. We assume that everything item we present has relevance to what we are delivering. We must evaluate why we feel it is relevant to a course or process that

has been developed. Whether it is the text, slides, videos, or other material, the relevancy must be considered. It is inappropriate to present in a space operations course outdated aviation material. The products must be current and relevant to the course being delivered.

These six dimensions are questions that we must ask ourselves and as a faculty peer group to ensure we have a quality product we are presenting to the student or community. But these are not the only tools that we can incorporate. In another paper, Ian Roffe (2002) provides some insight to some questions that have to be considered when evaluating learning. He focused his paper on the subject of e-learning, which we can use in our on-line courses, but these also can be part of our evaluation of the classroom in the extended campus. He presents a number of questions that can be incorporated in the first dimension of Maxwell's, effectiveness.

Some key questions on effectiveness might include:

(1) What is the overall satisfaction of the learners with the program?

(2) What change is there in the knowledge, skills or attitude of participants?

(3) What changes are there in on-the-job behavior?

(4) What savings are there in labor?

Now some of these may not be applicable to exactly what we might be teaching. We might not know how a student is effective on the job, but we can evaluate the improvements of the student in the class and subsequent courses. As for savings in labor, having a student that has access to the library and up-to-date information might be a great savings for some companies.

Conclusion

As faculty we are charged with providing a quality education. We may have our own opinions of what that might include. But as we evaluate what we are producing as a service, it will be increasingly important that we take major strides in promoting a quality assurance process within our extended campus and the regions that support the faculty. In the Southwest Region we have taken steps to ensure that what is presented to the student is uniform and standard. We have developed a template for the syllabus. The region encourages the instructor to follow closely the published course outline. There is no question what will be expected of the student. The faculty

is looking into other measures to ensure that the quality of instruction improves. Challenges are ahead of us.

I am not advocating membership in an association nor am I politicking for adherence to QMS2000, but what I am concerned with is that ERAU continue to provide the quality education that companies seek after. When an airline states that the first resumes reviewed are Embry-Riddle attendees, which means something. We must keep going forward.

References

International Organization for Standardization. (2003, April 15). *What 'international standardization' means.* Retrieved May 25, 2003 from http://www.iso.ch/iso/en/aboutiso/introduction/index.html#three

Quality Assurance Agency for Higher Education. (2003). *About QAA.* Retrieved May 25, 2003 from http://www.qaa.ac.uk/aboutqaa/aboutQAA.htm

Roffe, I. (2002). E-learning, engagement, enhancement and execution. *Quality Assurance in Education. 10*(1), 40-51. Retrieved May 25, 2003 from ProQuest /General Research database.

Ross, K., Batzer, L., and Bennington, E. (2002, Sept./Oct.). Quality assurance for distance education: A faculty peer review process. *TechTrends 46*(5), 13-18. Retrieved May 25, 2003 from ProQuest/General Research database.

Storr, L., and Hurst, K. (2001). Developing a quality assurance framework for in-service training and development. *Quality Assurance in Education 9*(3), 121-127. Retrieved May 25, 2003 from ProQuest/General Research database.

Southern Association of Colleges and Schools. (n.d.). *Mission statement.* Retrieved May 25, 2003 from http://www.sacs.org/pub/mission.htm

Walton, M. (1988). *The Deming management method.* New York: Perigee.

Bibliography

Andreu, R., Canos, L., de Juana, S., & Manresa, E. (2003). Critical friends: A tool for quality improvement in universities. *Quality Assurance in Education 11*(1), 31. Retrieved May 25, 2003 from ProQuest/General Research database.

Bingham, R. and Ottewill, R. (2001). Whatever happened to peer review? Revitalising the contributions of tutors to course evaluation. *Quality Assurance in Education* 9(1), 32. Retrieved May 25, 2003 from ProQuest/General Research database.

Embry, C., Kraner, T., & Tian, R. (2003). Return to academic standards: A critique of student evaluations of teaching effectiveness. *Quality Assurance in Education 11*(1), 37. Bradford. Retrieved May 25, 2003 from ProQuest/General Research database.

STRUCTURING FOR ADULT LEARNING IN THE TIME INTENSIVE COURSE: USING CLASS TIME EFFECTIVELY

by

Dr. Patricia H. Valley

Director, Center for Teaching and Learning Effectiveness
Assistant Professor, Department of General Education
Embry-Riddle Aeronautical University
College of Career Education

Abstract

The need of nontraditional students for scheduling flexibility in higher education has necessitated the time intensive course, one in which the term is generally shortened and the class sessions are lengthened. This class format presents a challenge to educators to structure the course for maximum learning. While some have questioned the quality of programs that accelerate the learning process by compressing knowledge and skill acquisition into a short period, the literature shows that no significant difference exists between the amount and quality of learning gained in time intensive and traditional course formats. Establishing the learning environment, effective teaching practices, and the academic benefits of time intensive courses are discussed in this paper.

STRUCTURING FOR ADULT LEARNING IN THE TIME INTENSIVE COURSE: HOW TO (EFFECTIVELY!) USE CLASS TIME

"Remember that the cerebral cortex is directly tied to the gluteus maximus, and the attention span of the latter strongly affects the former."

The Time Intensive Course

Universities have responded to the needs of the growing number of nontraditional students by implementing a variety of flexible course scheduling formats, including evening and weekend classes and time-shortened term lengths. While these course formats have enabled more working adults to attend classes, the increased length of the classes has presented a pedagogical challenge for instructors. The concern that intensive courses might produce reduced learning prompted studies that found comparable results between the learning of students in traditional and intensive courses as measured by examinations or grades (Gaubatz, 2003). Some educators expressed concern that examinations administered at the end of the courses did not indicate whether students retained information learned in intensive courses as well as in intensive courses; however, researchers such as Waechter (1967) found that there was no significant difference between the two types if courses in either long or long-term test scores. Furthermore, the literature supported the use of time intensive courses to promote active learning, encourage academic achievement, and improve class and faculty interaction (Gaubatz, 2003).

Teaching success in the time intensive course lies in carefully structuring a learning environment that capitalizes upon the strengths that the longer class periods afford and minimizing the disadvantages. Courses may run from three to four hours to as long as eight or more hours; therefore, instructors should incorporate a variety of teaching techniques whenever possible and actively involve students in the learning process if they are to maintain the interest and engagement of their students. Messina (1996) found that intensive courses permitted more time for in-depth class discussion, practice at applying theory, experiential learning activities, and greater interaction between the instructor and the students.

Teaching and learning experts from several major universities responded to a question concerning alternative class scheduling posted to the Professional and Organizational Development Network in Higher Education (POD) listserv. Their observations included the following:

> The longer block of time allows for extended problem solving and other involved tasks. (Rutgers)
>
> The longer block of time requires a variety of activities to avoid students losing interest. If the program relies on active learning, the added time helps in completing activities during the session. (Purdue/DeVry University)
>
> The longer block of time allows for more time on task, greater depth of coverage, and less review time at the beginning of each class. (Kwantlen University College)

Creating an Effective Learning Environment

Adults learn best in an atmosphere in which they feel both safe and challenged (Imel, 1994). The effective instructor will achieve a balance between being friendly and challenging the students so that students feel comfortable in the class but not so relaxed that they fail to take responsibility for their learning. It is particularly important to give adult students the opportunity to share relevant experiences.

The classroom climate is established with the first class session. According to Lyons, Kysilka, and Pawlas (1999), an effective first class meeting will prevent many potential problems later in the course. Every instructor should meet at least the following six goals in the first session:

1. Create a positive first impression
2. Introduce yourself briefly and without apology
3. Clearly communicate course objectives and performance expectations
4. Conduct student introductions
5. Learn the students' names
6. "Sell" the students on the value of the course

The arrangement of the classroom furniture is important. If you don't believe it, try sitting in various seats within the room and looking at where the instructor stands. I get a different perspective each time I change locations. If possible, arrange the furniture in a way that suits your instructional purposes. For instance, I try to arrange the furniture in an informal structure that encourages class discussion, much like one often sees in small graduate seminars, when I want

to stimulate a great deal of class discussion. For the easy assignment of small group tasks during the class, I might group tables to accommodate three or four people. Arrangements that permit students to see one another and the instructor and visual aids work very well.

In the first session, introduce yourself without being too lengthy. Like every leader, you need to establish credibility. Adults students like to know who their instructor is and what qualifies him or her to teach the course. Avoid apologizing, no matter how dire the conditions or short a time you have had to prepare. Suppose you were asked to teach the course at the last minute; if you share this excuse with your students, they will lower their expectations of the course.
If most students in the class already know one another, you may not think an ice-breaker is necessary. However, if many of your students do not know each other, you can break them into pairs and have them introduce each other or prepare some similar introductory activity.

The syllabus should be handed out and explained in detail so that everyone understands the plan for the course and the performance expectations from the beginning. Time should be spent discussing the relevance and value of the course and what learners can expect to gain. Adults need to know why they should spend their time in your class.

Establishing an effective teacher-learner relationship, according to Tiberius, Teshima, and Kindler (2003), "is as important to the facilitation of learning as are the traditional skills of the trade such as clarity of expression and organization" (p. 213). They related that recent discoveries by a group of psychiatrists, psychoanalysts, child development researchers, and pediatricians called the Boston Group indicated that there exist moments of opportunity within the teacher-learner relationship when trust and communication are either furthered or hindered. Tiberius et al. (2003) reported that the work of the Boston Group "suggests a mode of action through which teachers' authentic responsiveness in teacher-learner relationships may contribute positively to the learning process" (p. 214). The exchange between instructor and learner consists of a series of moments called "present moments," and when the moment becomes one of increased intensity, curiosity, questioning, or uncertainty, then it becomes a "now moment." If the moment is responded to openly and authentically by both participants, the relationship is furthered; however, failure to seize the moment will have a negative effect. The key to capitalizing

upon now moments is to practice awareness, to free oneself to improvise, to be honest about what one knows, and to realize that the student is trying to learn (Tiberius et al., 2003).

Teaching Practices in Intensive Courses

Brown (1992) reported that greater independent work was required of students in intensive courses as more material was learned at a time. She found that the success of weekend courses at City College required three key elements: "a) careful organization by the teacher; b) varied kinds of approaches/teaching techniques; and c) unique outcomes perceived by the students" (p. 4). It is necessary to pay particular attention to the organization of the course, keeping in mind the amount of time that students have to prepare in between classes. Sometimes it makes sense to modify assignments to reasonable lengths that can be accomplished within a shortened term. For instance, it may be best to assign only one longer paper or several short writing assignments rather than several long research papers. The structure of the course must permit students to learn in a variety of ways. Application or experiential learning activities are especially effective in this setting. Using case studies is one way to get students involved in learning and to encourage independent learning as well.

An effective case, whether real or not, is the prerequisite for learning by the case method. According to McKeachie (1999), providing too many details may hinder beginning students from getting the point of the exercise. Cases should progress in complexity and difficulty. Cases are most often conveyed in writing; however, they may also be presented through videos, on the Web, or through role-playing. In role-playing, participants are assigned parts and perform impromptu dramas based on specific character roles. Be sure that students can (a) identify the problem, (b) speculate regarding the causes of the problem, (c) gather clarifying evidence, and (d) draw conclusions and make recommendations (McKeachie, 1999).

In Teaching Studies in Rhetorical Theory, which met for about four and one half hours one night a week, I chose the controversy surrounding the crash of TWA Flight 800 as a case study to give students practice in analyzing the parts of an argument, weighing the validity of claims and proof, conducting research, and writing a position paper based on their conclusions.

All of the students were pilots, and all but one were also flight instructors, so the case held high salience for them. They worked on the project independently: critiquing the article that I provided for them in class, listening to Mike Wallace's account of the crash, conducting further research, and drawing upon the concepts of persuasion learned in the class. They peer reviewed one another's work as their drafts progressed, revised, and subsequently submitted papers of which they were justifiably proud. A salient case study, coupled with independent and group activities, is an example of a method that works well in the time intensive course.

Few people can pay attention for 50-minute spans, let alone digest new information for hours at a time. In fact, Medina (2003) has found that people listening to verbally presented detail need a change of pace or break of some sort every 10 to 15 minutes. When students remain in class for long periods of time, a comfortable classroom climate and sufficient variety become vitally important. I have tested Medina's principle in my own teaching, have observed others' teaching, and have found his rule to hold true. Students are more engaged when the material is presented with "breaks" about every 15 minutes. What qualifies as a "break" varies. Writing in a different color of marker or changing position in the room may be enough to break up the material on a good day, while other times may call for more obvious variation such as a different activity altogether. One of the most effective means of breaking up a lecture is to tell a story. Telling stories captures students' attention and "buys" the instructor another 10 or 15 minutes of attention after the story is over. Ideally of course, stories relate to the material under discussion and reinforce or introduce material. However, an unrelated story is sometimes just what is needed. Part of the art of teaching is discerning when to get students need to be "off the track" and for how long.

Some teaching practices that have been shown to work well in intensive courses include distributing the course syllabus to registered students before the term begins and using alternative forms of assessment such as student demonstrations or projects. Guest speakers, student presentations, audio/video materials, and Web resources can enhance the course and create variety. In one particularly effective evening doctoral course, the instructor scheduled a specialist as an invited speaker for the topic of the night as well as included student presentations

and projects. Teaching the intensive course is an opportunity to use one's imagination and create a unique learning environment that capitalizes upon the extended time format.

One of the best methods for engaging adults in time intensive courses is what I am convinced is also one of the most misused: group work or cooperative learning. Group work is not putting students into groups to work independently or to have those who finish quickly help those who do not; nor is group work a situation where one student does the majority of the work while the rest ride along. As Imel (1994) observed, group work that is well designed does offer a number of positive results. The learning environment is participative and collaborative, peers form positive relationships, students learn from each other, groups produce a result that is better than any one of them could have achieved alone, and students learn communication and leadership skills. In well-structured cooperative learning, students work in a team to achieve a common goal, work interdependently, and are accountable as individuals and as a group (Smith, 1996). Research has shown that cooperative learning experiences are as important at the undergraduate level as the graduate level. Indeed, Smith (1996) reported the findings of Astin (1992 as cited in Smith) who observed that the quality of the undergraduate experience was dependent upon the degree to which students were actively engaged. Smith listed five elements that signal effective cooperative learning: (a) positive interdependence (students' success or failure is linked to that of their team), (b) face-to-face promotive interaction (students helping each other to boost one another's success), (c) individual accountability (individual performance/contribution is assessed), (d) teamwork skills (leadership, shared decision-making, communication), and (e) group processing (discussion of how group is doing in achieving goals).

Teaching for long periods of time requires the instructor to pace the course. Experienced instructors find that easing in to the course material at the beginning of the class period gives the students an adjustment period as they transition from a busy work day to a night or weekend of class. Generally, students are the most able to absorb new material and complex concepts after a warm-up and review. When attention begins to wane, it is of course, time for a mini-break or time out. Toward the end of the course, the material should be lighter, as students will reach a

saturation point beyond which they will not be able to learn much more. Staying sensitive to the learning needs of the class will help you pace the course effectively.

Academic Benefits of Intensive Courses

Brown (1992) observed that "students in [intensive] classes often work together and form friendships analogous to those of traditional undergraduates, making college a more satisfying, shared experience than is sometimes true for adults working towards a degree" (p. 6). The atmosphere can resemble that of a workshop where application is a natural part of the process and interaction is the norm. This situation is ideal for cooperative learning, case studies, and peer review.

To best take advantage of the longer class sessions and shorter term, the instructor must plan the class sessions carefully. Variety, visuals, interaction, and novelty with frequent changes of pace should be incorporated as much as possible. The most effective instructors in this format will prioritize the course goals and structure activities accordingly, as students will retain those principles that are most emphasized and applied.

Intensive courses permit far more one-on-one interaction with students. I schedule individual conferences with students during periods of assigned class work and talk with each student about his or her progress in the course, being sure to communicate what is going well and what the student could do to improve. These conferences can also serve as a reality check for the instructor to find out what students think is going well in the course and what might need to be changed. I have found that communicating face-to-face does far more to help the student improve than any amount of marks that I may make all over a paper. I encourage students to ask me questions about the comments I make on their papers as well and gladly spend time going over a student's work after class or during a break, as these are valuable teaching moments when the student is trying to learn.

References

Brown, D. H. (1992, March). *Teaching literature in the intensive weekend.* Paper presented at the 23rd annual meeting of the College English Association, Pittsburgh, PA.

Gaubatz, N. (2003). Course scheduling formats and their impact on student learning. *The National Teaching and Learning Forum, 12* (1). Retrieved April, 8, 2003 from http:www.ntlf.com/html/lib/suppmat/1201course.html.

Imel, S. (1994). *Guideline for working with adult learners.* (ERIC Digest No. 154)

Lyons, R., Kysilka, M. & Pawlas, G. (1999). *The adjunct professor's guide to success surviving and thriving in the college classroom.* Boston: Allyn and Bacon.

Medina, J. (2003). *A thought in the dark.* Workshop sponsored by the NSF funded Project 2020. June 2003. Orlando, FL.

Messina, R. (1996). *Power package: An alternative to traditional course scheduling.* (ERIC Document Reproduction Service No. ED 396787)

McKeachie, W.J. (1999). *Teaching tips* (10th ed.). New York: Houghton Mifflin.

Smith, K.A. (1996). Cooperative learning: Making "groupwork" work. In T.E. Sutherland & C.C. Bonwell (Eds.), *Using active learning in college classes: A range of options for faculty, new directions for teaching and learning* (pp. 71-82). San Francisco, CA: Jossey-Bass.

Tiberius, R.G., Teshima, J. & Kindler, A. R. (2003). Something more: Moments of meeting and the teacher-learner relationship. In C. M. Wehlburg & S. B. Chadwick-Blossey (Eds.), *To improve the academy,* (Vol. 21), (pp. 213-228). Bolton, MA: Anker Publishing Co.

Waechter, R.F. (1967). A comparison of achievement and retention by college junior students in an earth science course after learning under massed and spaced conditions (Doctoral dissertation, Pennsylvania State University, 1967). *Dissertation Abstracts International. 27,* 11-A.