

## Paper 328-2007

## FanSAStic! Results: Collaboratively Leading Institutional Effectiveness Efforts in Higher Education Institutions

Dr. Allen Goben, SAS Institute, Inc.

*How can we cohesively build all four legs of the chair to support the strongest institutional effectiveness efforts in education?*

### Executive Summary

Institutional Effectiveness has become so important to colleges and universities that the language is embedded in accreditation and strategic efforts; institutional cultures are being transformed as human, fiscal, and technical resources are aligned to support and promote effectiveness; and senior leadership positions are being created or revised to include a focus on institutional effectiveness. However, as these efforts grow and adapt, we are left with a major question...

*What exactly is institutional effectiveness in education, and how do we fully leverage effectiveness efforts to increase our capacity to serve students and their learning needs?*

In order to understand what effectiveness means in education, we must consider several key ingredients that make up the recipe for a culture of learning success:

- The overall culture of education and how it compares to other industries
- A brief historical overview of institutional effectiveness in education
- Various sectors within education and how each defines effectiveness
- Four legs of the chair:
  - People
  - Culture
  - Technology
  - Processes
- Changing leadership and leadership needs: Hierarchical, top down buy-in versus grass roots ownership that creates a shared vision
- The CASE method... learning from each other
  - Education learning about useful effectiveness measures from other industries
  - Other industries learning about focusing on learning, collaboration, and improvement from education
- Examples of institutional effectiveness efforts in higher education in the United States are offered for descriptive purposes and for comparison

Each core ingredient has a tremendous impact on the overall success of institutional effectiveness efforts in education. Additionally, other ingredients are usually sprinkled in to meet local, statewide, or regional needs and further define what effectiveness means. In short, there is no universal definition for effectiveness in education. The common core elements are merely a starting point. This creates a climate where it seems that effectiveness is something that we know when we see it—but we are often unable to concretely describe it to either internal or external constituents.

A blueprint for success, then, is for any given educational organization to first be able to define, develop, and articulate institutional effectiveness internally. Then, once the people, culture, technology, and processes are aligned to support ongoing institutional effectiveness, the message of what this means and how it benefits students can be communicated to any number of external audiences.

### Educational Culture Compared to Other Industries

Education has its own unique culture. And, it is a culture that has developed and thrived over a considerable period of time. In some contrast to other businesses and industries, education has taken a lot of criticism over the years. However, if we compare 2-300 top colleges or universities from the beginning of the 20<sup>th</sup> century (circa 1900 AD) to 2-300 top businesses or corporations from that same point in time, how many of each are still in existence? As you may surmise, while businesses come and go, educational institutions remain largely intact. To be sure, they do grow and change... but most of them do not just disappear or undergo sweeping transformations from mergers and acquisitions as we find in the business world. Instead, they tend to move steadily forward while maintaining considerable continuity.

Another important aspect of educational culture differentiating it from other industries is the focus on a different bottom line. In a word, the bottom line for education is learning. It is not usually profit. In fact, many educators find for-profit language offensive. There are notable exceptions to this culture as for-profit colleges and universities have risen in prominence throughout the late 20<sup>th</sup> and early 21<sup>st</sup> Centuries. However, the mainstream of education is still a non-profit enterprise. The for-profit schools have developed a two-stage bottom line. Their first bottom line is still not money and profit. It is learning... just the same as their non-profit counterparts. For, without demonstrated success in learning, for-profit schools could not possibly compete with less expensive non-profit options. The second bottom line of money and profit (or money and sustainability for non-profit schools) can never be achieved without initial success in learning. Thus, we have established one baseline of measurable effectiveness that fits the culture of education: learning. This led to learning outcomes measurements and acronyms like OBE (Outcomes Based Education) in the late 20<sup>th</sup> Century.

Education also experiences a different culture of renewal compared to other industries. While other industries thrive on a quarterly financial statement and budget, education cycles more annually. In business and industry, the "renewal" of moving from one fiscal year to the next (often at January 1) is focused largely on financial considerations such as profitability. That is how success is measured in many industries. By contrast, education has a different and more sweeping sense of renewal each year. Following an academic year somewhat tied to (though usually a few months apart from) an annual fiscal year renewal of the budgeting cycle each summer, education has a renewal of people. There are new students everywhere! Expanding this renewal, much of education operates with annual contracts for faculty, administrators, and sometimes staff members. As such, there are often several new faces among the employee base (seemingly all at once) in education as the contract year changes in mid to late summer. This renewal affects the organizational culture because, rather than gradually integrating new employees throughout the year, education does a lot in a short time frame. This cultural difference affects everything in how the institution operates... particularly because it occurs simultaneously with a new group of students. Institutional Effectiveness efforts are sometimes slowed, then, because the "People" leg of the chair can change quite dramatically each year during a short period of time.

Funding structure in much of education is also quite different than other businesses and industries. In a typical business, when the number of constituents served goes up, profits also go up... making it easier to serve more constituents. This may be true in the small for-profit sector of education. In the much larger public, non-profit sector, however, the opposite is true. When the overall local, state, regional and/or national economy is riding high, there are usually more funds available for education... but fewer students since they are enjoying good-paying jobs. When the economy dips lower and unemployment rises, there are fewer funds available for education. This is typical for both state supported funding as well as individual, disposable income for would-be students. However, it is at this moment that student numbers tend to grow considerably... leaving the educational institutions between a rock and a hard place. Under these ever-changing conditions, the tangible things that define effectiveness might shift inside the culture of education. As the "rules of the game" change regarding availability of funds versus number of constituents to serve, the rules also change regarding the relative importance of fiscal matters to the overall measurement of effectiveness. It is not *that* this condition exists that is so important (though it is vital to know). Rather, it is that this condition is basically exactly opposite from the scenario we've intuitively come to expect in other businesses and industries that makes it so culturally relevant to institutional effectiveness.

Tenure and academic freedom are concepts unique to education, and they are both important in helping define the culture. Tenure is a concept that came out of the Middle Ages. It means, "safe passage." The idea of tenure was that learning and education was something few people in the Middle Ages had access to, so learned people should be given tenure (safe passage) to allow them to continually help educate and enlighten others. This concept likely expanded during the Renaissance when free flowing thoughts and ideas were admired. As a result, the idea of a culture of safety where educators can freely explore new ideas with academic freedom is deeply embedded in education. These are some of the things that make the job(s) fun despite often lower pay and other benefits. These are some of the main reasons educators become educators... so any institutional effectiveness effort that is seen as something that will support these aspects of life in education is likely to be well-received. Any effort that is seen as potentially destructive to these ideals will be undermined. That is why many educators dislike the term "performance management" but will likely warm up to institutional effectiveness efforts.

Education has maintained for decades that it is different. It is different. It is not something apart from the “real world” or any other similar and derogatory cliché. Education is firmly in the real world... it is just unique compared to other industries that share more commonalities because they are all based in financial profit.

### **A Brief History of Institutional Effectiveness in Education**

Institutional effectiveness in education was historically defined by each individual institution. While other external agencies might have sought to compare colleges and universities, for example, the real working definition of whether or not the institution was effective was defined locally within the college or university. Magazines or other rating pundits have put their criteria together to rank educational institutions, but true (more objective) benchmarks are still being developed. There is even an old joke that if you get eight educators in a room you'll have ten or twelve different opinions. No wonder there is a challenge creating a consistent model!

During the earlier part of the 20<sup>th</sup> Century, higher education in the United States expanded a process of self-accreditation managed within regional accreditation agencies. The purpose included defining some agreed upon criteria for what would commonly occur in a college or university, streamlining acceptable transfer from one institution to another, engaging faculty, staff, and administration in a regular review process, and so forth. Although the various regional accrediting bodies morphed into similar-yet-unique agencies, they are still a recognized common ground to maintain a coherent definition of effectiveness. In the latter 20<sup>th</sup> and early 21<sup>st</sup> Centuries, most of the regional accrediting agencies revised accreditation criteria to include more purposeful and concise language about institutional effectiveness. Some, such as the Higher Learning Commission (aka North Central Association or HLC/NCA) went so far as to develop a Continuous Quality Improvement (CQI) model of acceptable accreditation renewal. The Higher Learning Commission developed a CQI model called the Academic Quality Improvement Program (AQIP) to complement its traditional once-every-ten-years accreditation option. The traditional model was renamed the Program to Evaluate and Advance Quality (PEAQ). Revised Criteria for Accreditation implemented around 2004 includes strong emphasis on institutional effectiveness in both models. Although the overall practice is still a “self-accreditation” process with the HLC/NCA coordinating and supporting, it is quite clear that external pressure from legislators, taxpayers, and other officials has combined with internal desires to coordinate efforts and achieve excellence. The emerging result is that from considerable chaos there is now a more data-driven climate developing to better define and demonstrate institutional effectiveness. National standards and benchmarks are at least in a developing stage for higher education institutions in the United States.

K-12 education has remained more tightly owned and coordinated by state governments, historically. However, recent trends demonstrate a move to a national effort backed by data. The “No Child Left Behind” legislation is one example of this trend. Not to be overlooked, higher education might be mirroring this trend to some degree with political efforts underway to revamp the regional accreditation model in favor of a national structure. There is considerable political capital on both sides of this argument.

Our lesson from the brief historical overview of institutional effectiveness in higher education, then, is that accreditation has become a major driver of data-intensive efforts to demonstrate effectiveness. The accreditation criteria and frameworks all over the country have become more sophisticated and useful to help align people, culture, technology, and processes to support institutional effectiveness when they are properly leveraged through good leadership. Leadership is faced with a daunting task, however. Just as the technology systems that might support these efforts seem to have no true standardization across all technologies, there is a similar lack of standardization across the definition of what constitutes a modern “effective” educational institution.

### **Various Sectors in Education and How Each Defines Effectiveness**

Institutional effectiveness, at its core, is a combination of efficiency with success. Since all sectors of education have some common indicators of success such as learning outcomes, student retention and persistence to graduation, institutional financial viability, and the like... there is at least some possibility of determining institutional effectiveness measurements that are likely to fit with any type of educational institution. However, various sectors within education have unique attributes and needs.

United States K-12 school districts typically serving students ages 5-18 are comprised of elementary schools, middle (or junior high) schools, and high schools. This sector of education is likely to focus on learning outcomes, graduation rates, and financial viability for common effectiveness metrics. Student engagement is growing in importance, and placement of graduates in higher education has also grown in importance as more and more people go to college. A particular pain point that has been identified is whether or not students need remediation after high school. Though tied to learning outcomes, this particular measurement of effectiveness is under growing scrutiny from taxpayers and legislators who don't want to have to pay for a student's education twice.

Higher education is made up primarily of community colleges, technical colleges, and junior colleges; 4 year colleges and universities; and major research universities. There are further, aforementioned delineations between non-profit

and for-profit schools that can be found within these categories. As well, some noteworthy differences exist between public and private institutions.

There are also various interest groups within any given educational institution (particularly so in higher education) that might view institutional effectiveness through their own unique lens. For example, a Vice President for Enrollment or Student Services might prioritize enrollment management (such as student recruitment & retention) as one of the prime indicators of institutional effectiveness; a Chief Academic Officer might prioritize measurement of learning outcomes and faculty effectiveness as the prime indicator of institutional effectiveness; the Chief Financial Officer might view fiscal responsibility and efficient use of available funds as the top indicator of effectiveness; the Vice President or Executive Director of Advancement (fundraising) might prioritize growth in endowments; and so forth. The president or chancellor and Board of Trustees or Board of Regents are likely to view “all of the above... and more” as how to define institutional effectiveness.

So, again, we face the question: *What exactly is institutional effectiveness in education, and how do we fully leverage effectiveness efforts to increase our capacity to serve students and their learning needs?* The answer is really a both/and (or all/and) scenario rather than an either/or scenario. Institutional effectiveness in education is all of the above and more. Each institution may use common core indicators of effectiveness but, ultimately, each will continue to follow some of the traditional educational culture of defining effectiveness in a very local way. The changing dynamic currently emerging as we transition through 2007 is that frameworks to help define effectiveness such as accreditation by regional or state agencies, federal mandates, and national benchmarking efforts are becoming more sophisticated and more useful. Out of the chaos some semblance of order is emerging, though there is still much debate. Institutional effectiveness efforts can be best leveraged by utilizing these developing constructs that support effectiveness and by connecting the dots to blend strategic efforts such as accreditation, strategic planning, operational planning, measurements of achievement, and technical systems to support those efforts.

The newer accreditation criteria, for instance, often include language acknowledging the unique nature of any given college or university. The newer criteria encourage each institution to tie their mission and vision to specific needs, goals, and barriers while developing a shared vision of effectiveness that everyone can participate in as collaborative and supportive peers. Leadership is encouraged to help define needs, goals, and barriers through broad inclusion... and then follow through by meeting needs, supporting goals, and removing barriers to success. Thus, the modern definition of institutional effectiveness is a combination of more broadly held core concepts of effectiveness blended with local input that further defines needs, goals, and barriers... and then maps documented solutions back to those in an ongoing demonstration of responsiveness and progress. That's what the “Learning College” movement is all about. It is an overall effort to increase effectiveness to the point where the college or university becomes a true “Learning” organization that grows and adapts through ongoing innovation tuned to current, emerging, and future needs. It is a culture of “wonder” instead of a culture of “blame”... one where data-supported intelligence can be agreed upon so people can focus on being successful rather than on arguing about who is right.

Other things are growing in importance as this climate of effectiveness and ongoing learning develops. Measurement of and increase in student engagement has been proven to strongly fuel successful outcomes for students. Identification of students at risk and expeditious assignment of resources to help those students (that can be documented as improvements) are signs of effectiveness.

As we are discovering, institutional effectiveness is a rather muddy sort of endeavor... at least until common core concepts are interwoven with local needs and strategies. Then more concrete definitions of institutional effectiveness emerge, regardless of which sector of education is being considered.

#### **Four Legs of the Chair- People, Culture, Technology, and Processes**

An organization can move up through the stages of the information evolution model (1- Operational; 2- Consolidation; 3- Integration; 4- Effectiveness/Optimization; 5- Innovation/ Continual Learning) by using only three legs of the chair. That's a pretty wobbly climb to true effectiveness and innovation/continual learning, though. Progress comes much more readily by solidly building all four legs of the chair. Since decision support software has advanced considerably in the past several years, the technology is now available to support higher levels of achievement and faster progress toward effectiveness and innovation. However, many people have led with technology only to be disappointed in the outcome as the people, culture, and processes lagged behind. No one seemed to “get it” ...and expenses piled up with underutilized technical capabilities.

So how do we build a solid foundation for all four legs to work in concert? Due to several aforementioned cultural considerations inherent within education, it is doubly important to pay attention to bringing the culture of the institution along with people, technology, and processes.

### **Leading the Culture Forward to Embrace Progress**

If you say the word “change” to almost any educator, they’re all for it... until it affects them directly. That’s probably a bit of human nature common across most or all industries. However, people do want to make progress. Since change has become such a constant in our world (and a rapid pace of change, at that), let’s reframe the word and just call it progress. Really, a change just for the sake of change is rarely helpful... so all change should be progressive anyway. Now that we are focused on leading for progress, we are faced with the question of, “How do we make this happen?”

There are many possible leadership models to use, but one of the best is to develop an understanding of how various *people* within the institution view progress, and then lead strategically. The institutional *culture* is created collaboratively by *people*. *People* are also the ones who use the *technology* and develop/maintain the *processes* that sustain the organization. How readily does one person accept progressive initiatives compared to others? There are five groups that most people fall into when it comes to embracing progressive initiatives:

- *Innovators: Consist of around 10-15% of all employees. They integrate progress quickly into their conscience and actions... and usually seek to augment any initiative with additional ideas to continually improve it.*
- *Early Majority: Make up approximately 30% of all employees. They tend to go along with initiatives fairly quickly, though they may also change directions more easily later if the wind blows a different direction.*
- *Late Majority: Make up approximately 30% of all employees. They are often skeptical of any initiative, viewing changes as “flavor of the month” ideas that might go away if they ignore them. Late Majority are slow to adapt to change and view it as disruptive and time-consuming rather than as a normal part of their job/life.*
- *Resistors: aka “CAVE people” (Citizens Against Virtually Everything)... These folks make up about 5-15% of any organization and resist for the sake of resisting. They will undermine progressive initiatives that they do not instigate and will resist behind the scenes even while publicly supporting the effort.*
- *Leaders: These folks make up approximately 15% of all employees and have risen to leadership from one of the other four groups. Leadership is not defined by titles or hierarchy. Instead, leaders are the thoughtful, objective, and/or inspiring people others choose to follow.*

\* Adaptation of Diffusion of Innovations model by Everett Rogers

Since *people* fall into one of these categories regarding how they view and handle progress, institutional leadership teams need to realize who is in which category and then focus their time strategically to move the *culture* forward. When this is done successfully, *technology* can be best leveraged and *processes* can be improved continually to promote institutional effectiveness. While leaders need to focus time and communications to all constituents, *cultural* progress can be achieved most effectively with time devoted to the Late Majority. Here’s why...

Innovators will jump on board quickly, because they have an inner need to create and improve things. In fact, they will move most quickly to ownership of progress and results. Early Majority will follow more easily. They tend to handle buy-in or ownership and typically just try to do a good job and adapt as needed. Leaders may move slow or fast to own and implement progress—but, if the idea is sound, they will embrace it. Resistors are simply an energy drain. They will continually detract from progress, because their only power comes from being able to resist and to influence others to resist. As such, the more time devoted to them, the slower the initiative and culture can move forward to progress. The Late Majority are different, though. They may be slow to move, but that is because they have seen progressive changes come and go. They have adapted only to be told to adapt again, and they are somewhat skeptical until they have been thoroughly convinced that the “progress” is worth the pain it might take to get there. This is the group that should receive the most attention, as slow and painful as that may be to provide. When the Late Majority is on board, though, the progressive initiative will have approximately 80-85% of the people behind it and few left to drag down the *culture* with resistance. And, resistors usually only join the effort fully (or at all) when the Late Majority they like to play to help convince them that the progressive initiative is worthwhile and is going to stick.

Once the *people* and *culture* are ready, *technology* can be fully leveraged to fuel institutional effectiveness. *Processes* will begin to streamline into more efficient ways of working and helping students learn. It is possible to lead with *technology* and with *process improvement* initiatives... but there are challenges in getting these too far ahead of *people* and *institutional culture*. In a perfect world, any organization would be able to perfectly plan and implement this sort of leadership. In reality, it almost never works that smoothly. In reality people, culture, technology, and processes are interwoven into a complex matrix of interconnected relationships. Truly effective institutions not only define and measure effectiveness performance indicators, but they also surface that intelligence at the right time, to the right people so that decisions supporting tangible improvement can be made.

## Changing Leadership and Leadership Needs

Many organizations are arranged in a hierarchy of one sort or another. There are other ways to structure, such as a matrix, but hierarchical arrangements are most common. However, traditional top-down hierarchical methods of developing and moving strategies, information, and decisions are falling out of touch with the modern workforce. In the current US workforce, Generation Xers have reached a plurality in many organizations and Xers (now ages 25-40), along with a growing number of Millennials (under 25 but now entering the workforce) do not respond favorably to top-down hierarchical directives—if they respond at all. Baby Boomers (now age 41-60) have become the establishment rather than overturning it as many set out to do upon entering the workforce 20-40 years ago. The leadership mixture then, in most organizations, is made up primarily of Boomers and Xers with a much smaller amount of Traditionalists (above age 61) and a few Millennials holding leadership positions/titles. This particular four-generation mix creates considerable advantages for organizations that know and learn how to collaborate effectively by leveraging capabilities common among any given generational cohort. However, it also creates an atmosphere where intergenerational communication mishaps are quite common... and all of these mishaps impede institutional effectiveness efforts.

*What early 21<sup>st</sup> Century organizations need to succeed in institutional effectiveness efforts is a **culture** made up of **people** who are collaboratively using **technology** to improve **processes**. That is how we can fully leverage effectiveness efforts to increase our capacity to serve students and their learning needs in all educational organizations.*

Leadership teams must recognize and leverage the diversity inherent in all generational groups to improve their capacity for effectiveness. In order to achieve this climate, leadership must recognize the growing importance of ownership and creating a shared vision rather than always attempting to get employees to buy in to top-down directives. Ownership is different... it takes more time than just passing down a directive. It is a vital need of the bulk of our modern workforce, though, and cannot be stressed enough as the key to engaging the *people* and moving the organization's *culture* toward progress... a need without which technology implementations and process improvements will be doomed to failure or limited success. To create ownership rather than buy-in, employees must be engaged in a collaborative problem solving effort rather than being given a fully baked "right" answer. They must be allowed the time to co-create the solutions that they are expected to implement. Strategy, communication, and decision making must involve more people and involve them in a meaningful way. That's how the culture of an organization grows, adapts, and learns how to learn.

## The CASE Method: Copy And Steal Everything ☺

The old saying goes, "There's no sense in reinventing the wheel..." This is good logic when considering institutional effectiveness efforts. Education and other businesses/industries have much to offer each other to help facilitate successful efforts for continually improving institutional effectiveness.

### **Education Learning From Other Industries**

Although education historically has shied away from borrowing too many ideas from the corporate and industrial world, there is much to be gained in the arena of institutional effectiveness. In particular, sophisticated performance measures have been developed in many industries to increase efficiency and reduce overhead cost of operation. While this was developed with a bottom line profit motive somewhat foreign to much of education, it is tremendously useful. Educational institutions may focus on learning, but they also need to manage finances. In fact, it could be argued that with shoestring non-profit budgets in particular, educational institutions need to be even better at financial management. Even aside from finances, performance metrics might not be exactly the same across industries, but the way measurements are constructed in other industries is useful knowledge for educators to absorb and reflect on how they might be redeveloped (whenever applicable) toward education-specific ends.

Perhaps one of the biggest lessons educators can learn from "been there, done that" examples in businesses and industry is the understanding of both failures and successes in achieving cultural progress and process improvements. Although education is unique, people are people. We all have to use technology to do our jobs, and leadership examples can help create successful blueprints for educational leaders, regardless of which industry those examples come from.

### **Other Industries Learning From Education**

Education may be ahead of the curve in leveraging collaboration power. Since education is focused on learning, it has many "been there, done that" lessons to offer business and industry regarding how to learn. When the learning is directed toward the organization at large rather than just around students in classrooms, education is perhaps the emerging leader in institutional effectiveness capabilities. While corporations have adapted more readily to technologies, for example, education has adapted better to people. Learning communities have been created to leverage collaborative strengths and help students succeed. Business and industry can learn much about effective collaboration to further their own ability to compete.

As well, educators work with (and learn how to work with) each succeeding generation of students before they graduate to the workplace. There are often definitive differences in a new generation that are reflected in their learning and communication needs. Those needs don't simply "go away" when students enter the workforce and begin collecting a paycheck. As such, businesses and other industries need to communicate with educators to learn about—and prepare for—their workforce before they arrive. This will help new employees be more effective and decrease costly employee churn.

### Examples of Institutional Effectiveness Efforts in Higher Education

Several examples are available via web links listed below. One nice list was developed by the Community College Roundtable in 1994 and updated in 1999. It includes the following indicators of effectiveness in the context of American community colleges:

- Student goal attainment
- Persistence (fall to fall)
- Degree completion rates
- Placement rate in the workforce
- Employer assessment of students
- Licensure/certification pass rates
- Client assessment of programs and services
- Demonstration of literacy skills
- Demonstration of citizenship skills
- Number and rate who transfer
- Performance after transfer
- Success in subsequent, related course work
- Participation rate in service area
- Responsiveness to community needs

(Roueche et al 2001)

These are some of the common core indicators of effectiveness that are pertinent to community colleges and can be measured and mapped to sources of data, though the list is certainly not all-inclusive. By contrast, a university might put much more stock into alumni and development as a prime indicator of effectiveness. Thus, it is important to note that differences do exist in the various sectors within higher education.

Additional ideas can be found via the following web links:

[http://www.aacc.nche.edu/Template.cfm?Section=Browse\\_by\\_Subject\\_Topic&Template=/Ecommerce/ProductDisplay.cfm&ProductID=207](http://www.aacc.nche.edu/Template.cfm?Section=Browse_by_Subject_Topic&Template=/Ecommerce/ProductDisplay.cfm&ProductID=207)

<http://www.gseis.ucla.edu/ccs/edinfos/edinfo9.html>

[http://www.southern.wvnet.edu/assessment/ccc\\_indicators.htm](http://www.southern.wvnet.edu/assessment/ccc_indicators.htm)

<http://www3.interscience.wiley.com/cgi-bin/abstract/93516832/ABSTRACT?CRETRY=1&SRETRY=0>

<http://www.lee.edu/institutionaleffectiveness/>

<http://www.madisonville.kctcs.edu/gpe/planning.html>

[http://www.commission.wcc.edu/Reports\\_Studies/CI2002.pdf](http://www.commission.wcc.edu/Reports_Studies/CI2002.pdf)

<http://scholar.google.com/scholar%3Fq%3Dauthor:%22Nichols%22+intitle:%22A+Practitioner%27s+Handbook+for+Institutional+...%22+%26hl%3Den%26lr%3D%26rls%3DWDIA,WDIA:2006-50,WDIA:en%26oi%3Dscholarr>

<http://ipr.sc.edu/effectiveness/>

<http://iea.fau.edu/>

<http://assessment.clemson.edu/>

## Bibliography

- Drucker, P. F. (1999). *Management challenges for the 21<sup>st</sup> century*. New York, NY: HarperCollins Publishers, Inc.
- Howe, N. & Strauss, W. (2000). *Millennials rising: The next great generation*. New York, NY: Vintage Books, a division of Random House.
- Kouzes, J. M. & Posner, B. Z. (1999). *Encouraging the heart: A leader's guide to rewarding and recognizing others*. San Francisco, CA: Jossey-Bass, Inc.
- Lancaster, L. C. & Stillman, D. (2002). *When generations collide*. New York, NY: HarperCollins Publishers, Inc.
- Minerd, J., "Bringing Out the Best in Generation X." *Futurist*, January 1999, Vol. 33, Issue 1, 6-7.
- Mink, O. G., et al. (1993). *Change at work: A comprehensive management process for transforming organizations*. San Francisco, CA: Jossey-Bass, Inc.
- O'Banion, T. (1997). *A learning college for the 21<sup>st</sup> century*. Phoenix, AZ: American Council on Education, Oryx Press.
- O'Banion, T. & Milliron, M., "College Conversations on Learning." *Learning Abstracts- League for Innovation in the Community College*, 2001, Vol. 4, Number 5, 1-2.
- Rogers, E. M. (1995). *Diffusion of innovations: Fourth edition*. New York, NY: The Free Press, a division of Simon and Schuster, Inc.
- Roueche, J. E. & Baker, G. A. (1986). *Profiling excellence in America's schools*. Arlington, VA: American Association of School Administrators.
- Roueche, JE et al (1997). *Embracing the tiger: The effectiveness debate and the community college*. Washington, DC: American Association of Community Colleges.
- Roueche, J. E. et al (2001). *In pursuit of excellence: The community college of Denver*. Washington, DC: American Association of Community Colleges.
- Strauss, W. & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. New York, NY: Morrow.

## Biography

Dr. Allen Goben works as a Senior Executive, Higher Education Development in the Education Practice for SAS Institute, the world's largest privately held software company [www.sas.com/education](http://www.sas.com/education). Prior to joining SAS in 2006, Allen devoted twenty years to collaborative leadership and learning excellence as a teacher, coach, college recruiter, counselor, and administrator. Administrative duties include work as Executive Vice President at AIB College of Business (Iowa) [www.aib.edu](http://www.aib.edu); Dean of Academic Affairs and Workforce Development at Central Arizona Community College (Arizona) [www.centralaz.edu](http://www.centralaz.edu); and leadership of student services operations for advanced technologies at Indian Hills Community College (Iowa) [www.indianhills.edu](http://www.indianhills.edu). Dr. Goben has served as a master presenter and keynote speaker for colleges, businesses, leadership training programs, and faculty/staff development institutes in several states—focusing on leadership, technological implementations, learning styles, and communication training. A full electronic career portfolio is available at [www.goben12.net](http://www.goben12.net).

A first generation college student who began his post-secondary educational journey at Indian Hills Community College, Allen eventually completed a bachelor's degree in History from Iowa State University, a master's degree in School Counseling from Drake University, and a doctoral degree in Educational Administration from The University of Texas at Austin, Community College Leadership Program (Ed.D., 2003).

By Dr. Allen Goben, c. 2007, Reprinted by Permission

SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc. in the USA and other countries. ® indicates USA registration.

Other brand and product names are trademarks of their respective companies.