

# 21st Century Reflections of an Academic Dean

## Bir dekanın 21. yüzyılda eğitime ilişkin düşünceleri

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### Özet

İçinde yaşadığımız dönemde eğitimde küresel bir devrim gerçekleşmektedir. Bilgi teknolojisi sadece disiplinleri değiştirmekle kalmamakta, aynı zamanda sınıf ortamını ve öğrenme süreçlerini de değişime uğratmaktadır. İronik bir şekilde yüzyıllar öncesine ait eski İngiliz yükseköğretim sistemi bugün yeniden ele alınabilmektedir çünkü teknoloji her yaşta öğrenci için artık ulaşılabilir hale gelmiştir. Bu değişimin getirdikleri zorlukların üstesinden gelebilmek için, öğretim üyesi atama ve yükseltme kriterleri ile birlikte sabit maliyetleri düşürme ve sorumlulukları artırma gibi yükseköğretim politikalarının yeniden gözden geçirilmesi gerekecek, bu da yükseköğretim sisteminin ulaştırılmasında ve öğrenme paradigmasında küresel boyutta yeni değişiklikleri zorunlu kılacaktır. Bu dönemin zorlukları, öğrenci ve öğretim üyelerinin gelecekte eğitim-öğretim program yapılanmaları ve içeriklerindeki gerekli değişiklikleri benimsemelerini sağlamak için üst düzey yöneticilerin farklı bir stratejik değerlendirme yapmalarını gerektirecektir.

**Anahtar sözcükler:** Teknoloji ve sınıf, yükseköğretim politikası değişimi, yükseköğretimde değişim.

### Abstract

A global revolution to education is occurring. Information technology is not just changing disciplines but is also materially affecting the delivery process of a classroom and the learning process. Ironically the old British higher education system from centuries ago may revisit today because technology available to students of all ages. Addressing the challenges of this change will require higher education to revisit policies such as tenure requirements with the focus being to reduce fixed cost and increase accountability. It will require new changes in delivery systems and learning paradigm globally. Challenges of this era will require a different strategic assessment by key administrators to assure that future students and faculty affirm the necessary changes to programs and delivery of content.

**Key words:** Higher education change, higher education policy change, technology and the classroom.

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**A** young student walking home from his elementary school listens as his phone buzzes. He pulls it from his pocket, clicks the screen open and reads a brief set of questions from the day's class that his teacher sent him. Then he texts a response.

His teacher has just completed her day and waits patiently for all her students to send their answers. A few minutes later she smiles at a summary of responses that covers the topics presented in class that day. The responses, a continual self evaluation of her teaching, affirm the understanding of her lesson plan by her students. She also is responding to the new performance measures that will be the source of her compensation.

Meanwhile the student calls friends, checks the weather, and Googles a topic that he wants to know more about. He is aware that during the evening he will have his iPad open to review soccer teams in a country he has never seen. But the iPad will provide a more comprehensive answer to questions his teacher posted.

Observing youths of today is compelling evidence that technology is launching a dramatic shift in the delivery of education and teacher evaluation. In grammar schools with each passing year, the education delivery model is undergoing dramatic change. Students have been exposed to technology and are very comfortable with it as a learning tool.



In contrast to the changes in grammar schools, the cornerstone of higher education appears to remain locked into the Socratic Lecture Method. Admittedly, it has begun to change, but the most significant change is yet to come. Seeing today's youths with such comfort makes one wonder why the classical university model is not also undergoing equivalent change, particularly since the grammar school students will arrive for degrees in the next decade.

Change that is occurring in this century in higher education will be significant because of technology. Admittedly it is a simple statement that most all would agree with. Yet the immediate issue is how higher education is handling the change necessary to make sure universities, colleges, and disciplines are responding.

Regarding an academic discipline, the first question relates to the talent pool of the faculty and their ability to adjust to a significant change in an academic discipline itself. One example that comes to immediate attention is the field of statistics. The classical model focuses on the mathematical principles of a normal distribution. Virtually every other alternative model still remains closely akin to similar mathematical method. Huge databases today with incredible diversity have patterns that the classical methods do not fully detect. Bayesian and other more modern mathematical methodology are more accurate in predicting results. Thus different modeling is far more important in this era of massive data availability. There is much practical evidence suggesting its importance in a variety of fields from healthcare to business.

For example, many businesses during this global recession began to focus on reducing costs with a major source of that effort, particularly in retail, is to reduce inventory while retaining the capability of growing sales. Massive data has become the basis of analysis with new statistical models. The necessary change to currently accepted methodology, including most any field could be a major undertaking to assure academic programs are on the cutting edge of this era. Most all disciplines have the equivalent of a fixed culture of a society and proposed shift will have great resistance.

Focusing on each discipline in a college and asking critical questions becomes a necessary task to assure the response to a changing educational needs in this 21st Century. Admittedly, this is not a new challenge but the difference is that necessary change must be far more rapid today than in previous decades.

How to respond to discipline challenges at the collegiate level is, in large measure, dependent on the cultural presence of shared governance model that is used by many universities

around the globe. Tenured faculty members dominate such an environment since they are those whose academic performance is the standard for a college and thus they have the major say in changes proposed. Moreover, a college with a performance standard dominated by more traditional elements of a discipline might have a difficult time making changes.

This concern is personal since I faced such an issue as a dean before this century began. And today I am still convinced changes are even more important than when I began questioning.

In February of 1993 I wrote a paper, intending to spark faculty discussion and debate on the 21st Century. By then, my concern over faculty creativity in strategic planning for the College of Business Administration had been affirmed. I mirrored the concern as I reflected on my own academic behavior.

The foundation of research, particularly that which uses mathematical modeling, begins with a statement of a null hypothesis. If that is a core element of a collegiate culture, a strategic suggestion from planning will come under significant criticism. The classical form of strategic planning does not necessarily prove to be a success in such a shared governance environment. The chosen solution was to present my views and let the null hypothesis behavior be focused on the dean and let the criticism be focused on the idea I presented. "Unconventional Challenges and Unconventional Responses: A Look to the Future" was the title of the paper I presented.

The paper focused on:

- Complimenting the faculty on the significant changes and national recognition that came to the MBA program,
- Confirming that government funding was shrinking and would continue to do so for the foreseeable future, and
- Describing the changes in the student population. They were a little older, not staying in dormitories, working part-time and, when evaluating a course, emphasizing the question, "Can I use it?"

The paper concluded with an overview of the college curriculum and my views on where all business schools might find themselves going into the 21st Century.

Business disciplines are an applied and maturing social science on the American campus. Since the end of the Descriptive Age (the 1960s) in discipline development, the academy has developed rigorous research tools and gained academic respectability. Yet the preoccupation with research methods and the blind introspection that came with this new-



found knowledge left many disciplines without a social rudder, without an agenda of national imperative, and, thus, without a reason for wearing the new mantle of a maturing field of study. The faculty and administrators must be conscious of this point in the history of the academy as new faculty are selected for the next generation of students. Colleges and Universities are making a journey in this planning process since it is a defining a moment in the history of the education process. We are inventing a new school and a new path in professional education. Our work will be the model for educating the leadership of the twenty-first century organization.

To launch this major redo of the entire undergraduate curriculum at Tennessee during the 90s, a donor provided an endowment with its income supporting proposed changes. Funds from the gift were not to be used permanently, but for a stipulated period to achieve a specific goal of sea change. In essence this give was the equivalent of an investor in the private sector of the economy.

Two years later, after several aspects of the sea change had begun to take affect, I found myself once again thinking about the future of B-schools around the country and how they were preparing for the next century. During that period several of the nation's leading B-schools had either visited my college or invited me to do a presentation at a forum.

When the first invitation came, I was flattered. Then reality set in. I had no concise presentation of the issues to address, because most of those adopted by the college faculty were verbally presented or had only very brief notes (such as those of 1993) stating why an item should be considered. Also, if I were to give a prescription for another school without knowing its culture or current situation, the host should show me the road. The reality of the invitation forced me to put on paper some ideas that I even still questioned.

One of the first considerations was to recall where we had been and what had been noticed in other academic programs on campuses across the country. Ironically, the first thoughts that came to mind were the programs in colleges of education-undergraduate courses necessary for a teacher's license focus on how to teach, not what to teach. If students wanted to become math teachers, they did not have to major in math but take only some math courses and a lot of courses in how to teach math. Colleges of education had, in essence, professionalized the curriculum.

Business school curricula paralleled that same design. More and more courses were added to majors in a discipline as fewer general education courses were required. A graduate became technically competent in a field, but was challenged to know the larger issues relating to business in general or

society. When this program design was delivered as a series of classes, students found themselves in an academic silo.

A second observation regarded budgets with a simple question: "What percentage of a budget are fixed costs and what is variable?" Then an associated question, one that fit public institutions more than private ones: "What are the target variable costs that reflect the cyclical nature of the state's budget where you are located?"

As the list of issues became notes on paper, I was struck by what I finally concluded was the most difficult challenge to be faced by B-schools and other colleges on a campus. It was not about money or course content, though they were related to one another, but rather the delivery of the curriculum content in the twenty-first century.

The Socratic Lecture method has long been used in all of higher education. A professor delivered a lecture. Students took notes, read material, and mastered the course content as proven by an exam. The old British system was somewhat different. A professor delivered a lecture. Students left to read and research on their own until they considered themselves masters of the material. Then they returned for the faculty member to affirm their knowledge.

The American model followed the Industrial Age, when schedules, labor productivity, and economy of size were the main drivers of the adopted model. The fact that ours was an agrarian economy determined the ultimate start of a semester and the end of a spring term. So, the education model that defines today's classroom is based on the principles of the Industrial Age and the rhythm of the agrarian economy.

Will the twenty-first century affirm the same model or will a sea change be required? My view is that it needed a sea change then and such pressure for change remains. The Age of Technology is upon all of education. Its presence has already replaced a significant part of the traditional library collections and the physical needs for books by students and faculty. Ditto for the classroom, where students have immediate access to data through wireless connections.

What will a classroom, even if there is one at all, look like by the time a college's current tenured faculty retire and an entirely new set of professors are responsible for delivering education?

As 2000 approached, I was sure that many colleges would not be ready because of the time and money required. Department heads, deans, and campus chancellors would need to immediately increase the percentage of variable costs in their budgets and, simultaneously, find a way to beta test an entirely new delivery system to students who, because of the technology, will likely come to class with an entirely dif-



ferent learning model than did their parents and certainly their grandparents. Moreover, the traditional need of a classroom is already undergoing significant change.

The best way to present such a touchy topic, I concluded, was to offer ideas in the form of questions rather than a prescription. So, I drew up a list to reflect graduated comparisons, and asked respondents to mark an X at the appropriate place along each line:

Where is Your B-School Along the Continuum?	
Pre-Twenty-first Century	Twenty-first Century
Course/Discipline.....	Curriculum/Cross-Functional
Individuals.....	Groups
Grading.....	Evaluation
Class Scheduling.....	Self-Paced Learning
Researcher as Publisher.....	Researcher as Teacher
Grants.....	Loans
Faculty Supported.....	Faculty/ Entrepreneurial
Lecture/Socratic.....	Technology Driven Learning
Local Issues.....	National/International Issues
Competition as Major Tenant.....	"Coopertition"
High Fixed Cost.....	High Variable Costs
Few Competitors.....	Many Competitors

Some questions posed by participants in a presentation were, admittedly, a little absurd. Still, the discussions that followed with several schools were highly interesting. One example was an item that I purposely left off the list: compensation of faculty. The need for variable costs annually, however, was a major underlying theme.

In order to address sea change budget must have a significant annual expense that is variable rather than fixed. The source of such may be additional budget amounts yearly or the flexibility to reallocate funds from one need to another. Yet, the historical budget methods of most public universities focus on the greatest fixed cost: faculty.

Faculty members with tenure were salaried. If a professor held an endowed professorship, the total compensation was considered fixed, and included both private funds from the endowment and public funds from state appropriations. Other schools, particularly those largely dependent on private funds, sometimes paid a professor a base salary. That was the amount considered to be the tenure commitment. The endowment income that supplemented the salary was, however, to be paid based on performance review every five years. The issue was: If all compensation, whether from private dollars or state funds, is considered fixed, then the percentage of variable dollars of a budget would be difficult to obtain.

The reason the variable-cost issue was so much a part of my thinking is that for several years my college had made an effort to increase the percentage of variable cost in the budget to fifteen percent. The rationale was to have sufficient flexibility to financially handle needed changes in the content and delivery of the curriculum and do so in a time when the appropriation for the college budget was shrinking. Still, by the mid-1990s that objective was not achieved.

Another of the list that caused a number of questions was the topic "coopertition." Usually the first comment was that the word was misspelled and only after I explained the term was to represent the emergence of group competition, not the traditional view that individuals were the focal point of competitors. Further, the term reflects the emerging Information Age that flattens traditional organizational structures and changes the behavior of traditional leaders.

Ironically, that topic came to mind when visiting a university in Jordan. Several faculty spoke of how students worked with one another preparing for a class and taking an exam together. How could that be was the first thought that came to mind? How could a faculty evaluate a student's accomplishments if there was no single way to measure the individual's performance? Then it was obvious that the culture of that university was a totally different model than what was the traditional understanding in the United States that competition was to be focused on individuals. That, however, was but one issue.

I had been talking about all issues with other deans of business colleges, knowing that my own college was not able to achieve many of the goals by the 21st Century. We still remain focused on classrooms and lectures while the geographic boundaries of virtually every offering is no longer the same as it was years ago. A class offered in one country can be taken in another. Interaction of a faculty and students can occur at any time and place. Thus the pressure for change is growing.

The content of a program and the delivery of a course are but two most evident outcomes but for that to become a reality, a more touchy topic must also be considered; the structure of "tenure" system. The current tenure practice results in fixed cost of personnel that can prohibit change from occurring. Also, "tenure" system is sometimes abused and has negative influence to performance measures of faculty who may not perform their duties well. Therefore, it will likely be modified. This issue, however, is generally the responsibility of the government under which a public university is reporting, the accrediting body of a particular field of study, and/or the campus leadership. No matter which authority has the responsibility, the issue of fixed cost is a central theme that can reduce needed changes from occurring.



Another premise of higher education structure today is continuing to follow the principle of the economy of scale. A bigger classroom with more students per faculty member will reduce costs and make delivery more efficient. Simply, the principle, “economy of scale”, continues to be dominate reasoning even at a time when the “economy of agility” may be more important to decision making, particularly in this technology era.

As 2011 is here and reflection of transition to the 21st Century the items presented in the early 1990s are themselves somewhat out of date. The sea change viewed as occurring then was important but now many of the same issues remain. Technology, the major element that is forcing both disciplines and delivery of learning, is increasing pressure for change. And, addressing such is likely to be occurring in universities that have had to significantly reduce their budget in this business cycle.

Will universities follow the same set of decisions businesses around the globe are doing as this economic cycle is occurring? If so, the substitution of technology for labor cost will become a focal point for delivering an improved educational experience and knowledge to every student who entrust their future to a campus.

The young man continues homework required by his teacher. His iPad is filled with responses as he shares his views with friends from a variety of countries around the globe. His classroom and neighborhood no longer dictate the parameters of his education exposure. His use of the technology is a very important sign that the content of offerings and the method of their delivery are undergoing a sea change and every university will need to do whatever is necessary to place all the issues on the table for action before this new student arrives on a campus to place their future in the hands of the faculty and administration.