

# **AN ENTREPRENEURIAL APPROACH TO ENTREPRENEURSHIP EDUCATION: ACTIVE TEACHING**

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## **ABSTRACT**

This paper describes an approach taken to curricula design and teaching using student-centered or active learning techniques. The literature used in this approach is reviewed. The previous Small Business & Entrepreneurship degree program was redesigned using an entrepreneurial approach based on the projected student profile and actual knowledge, experience, and training in the business world. A teaching style was developed into a process termed "Active Teaching." The various classroom techniques used and results are discussed.

## **EXECUTIVE SUMMARY**

No one really teaches professors how to teach. New professors, coming from the business world or academia, start by using lectures as their primary technique. Not satisfied with the results and always believing there may be a better way to do something, a pro forma teaching business plan was developed. The market was analyzed and a SWOT analysis performed. At the same time other methods of delivery were investigated through literature and educational programs.

Based on the above, the reengineering of a teaching style using student-centered learning or active learning tools is discussed. All syllabi have been re-written as flexible contracts tying all of the courses together. Students are now empowered in each of the courses. Lectures covering each chapter have been discontinued, and only the topics students didn't understand are being discussed. Emphasis is now placed on the students understanding the materials rather on grades, and extra efforts are being made when students didn't understand a particular topic or item. Hands-on exercises, software for tutorials and testing, computer simulations, case studies, role playing, group projects, and group assignments are being used to facilitate more active learning.

This has created a technique called Active Teaching which continually seeks new methods of delivery and fine tunes existing methods to maximize student learning and understanding. This process is implanting an impression in student's minds that the professor cares about their success which was always the aim, but now is being verbalized by the students. Student evaluations are superb, with written comments on many of them where there were only a few in the past.

The challenge of working with the existing student population has produced an opportunity for creativity. Teaching has become fun and more rewarding!

## **INTRODUCTION**

Most full-time academia became experts in a particular area in their field of endeavor through their research during their PhD program. These very same people then enter the classroom with little or no training as to how to teach. To minimize the chance of failure, they most likely emulate the style of teaching they related to most successfully as a student. They are then assessed, a sensitive word in today's academy, usually by an administrator who may or may not have been a superior teacher. They

go on to design curricula based on what works and what doesn't, along with additional research, consulting assignments, etc.

In business, and more specifically the entrepreneurship field, a greater portion of full-time faculty seem to come to the profession with some or extensive business experience. While this keeps the curricula more timely and meaningful, there is still no insurance that these professors will be better teachers.

Additional challenges to effective teaching may arise when faculty enter the academy late in life after many years in business; the institution has open enrollment or is a small, public college; or students are the first of their family to attend college or have been under-achievers with C averages in high school.

This paper will attempt to point out how both intrapreneurial and entrepreneurial approaches may be used in the classroom and in curricula design. Methods obtained from researching teaching and learning styles will allow faculty to change from lectures to active learning techniques with a great deal of success.

## TEACHING

First, what is teaching and who prepares us for this process? Seldin (1995, pp 1-3) and others have discussed how little training we receive prior to full-time teaching, and that no training is actually required. Seldin (1995) also has stated many faculty members see no reason to improve their teaching as they are already doing a good job (pp. 2-4). They will spend their faculty development funds in improving their knowledge of their discipline rather than refining their teaching style. Fortunately for the students, not everyone thinks the discipline is more important than the teaching. Seldin (1995, pp. 4-7) and others have no formula for making someone an effective teacher as one size does not fit all. All professors do not learn alike just the same as our students. Halpern and Hakel (2003, p. 38) say that most of our learning is gained on the job through trial and error.

So what makes a professor an effective teacher? First, we must change our perspective. Riordan (1993, p.2) states: "Good teachers realize that educating students involves more than walking into a classroom and doing what comes naturally." However, if "naturally" refers to just lecturing, is this truly part of good teaching? If we learned through lectures, does this mean our students will learn the same way also? Systek (1986) stated "Lecturing is a process by which information is transferred from the notes of the lecturer to the notes of the student without touching the minds of either."

We must change the focal point of our teaching. Riordan (1993, p.2) believes "Most of us have been socialized in graduate school and in other contexts to focus on the disciplines we teach, so we emphasize the need to be expert or current in our disciplines." This is an important consideration, of course, but the meaning of it might change if we begin with a different focus: the students we are teaching. The point of education, after all, is the students we teach.

Furthermore, we need to teach our students to be proactive learners and not reactive learners. As an example, the students study because they have a test which is a reactive process. On the other hand, to be a successful entrepreneur you need to learn to be proactive in your approach to problem solving. Therefore, we must make teaching more than just understanding the subject matter. We need to teach our students how to attack their learning in a manner that will make them successful when they graduate. The classroom process needs to change from a lecturing process to one that is interactive where the students realize the professor is there to assist them to develop critical thinking and problem solving skills, as well as the course material. They need to understand their own strengths and weaknesses, and to develop strategies to minimize, if not overcome, these. For example, "We can

develop strategies that assist students to ask questions within the disciplinary framework, to explore issues by building on those questions, to be able to articulate hypotheses, to draw conclusions on the basis of their observations, and to have confidence in them because they know how to gather evidence (Riordan 1993, p.10).”

Is changing teaching styles risky? Entrepreneurs see opportunities where others see failure; only the perspective is different. If we are to teach entrepreneurship, shouldn't we be willing to seek opportunities for greater success in teaching by making major changes to our teaching style rather than worry about the risk of failure? If we assess changes by doing the same analysis we teach students in our classrooms, we have minimized the potential threats.

One of the first things we have to understand is the learning styles of our students. We have to not complain about the student population we are given. This is what we have to work with. These students represent a major teaching opportunity. You should note the word opportunity instead of challenge was used as this is an entrepreneurial viewpoint.

## **LEARNING**

We all know that individuals learn verbally, visually, hands-on, or a combination of these. An auditory learner requires a tremendous amount of concentration and skill. Even the best of us have our minds wander after fifteen minutes. We are not all skilled performers – actors or comedians. Despite this knowledge, many professors believe students should have understood and have learned the subject matter just because they covered everything in their lectures. Subsequently, they are frustrated when the students don't do well on the exams and ask what is wrong with today's students?

Bradbeer et al (2004, p. 32) stated “The ideal of higher education as a voyage of personal discovery will remain just that, a staff (faculty) ideal unrealized by students, unless students are helped to explore other conceptions of learning and teaching.”

Two equivalent terms are used when the emphasis is switched from the passive learning which takes place in lectures to the students' self-discovery: student-centered or active learning. For the sake of this paper, the term active learning will be used. Frazier (2005) discussed this practice in teaching entrepreneurship as constructivist learning rather than active learning. She explains the theory in more detail and the use in teaching non-business majors.

Prince (2004, p. 223) defines active learning as any instructional method that engages students in the learning process. He further defines three types of active learning: collaborative, cooperative, and problem-based (PBL). “Collaborative learning can refer to any instructional method in which students work together in small groups towards a common goal. Cooperative learning can be defined as a structured form of group work where students pursue common goals while being assessed individually. Problem-based learning is an instructional method where relevant problems are introduced at the beginning of the instruction cycle and used to provide the context and motivation for the learning that follows. The latter is always active and usually (but not necessarily) collaborative or cooperative using the above definitions.”

In his conclusions Prince (2004, p.229) stated that credible evidence suggests faculty consider a nontraditional model for promoting academic achievement and positive student attitudes. Faculty adopting PBL are unlikely to see improvements in test scores, but are likely to positively influence student attitudes and study habits.

With the growth of online courses, the premise of active learning should not be considered unique. Therefore, we should be doing more to implement this in mortar and brick classrooms. We need to find ways to make students active seekers of knowledge, not passive recipients of learning. We need to find methods to engage all styles of learners so that they focus their attention on the material. We need to be aware that students may enter class with negative baggage that day from some external stimuli we cannot control but must try to overcome.

Browne and Harris (2005) describe a model they developed of building business curricula using a variety of active learning techniques. Weimer (2003, pp. 49-54) suggests shifting power towards the student and making the teacher into a facilitator helping students develop their ability to self-learn. When asked most faculty will view this as either a risky venture or too much effort to make a change. They do not see this as an opportunity to create a better venue for learning. However, this should be seen as a chance to take a population of students who may never been motivated to do more than the minimum required and to change these individuals into scholars.

We should no longer use passive teaching methodology and become Active Teachers. Active Teaching, as opposed to Active Learning, is a continual self-assessment process that constantly evolves and refines ones' current methods of instruction away from pure lecture towards new delivery systems in order to maximize the students' learning and understanding.

Benevenuto (2002) lists four reasons why students resist innovative teaching methods: traditional methods are familiar and comfortable, traditional methods are easier, sheer laziness stands in the way of change, and traditional methods better obscure the varying paces at which people learn.

Will all of the students immediately buy into new styles of teaching? Absolutely not! You will, however, get their attention. The professor first has to believe in what he or she is doing and then be consistent. Some students (the innovators) will think this is the greatest thing since sliced bread. A few weeks into the semester the large majority of the students (the followers) will be convinced, and if you are fortunate the rest (the skeptics) will join in by half way through the semester or after the first exam. The next semester the student grapevine will have carried the word out for you, and the process will take much less time. If you, the professor, convince the students you really care that they learn and understand, most of the students will participate in the process. This cannot just be lip service as the students today are too sophisticated or skeptical to believe you unless you back up your words with actions. Always keep in mind Mann's (2004) tips for college teaching: care; be real; be prepared; find a classroom style that works for you; laughter is good; have high standards; teach with passion, evaluate with compassion; be humble; there is a time and a place for everything; go straight; do not use a pen to correct; set boundaries; if it isn't written down, it didn't happen; attend every inservice (event) on teaching you can; and prepare for a new year, every year.

Caring is not an unusual concept; most faculty care about students learning. However, students may not have that same perception of their professors. There is a hurdle to overcome to get the students to believe professors are in the classroom because they care about learning and understanding. The concept must be repeated and reinforced regularly; the students sometimes have short memories. Weimer (2004, p.7) states "Caring teachers nurture. They are accessible and attend to individual students needs. They have rapport and connect with students. They show interest in students, are kind, thoughtful and respectful. Students feel a sense of belonging in their classrooms. And in those environments, caring teachers affirm students, show empathy, and are understanding and patient. They

are flexible and fair and make learning fun. They challenge students, believe in their ability to learn and never give up on students even when circumstances are difficult.”

## **THE TRANSFORMATION**

If one were to look at the teaching process from an entrepreneurial prospective, the first step is to examine the market. For example, Lyndon State’s current market niche or student profile is approximately 70% traditional and 30% non-traditional students, 50% in-state, may be the first generation to go to college, and mostly “C” students. Some of the students have chosen our college for financial reasons, and 78% of the students work to pay for their education in addition to their loans. Many of the students wanted to go to school closer to home. A portion of the students commute to school, and, unfortunately, some of the commuters also have to work to pay for school, creating time management problems with their academic goals. This college is in a mountainous, rural community blessed with a wide variety of summer and winter activities nearby that can serve as a distraction to the students. This creates challenging and interesting student demographics.

An internal and external SWOT analysis based on the student population and individual faculty business and/or teaching experiences is used to demonstrate opportunities, threats and challenges. New faculty with extensive business backgrounds may realize they face short time spans to make the transition into an effective teacher.

The literature contains many techniques for active learning. Choosing which ones to use to create an atmosphere for learning is the difficult task. Each choice needs to be compatible with each faculty member’s style, knowledge, and experience, and have a high degree of predictable success for the students at the college. Therefore, the first major step is to set three goals: students will now have an understanding of the material, they will apply this knowledge to problem solving, and they will use critical thinking in this process.

An entrepreneurial process of creating strategies for success should be done next. The initial strategy is to learn to teach well as soon as possible. Attending meetings, sitting in on other faculty’s (not in the same department) classes, reading the literature, and attending programs such as the Virginia Tidewater Consortium’s 26<sup>th</sup> Annual Summer Institute on College Teaching in June 2004 allow new faculty to gather data as how to accomplish this task. On-the Job-Training, of course, continues to be the best teacher.

The next step is to determine how to implement this process (a description of an actual implementation and the results are listed below). Following the latter is a process of involvement in professional entrepreneurial associations to take both the teaching and knowledge to the next level. Finally, a strategy is created to constantly self-critique your progress in all the above strategies.

Parkes and Harris (2002) have defined a syllabus as a contract, a permanent record and as a learning tool. Thus, all syllabi should be rewritten and used as a flexible contract between the students and the professor. The departmental goals need to be added to each syllabus, and the course outcomes shown as to how they related to the departmental goals. In addition, each syllabus must now show how this course relates to the other courses in the curriculum. This may be the first time any professor explains why they are taking a particular course or set of course for some students.

The next step is to negotiate the weights of the various course components with the students. The first time this is done, the students may be stunned and have to be coaxed to participate. The professor

should retain veto power over any choice they make. Each syllabus starts with the weights from the last time the course was taught, but the students are free to make changes.

The students are also able to negotiate the type of exams they wanted to take. Some classes will opt for take-home exams even though they are warned they are giving a professor freedom to make the exams three times as long and three times as hard. When these techniques outlined above have been used no class has selected True or False, Multiple Choice, or Fill in the Blank exams. They are fine with essay or problem solving type exams. An instructional rubric should be developed with the students in some courses as to how the exams and/or case studies will be graded. While this needs to evolve over time, the students will see all of the details of the grading, and there shouldn't be any disagreements over the grading.

The syllabi are very clear about attendance (see how class is conducted below) and all other rules, procedures, etc. The syllabus is reviewed in detail during the first class, and students are told this is their contract with the professor. By staying enrolled in the class, the student agrees to abide by the rules stated therein. The professor must remember not to wield too much power in the syllabi. Singham (2005) discusses how some professors go overboard with rules. There is indeed a fine line that needs to be drawn in the preparation of syllabi.

A typical class begins with a review of the topics needing further clarification from the previous class's One Minute Paper which is discussed below. Once this is completed, the class breaks up into Focus Groups. Since the student is now responsible for the reading assignment, there is no longer any lecture. The students bring their questions on the materials they didn't understand to class. The focus group distills these down to a few Focus Questions, answering some of the questions within the group rather than asking the professor. The remaining focus questions are put on the blackboard, and the professor discusses the important questions. During these discussions the professor will stop frequently for a Break for Understanding. If time permits, there is some group project planned after the Focus Questions. Finally, at the end of the class the students are given small pieces of paper to prepare their One Minute Paper (Weimer 2003, p. 1) on what was the most important thing they learned today, and what was the one thing they still don't understand. The One Minute Papers are collected as they exit, compiled, and used to start off the next class.

One of the first questions to be asked is did all of the students read the assignment? The answer becomes obvious when you see a few students looking through the book during the focus groups to come up with a question. Usually these are the same students in each class and are a good predictor who will be doing poorly on the exams as the latter are usually based on critical thinking and problem solving. Weimer (2003, p.3) cites a study by the Association of American Publishers documenting over half of college students don't see as much importance to textbooks as their professors. She remarks "Many college students today aren't strong readers; they regularly report that they don't like to read."

The use of focus questions may not overcome this problem. Further research needs to be done to determine whether this methodology improves the percentage of students actually reading the assignment.

The One Minute Papers are extremely useful for a professor to see where a particular concept was explained well to the students and gives the professor another chance to explain the subject matter in

another way the next class period. The One Minute paper also allows the quiet student to “participate” at the end of class without feeling uncomfortable.

Is not lecturing a copout? Actually, not using lecture notes and being prepared to discuss anything in the reading material is much more difficult. The professor must come into class and be prepared to be at the top of his or her game. There are times when the professor needs to have additional focus questions prepared in case the students miss the obvious.

Poorsoltan (2005) describes a three-part experiential learning experience combining idea generation, networking, and seed money.

A number of other techniques are used to supplement classes to add an experiential aspect to the active learning: hands-on exercises, computer software tutorial and testing programs, computer simulations, case studies, group projects for local businesses, role playing, group assignments, and combinations of these.

Computer simulations have been effective tools for application of prior learning. Fregetto (2005) describes the better effectiveness of simulations over business plans as an active learning technique for entrepreneurship. Cadotte (2003) compares lectures/textbook to case studies and reality simulations. In simulations the use of group analyses of marketing data, competitive information, costs versus benefits, compensation data, productivity data, etc. help in the creation and implementation of strategies. While the process does not appeal to all, the competitive nature of the simulation creates more involvement than other group work.

The college is located in a rural area of the country where most of the businesses are small businesses. Tourism, light manufacturing, retail, and service businesses make up the majority of firms in the surrounding communities. Therefore, group projects to assist small businesses are usually readily available.

### **SO WHAT?**

This paper has addressed several issues. The paper discusses how to approach curriculum design from an entrepreneurial perspective. The paper emphasizes the need to make students become active learners and to be proactive in critical thinking and problem solving. Finally, the paper supports the concept of Active Teaching - a continual self-assessment process that constantly evolves and refines ones' current methods of instruction away from pure lecture towards new delivery systems in order to maximize the students' learning and understanding.

### **CONCLUSIONS**

The entrepreneurial process used in the startup and analysis of new businesses is also applicable to curricula design. When market and SWOT analyses are prepared for the students and the institution, goals, strategies, and outcomes may be developed to meet each individual situation. While generalizations may exist across the board, each department, school, and group of students represent a unique opportunity.

When students are active learners, they tend to become more involved with the subject material. Techniques to promote active learning will create opportunities for students to be active seekers of knowledge and better students. There are many different methods for active learning already in the literature, and each professor should select those which suit his own style.

Active Teaching should be used as a pedagogical technique, and this means sharing power with the students. You will work harder, but the teaching will become more fun and rewarding as the students become proactive and involved with the subject matter. Seeing the creation and application of entrepreneurial concepts in the classroom will be more rewarding and fulfilling. As the result of your sharing power with the students and using Active Teaching, your students will perceive you as a more caring instructor, and student evaluations will become more positive.

You can make more of a difference in students' academic lives through Active Teaching.

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