

# **WHAT I LEARNED ABOUT LEADERSHIP: REFLECTIONS OF AN ENGINEERING EDUCATOR**

Kai Fong Lee

Dean Emeritus, School of Engineering  
Professor Emeritus, Electrical Engineering  
The University of Mississippi

## **ABSTRACT**

Traditionally, courses on leadership in Universities are usually offered in business schools. In recent years, however, more and more engineering schools have recognized that it is desirable to expose students early to leadership ideas. Programs on leadership are now offered, or being developed, in a number of engineering schools in North America. Among them are MIT, the University of Southern California, Cornell, the University of Maryland, the University of Toronto. At the University of Mississippi, the speaker initiated and coordinated a course on leadership to engineering students in the Fall of 2002. This talk will discuss what he learned about the subject, both from offering the course, as well as from his experiences as department head and dean in a number of Universities.

## **OUTLINE**

- I. INTRODUCTION**
- II. DEFINITIONS OF LEADER AND LEADERSHIP**
- III. TWO LEADERSHIP COMPONENTS**

#### **IV. PERSONAL LEADERSHIP QUALITIES**

#### **V. ORGANIZATION LEADERSHIP**

#### **VI. CONCLUDING REMARKS**

#### **VII. RECOMMENDED READING**

##### **I. INTRODUCTION**

Since I left Hong Kong in 1985, I have been fortunate to have been able to visit City University of Hong Kong nearly two dozen times. In every visit, I was asked to give a technical talk on my research on antenna design. This time, I suggested to Prof. Luk that, since the Department has numerous visitors giving technical talks, perhaps a talk which is nontechnical but related to engineering education would be a welcoming change. It was very kind of him to agree.

Why do I want to talk about leadership to engineering students? To answer this question, a somewhat lengthy introduction is necessary.

As mentioned by Prof. Luk, I took up the position of Dean of Engineering at the University of Mississippi (nickname Ole Miss) in 2001. Ole Miss has a relatively small Engineering School, much smaller than that at our sister institution at Mississippi State University. However, we have a tradition of producing leaders in the profession. Some examples: William Parsons, a graduate of 1979, had a prominent career at NASA, advancing to be the Director of the Kennedy Space Center in 2006. Before that, he was chosen to be the person responsible for

fixing the problems of the Space Shuttle Program after the Columbia disaster in 2003. As you may remember, the Shuttle program was back on track with the flawless launch and safe return of the Shuttle Discovery in the summer of 2005. As Dean of the School of Engineering at that time, I was fond of bragging that, faced with the Columbia disaster, NASA chose an Ole Miss Engineer, rather than a MIT Engineer, to rescue the Shuttle Program.

An Ole Miss Engineer who was a leader in Engineering Education is John Prados. A chemical engineering graduate, he served in a leadership position in the Accreditation Board of Engineering and Technology, better known as ABET, and was one of the architects responsible for the accreditation requirements called ABET 2000, which stressed outcomes and assessments rather than bean counting. Another Ole Miss graduate, Paul W. [Murrill](#), was president of Louisiana State University for over a decade.

There were two aspects of an Ole Miss engineering education which our graduates most appreciated: one being the small classes which enabled professors to give personal attention to students; the other being the strong liberal arts environment of the University which enabled them to mix with students of a variety of backgrounds. However, our alumni felt that a formal introduction of the ideas of leadership in the undergraduate curriculum will better prepare our graduates in their careers. The importance of leadership skills is beautifully conveyed in these two statements:

**“An engineer is hired for his or her technical skills, fired for poor people skills, and promoted for leadership skills” (Russell and Yao 1999)**

**Technical Ability x Leadership = Impact on Society**

It is in the background described above that I, working with our alumni, came up with the idea of a course on leadership for our undergraduate students.

We began offering the course in the Fall of 2002. It was a one credit hour course. The class met once a week. The course consisted of two components. One component was a series of lectures given not only by successful Ole Miss Engineering Alumni but also by successful engineers who were graduates of other Universities, as well as by prominent leaders in non-engineering professions, including the Chancellor of our University. Each lecturer spoke on one or more aspects of leadership from his/her personal perspectives. For example, one of our Vice Chancellors, who was a Professor of Communications, spoke on oral communications, including hand gestures.

In addition to attending the lectures, the students were required to write reports on three of the lectures.

The second component was that the students were required to study two books:

**“The contrarian’s guide to leadership” by Steven Sample.**

**“Developing the leaders within you” by John Maxwell**

Tests were given based on the contents of the above two books. As with other courses, students were asked to evaluate the course. Most of the comments were positive, and the course has continued to this day.

It should be mentioned that around the time we conceived the course, circa 2002, we found that, in the U.S., leadership courses were offered primarily in business schools and only a handful of engineering schools offered such a course. One of the few was the University of Southern

California. The President of USC was Dr. Steven Sample, an electrical engineer. He taught the course with Warren Bennis, regarded as a guru on leadership. Dr. Sample's book was an outcome of this course. It was published in 2002 and was a Los Angeles Times best seller. It was the only book by an engineer that made to the best seller list.

In recent years, it appeared that more and more engineering schools in North America have established programs on leadership, including MIT, Cornell, and the University of Toronto.

In the next 40 minutes or so, I shall talk about some of the things I learned about leadership. In choosing this topic, I do not imply in any way that I have successfully practiced what I am about to say, nor imply that I had even been a good or effective leader.

I shall from time to time tell a story or two to make a point. Some are from my own experiences. If they sound like tooting my own horn, I apologize in advance.

## **II. DEFINITIONS OF LEADER AND LEADERSHIP**

Let me begin with an attempt to define leader and leadership.

**A leader is someone who has identifiable followers over whom he exercises power and authority through his actions and decisions.**

**Leadership is the ability to have a clear vision of what is to be accomplished and to inspire and influence others to work toward the realization of that vision.**

Most people exercise power and authority over followers by virtue of elective or appointive office.

One often hears the following quotes about the difference between managers and leaders:

“Managers do things right, while leaders do the right things.”

“A manager is skilled at making sure people can climb up a ladder successfully. A leader makes sure the ladder is leaning up against the right wall.”

The above begs the question: What is the right thing/right wall?

If a leader follows the teachings of Confucius and Plato, which emphasized the good side of human nature, he would have a system of values against which all of life is judged. The Golden Rule, “What you do not want done to yourself, do not do to others” is a cornerstone of such values. Such a leader can be said to be a good leader.

On the other hand, Machiavelli, the author of “The Prince”, recognized the reality of human nature and his approach to leadership contained elements which may at first glance seemed devious. A leader who takes Machiavelli’s approach can be an effective, but not necessarily good leader. For example, Stalin was by all accounts a very effective leader, but was he a good leader? Depends who you ask.

The above brief remarks indicate that leadership is an art and not a science. Different leaders have their own approaches. Nevertheless, there seems to be common agreement on the essential elements that make a leader.

The bad news is that persons with liberal arts education are more exposed to leadership concepts than persons with an engineering education. The good news is that, even if we were not formally exposed to leadership concepts in school, we engineers can pick up such concepts on our own.

### **III. TWO COMPONENTS OF LEADERSHIP**

It is convenient to divide what I am going to talk about into two categories: personal qualities to make an effective leader and actions leading an organization to success.

The first group under individual qualities are hard knowledge and skills including knowledge in your chosen field, written and spoken communication skills, and a broad liberal arts education.

A person's ability to excel in these areas are sometimes quantified by the intelligence quotient or IQ number. The second group includes personal vision, integrity, positive attitude, and several elements which have come to be called emotional intelligence or EQ. EQ comprises self awareness and self management, social awareness and relationship management.

Under organization leadership are a host of actions that a leader takes to lead the organization: build a strong team, articulate a shared vision, plan and prioritize, communicate/listen, lead by example, develop leaders, seize opportunities and take reasonable risks, work in teams, persevere, evaluate performance, and get along with your boss.

The rest of the lecture will be devoted to discussing and giving examples of the above.

### **IV. PERSONAL LEADERSHIP QUALITIES**

#### **A. Hard Knowledge/Skills**

- Knowledge in your field

This is obviously an important element. Take, for example, the position of an engineering department head or engineering dean. Even though the position involves mainly administrative duties, a department head or dean must have established a distinguished record of accomplishment in teaching/research to have the respect of the professors so that he can be an

effective leader. Indeed, it is rare that a reputable University will hire someone into these positions who do not have an established reputation in his field.

- Communication skills (both written and spoken)

Communication skills, both written and spoken, are extremely important for landing a leadership position as well as after you obtain the position. Let's focus on the former for the present and talk about the latter later.

Perhaps the most remarkable example of the power of words was the rise of President Barack Obama. Before the Democratic Convention in 2004, hardly anyone outside of Illinois had heard of him. He was a junior senator from the State of Illinois. Then the Democratic Nominee John Kerry chose him to be the keynote speaker of the Democratic Convention. The speech he made was so remarkable that he immediately got the attention of his party and the American public. This laid the ground work for his successful bid for the nomination of the Democratic party in 2008 and subsequently to his being elected the first African American President of the United States.

We all know that, when we apply for a job, we have to write a cover letter, attaching our resume. Although the substance of the resume is of paramount importance, its presentation as well as the cover letter are also very important. If they contain grammatical errors and they are poorly organized, it would adversely affect your chance of making it to the short list. Once you make the short list, your spoken communication skills is crucial. When I applied for the Department Head position at City Polytechnic back in 1984, I was fortunate to make it to the short list of candidates to be interviewed. It turned out that the short list consisted of four people. Of the four, I was the only one whose native tongue was not English. Two were graduates of



Cambridge University, who had worked in Hong Kong for some time. The third was a Professor at a University in the UK. Somehow I must have convinced the selection committee and the City Polytechnic Director, Dr. David Johns, that someone speaking English with a Cantonese accent was better suited for the job than the three gentlemen with no accent. This success launched me into the leadership phase of my career.

We shall return to the subject of communication when we talk about organizational leadership.

- Liberal arts education

Students majoring in liberal arts disciplines are exposed to subjects dealing with human nature more than engineering students. They also have more chance to learn communication skills. As such, their education prepares them better for leadership. One interesting example is Carly Fiorina, former President & CEO of Hewitt-Packward. HP was a high tech company and guess what was the major field of her study: philosophy and medieval history. As I mentioned before, the bad news for engineers is that a liberal arts education prepares one better for leadership than an engineering education. The good news is that we engineers can pick up liberal arts education on our own. You may well ask: first, we are all very busy, where can we find the time? Second, even if I find the time, what should I read? To these questions, I refer to the suggestion of Dr. Steven Sample, in the chapter entitled “You are what you read” in his book.

When Dr. Sample wrote this book, he was President of USC, a very busy man. Yet he set aside, on the average, 30 minutes a day to read. This amounted to 120 hours a year. He emphasized the importance of spending some time reading what he called “supertexts”. Supertexts are books which were written a hundred or more years ago but which are still widely read today.

The examples he gave included the Bible, the Analects of Confucius, Plato’s Republic, Homer’s

Iliad and Odyssey, plays of Shakespeare, Machiavelli's The Prince, among others. You can make up your own list of supertexts, but Dr. Sample's point is that the supertexts contain some timeless truths about human nature, knowledge of which contributes to effective leadership. Another reason why the knowledge of the supertexts can be so advantageous for any leader is because the authors of the supertexts have proven to be extraordinarily successful word-smiths. Dr. Sample claimed that, setting aside 30 minutes a day on the average, he had read, in the decade he was President of USC, nearly 400 books covering a wide range of history, philosophy, religion, biographies, novels and poetry. Along the way, he had gotten a pretty good liberal education, better than many liberal arts majors.

Each of us can figure out how to find time for reading in our schedule. For me, during shopping trips with my wife, I usually go to a nearby Barnes and Noble Bookstore while she spends her time in department stores such as Macy's.

Shown in this slide are several quotes which I am fond of. The first is from a chapter title in Dr. Sample's book – you are what you read. It simply sums up the idea that what you read is reflected in your personality. The second quote was from a former colleague of mine and law professor at Ole Miss, **Dr. Don Fruge**. I invited him to lecture in the leadership course. Among other wisdoms, he encouraged students to form the habit of reading, because “The more you learn, the more you earn, the more you live.” The third quote was a modification of a remark by the famed CBS journalist, Mike Wallace, who was an iconic reporter in the news magazine 60 minutes. A few years ago, when he was near ninety, he was interviewed and asked why he **still** remained active. He replied that retirement was not in his vocabulary and he wanted to “Grow until you go”. When preparing this part of the lecture, I thought it interesting to modify it to: “Read and grow until you go.”

## B. Personal vision, Integrity, Positive attitude, Emotional intelligence

- Personal vision/goals

There are two types of vision, one personal and one organizational. Here we focus on the former.

Like most youngsters in high school, I was not particularly interested in my studies, nor did I have any idea what I wanted to do when I grew up. This all changed in the last year of high school, when a dynamic teacher in mathematics and physics joined our school. His teaching was inspiring. He not only aroused my interest in math and physics but also became a role model.

When I learned that he graduated from Sun Yat Sen University with a degree in electrical engineering, my goal was to study electrical engineering and become a professor and researcher. Later on, the thought of being an academic leader who has more influence than a professor began to appeal to me. This was partly inspired by the career of my Ph.D. mentor, Professor Henry Booker, who in 1965 went from Cornell to the University of California, San Diego, to start a new EE Department. Just like a Ph.D. degree is a terminal degree in a particular field of study, I regarded the Dean of an Engineering School to be the terminal position of an engineering educator's career.

There are two points to the story, which are summarized by these two quotes. First, "you need a dream, if you are going to succeed in anything you do." Second, "you can seize only what you can see." In other words, what you will ultimately accomplish will be limited by the goal you set, so aim high. In my case, since my goal stops at the dean of engineering level, I never

became a Provost or a President of a University, which are positions higher up in the academic hierarchy but outside the field of engineering.

- Integrity

“When I have integrity, my words and my deeds match up. Integrity builds trust and inspires confidence in a leader.”

If what I say and what I do are the same, the results are consistent. If what I say and do are not the same, the results are inconsistent.

For example, suppose you are the owner of a store and you say to the employee:

“Be at work on time”. If you do arrive at work on time, they will be on time.

On the other hand, if you arrive at work late. Some will be on time, but some won't.

Most importantly, if your followers see you not telling the truth, they may feel free to lie as well.

A leader without integrity will ultimately fail. The best known case was that of Richard Nixon. During the Watergate scandal, he famously said on TV that he was not a crook. When his own tapes revealed that he lied to the American people and he was indeed a crook, he faced impeachment and was forced to resign, becoming the only U.S. President who had to resign while in office.

I have another story to tell. There was a Dr. K. who was department chair at one University in Ohio. He became the engineering dean at another University in Ohio, partly because the search committee did not check the references well. Dr. K. was clever and energetic. However, he had a habit of lying to people with a straight face. In addition, like Donald Trump, he derived

pleasure in firing people. He created an atmosphere of mistrust and terror in the engineering college, but he cultivated the Board of Trustees well, dining and playing golf with them. After four years as dean, the Board of Trustees made him the President of the University, despite the objections of many faculty members. However, seventeen months later, he was fired. The Board of Trustees finally realized that he had no integrity and had done considerable harm to the University. Unfortunately, this realization was several years late. An article in the Chronicle of Higher Education reporting his firing stated that “His brief presidency has left the University reeling as it tries to recover from what some observers on campus characterizes as a near dismantling of the institution.”

Dr. K. was able to fool people for a while, but he ended up to be a laughing stock in the higher education community.

- Positive attitude

William James, a psychologist, said “The greatest discovery of my generation is that human beings can alter their lives by altering their attitude of mind.”

How much one can accomplish is directly related to one’s attitude and determination. In John Maxwell’s book, he illustrated this with the story of the four-minute mile, which is reproduced below:

“People had been trying to run a mile below 4 minutes since the days of the ancient Greeks. Folklore has it that the Greeks had lions chase the runners, thinking that would make them run faster. They also tried drinking tiger’s milk . Nothing they tried worked. So they decided it was impossible for a person to run a mile in four minutes or less. And for over a thousand years

everyone believed it. Our bone structure is all wrong. Wind resistance is too great. We have inadequate lung power. There were a million reasons.

Then one man, Roger Bannister, on May 6, 1954, proved that the doctors, the trainers, and the millions of runners before him, who tried and failed, were all wrong. And, the year after Roger Bannister broke the four-minute mile, thirty-seven other runners broke the four-minute mile. The year after that three hundred runners broke the four-minute mile. And a few years later, in a race in New York, thirteen out of thirteen runners broke the four-minute mile. In other words, a few decades ago, the runner who finished dead last in the New York race would have been regarded as having accomplished the impossible.

What happened! There were no great breakthroughs in training. No one discovered how to control wind resistance. Human bone structure and physiology didn't suddenly improve. But human attitudes did.”

Having positive attitude is also essential in effectively dealing with hardships and adversity.

When encountering problems, it is helpful to remember that problems give meaning to life. As the saying goes, if you want the rainbow, you got to put up with the rain. A study of 300 highly successful people, ¼ had handicaps (e.g, Franklin Roosevelt, Stephen Hawkins), many had either been born in poverty (e.g. Oprah Winfrey), or came from broken homes (e.g. Gary Grant, Bill Clinton). They turned their stumbling blocks into stepping stones.

When a leader has positive attitude, it filters down to his followers more quickly than his actions.

- Emotional Intelligence

Emotional intelligence is a set of skills that capture our awareness of our own emotions and the emotions of others and how we use this awareness to manage ourselves effectively and form quality relationships. The four emotional intelligence skills pair up under two primary competencies: personal competence and social competence.

Personal competence is your ability to stay aware of your emotions and manage your behavior and tendencies. For example, I know that tight deadlines bring out the worst in me so I always plan my time carefully and get my work done well in advance. Someone who is highly self-aware knows where he is headed and why; so, for example, he will be able to be firm in turning down a job offer that is tempting financially but does not fit with his long-term goals.

Social competence is your ability to understand other people's moods, behavior, and motives to proactively improve the quality of your relationship. For example, if you know a department head has a large ego, you do not criticize him in public. Neither do you sing the praise of another department head in his presence. People who are socially competent tend to have a sense of humor. A sense of humor helps us to get through dull times, cope with the difficult times, enjoy the good times, and manage the scary times.

The two competences can be summed up by the two Chinese phrases: **知己知彼**

As Sun Tze wrote in the Art of War, some 2500 years ago, “**知己知彼，百戰百勝**”. This is consistent with the findings of a study by Daniel Coleman, the author of Ref. 3, “What makes a leader”, that most effective leaders have a high degree of EQ. Just having good IQ is not sufficient. This article has become a required reading for Harvard Business School students.

## V. ORGANIZATION LEADERSHIP

- Build a strong team

It has been said that the first method for estimating the intelligence of a leader is to look at the men he has around him. The best leadership position is one that allows the leader to build a team from scratch. Such opportunities, though rare, do sometimes exist. For example, my Ph.D. mentor, Professor Henry Booker, went from Cornell to the University of California, San Diego in 1965 to build a department of electrical engineering from scratch. The new UCSD campus was situated in La Jolla, California, with views of the pacific ocean and beautiful beaches nearby. The weather was the best in the nation: all four seasons are spring-like. Professor Booker was probably given a lot of resources as well. These, together with his stellar reputation as a scholar/administrator, enabled him to recruit a team of top notch professors to the department. Among them were Victor Rumsey from Berkeley, inventor of frequency independent antennas, Irwin Jacob from MIT, who later co-founded Qualcomm, and Hans Alfvén, Nobel Laureate in Physics in 1970. In a short period, the department became one of the top electrical engineering departments in the U.S.

I was fortunate to have the opportunity to start a Department of Electronic Engineering at the City University of Hong Kong in 1984. Among the people I hired were Professor Edward Yung and Professor K. M. Luk. Professor Yung is an Ole Miss graduate. I also interviewed Professor K. F. Man in the U.K., and recommended him to Dr. Barry Jeffrey, my successor. As you know, both Prof. Yung and Prof. Luk served as Department Head for six years, and Professor Man is the current department head. In a relatively short time, the Department has built a solid



reputation not only in Asia but also in the world. The consequences of building a good team are evident in these two examples.

- Articulate a Shared Vision, Plan and Prioritize

“If you do not know where you are going, every road will get you nowhere” – Henry Kissinger

Most organizations have a strategic plan. A strategic plan usually begins with a vision statement which

states *what* the organization aspires to be, and a mission statement which spells out *how* to get there. The plan then progresses to goals and objectives, SWOT (strength, weakness, opportunity and threat) analyses, implementation strategies including priorities, as well as assessment methods to monitor progress. A strategic plan serves as a road map for the organization. It embraces positive changes and as such, input from all constituents must be vigorously sought. There is no time for me to go into the details of strategic planning but it is interesting to look at several vision statements.

Amazon: "Our vision is to be earth's most customer centric company; to build a place where people can come to find and discover anything they might want to buy online"

Walt Disney Company: "To make people happy".

Mayo Clinic: "Mayo Clinic will provide an unparalleled experience as the most trusted partner for health care."

- Communicate/Listen

A leader must be able to share knowledge and ideas with his followers and his ears must ring with their voices by listening. Two way communication is essential to produce an atmosphere of

trust and minimize the opportunity for conflict. When I accepted a department head or dean position, the first thing I did was to arrange one-on-one meetings with each faculty member. The purpose was to listen to their suggestions. I had weekly meetings with department chairs and research center directors. Minutes of the meetings were shared with the faculty to keep them informed of what was going on. In addition, I had an open door policy. Faculty, staff and students could see me without the need of an appointment. However, decisions and allocation of resources followed the administrative hierarchy, i.e. the dean did not micromanage. This policy could be described as “open communication with structured decision making”, which was eloquently articulated in Dr. Sample’s book.

We also had a mechanism of continuous improvement through feedback. At the semi-annual meeting of the Engineering Advisory Board, Board members met with representatives of undergraduate students, graduate students and faculty. These “stakeholder groups” discussed with the Board members the state of the School and made suggestions for improvement. The Board then conveyed the suggestions to the dean. The dean met with the department chairs to discuss each of the suggestions, to decide which suggestions have merit and which do not, and to make serious attempts to act on those that have merit.

- Lead by example

It is human nature to follow the leader’s example. Einstein once said that setting an example is not the main means of influencing others, it is the only means. When I was a graduate student at Cornell, I was impressed by the research productivity of the professors in our group and I felt a urge to do well in my research and followed their examples. This urge to excel in research continued when I became a faculty member. When I became Department Head and Dean, I

continued to keep up with my research, which had a positive effect on the faculty. When a faculty member saw that his department head or dean was productive in research, he had no excuse but to try his best to do so as well.

Another habit of mine was to work at least a portion of the weekends, usually Saturday morning and Sunday afternoon. A few years into my deanship at the University of Mississippi, I was told that, on weekends, the parking lot next to the engineering buildings were noticeably more crowded than before I assumed the deanship.

Setting examples extend into other areas. If the leader has integrity, the organization tends to have integrity. In tough situations, if the leader sees the glass as half-full instead of half-empty, it would lift the moral of the organization.

- Develop leaders

A leader's effectiveness would be multiplied if he can develop his lieutenants into good leaders also. If you are a dean, your lieutenants are the department chairs. If you are a department chair, your lieutenants are your associate/assistant chairs and section heads of various research groups. Hopefully, they will learn from your example of how to be an effective leader. You should give them the necessary authority, provide them with necessary resources, be accessible to discuss their aspirations and problems, and let their people know that you have confidence in them. A key to leadership is to realize that it is not just how many followers one has; it is also how many leaders one has created among them. The more leadership in the ranks, the more effective is one's own.

- Seize opportunities and take reasonable risks

As the saying goes, a ship is always safe at the shore – but that is not what it is built for. The same is true about life. I will relate one example in my career about seizing opportunities and taking reasonable risks. This was the decision to plan for a new Engineering Complex and to launch a Campaign to accomplish this at the University of Mississippi. When I took up the deanship in 2001, I was aware that the undergraduate student to faculty ratio was among the lowest in the University. Also, in my one-on-one meeting with faculty, it was apparent that more research space is needed. Looking at the state of the engineering buildings, it was obvious that, in addition to increasing space, the buildings and facilities had to be more attractive in order to increase undergraduate enrollment.

We therefore made an ambitious plan for a New Engineering Complex, and launched a Campaign to raise funds to accomplish this. This was a risky undertaking. Success will no doubt change the face of Engineering at Ole Miss, but if it failed, my deanship will forever be remembered for its failure.

I will now use the Engineering Campaign as examples of working in teams and perseverance.

- Work in teams

Once we had convinced the Provost and the Chancellor to be on the Engineering Campaign bandwagon, it became the team work of the upper university administration, engineering alumni represented by a committee chaired by two representatives, the school of engineering, and the University's development office and public relations office. At the outset, the PR office and the dean's office prepared an attractive brochure, detailing the vision of the school, its current strengths and weaknesses, and why the campaign was important for moving forward. The brochure began with a nice picture of the Chancellor, Provost, and Vice Chancellor for

University Relations. Beside the picture were their statements of strong support. We were confident that, with their support, there was no way we would fail. The brochure was sent to all constituents. Federal, State and private funds were sought. Periodic telephone conferences were held between the Vice Chancellor for University Relations, the Dean, his development officer, and the two alumni committee co-chairs to discuss strategies and identify potential donors. Travels were made to cultivate potential donors.

- Persevere

Unfortunately, shortly after the Engineering Campaign was launched in the summer of 2001, the tragic 9/11 event occurred. The US economy and the stock market dived, and it was not a good time for fund raising. For several years, the prospects of the Campaign looked pretty grim. But we persevered. The first break through came when, in 2004, the University obtained \$4 million from the State Legislature to renovate the Old Chemistry Building, which was to be used exclusively by Engineering. The second break was the announcement of the Governor in 2008 that a Center for Manufacturing Excellence (CME) was to be established at Ole Miss, with the School of Engineering playing a primary role. This was in conjunction with Toyota building a plant in Blue Springs near Tupelo. In the Fall of 2008, I was able to write on our biannual engineering newsletter:

“The school has just acquired about 12,000 square feet of research laboratory space in the former Wal-Mart building across Jackson Avenue. The renovation of the Old Chemistry building, to be used exclusively for engineering, is scheduled for completion about a year from now. By the end of summer 2010, we anticipate the completion of a new building to house the Center for

Manufacturing Excellence. We are also planning for the renovation/expansion of Carrier Hall, which should be completed by August 2010.”

Although I stepped down as Dean in June 2009, under the deanship of Dr. Alex Cheng, aside from minor delays, the projects were completed as planned, increasing the space of the School of Engineering by 143%. The Old Chemistry Building was renamed Brevard Hall, in honor of Henry Brevard and his family. It became the flagship engineering building, with a magnificent dean’s office suite overlooking the most beautiful part of campus. Undergraduate engineering enrollment has been steadily increasing every year, with no sign of leveling yet.

The importance of perseverance is summarized by these two quotes:

“It does not matter how slowly you go as long as you do not stop.” (Confucius)

“Many of life’s failures are people who did not realize how close they were to success when they gave up.” (Thomas Edison)

- Get along with your boss

The support of your boss is essential to your success. If you are a department head, you need your dean’s support. If you are a dean, you need the Provost’s support. If you cannot get along with your boss, you cannot be effective in leading your department or school.

The Engineering Campaign served as a good example. Without the support of the Provost, it would not have succeeded.

- Evaluate Performance

This is probably one of the most difficult, tedious, but important tasks of a leader. In academia, evaluating faculty members and departmental staff and recommending their raises are the job of department chairs while the evaluation of department chairs is the job of the dean. This exercise usually takes place once a year.

In evaluating performance, remember that everyone wants to feel worthwhile and encouragement brings out the best in people. Thus it is important to give credit where credit is due and be artful when issues need to be addressed. When confronting issues, John Maxwell suggested the following helpful guidelines, which he termed the 10 commandments of confrontations:

1. Do it privately, not publicly.
2. Do it as soon as possible. Do not wait for the annual evaluation time.
3. Speak to one issue at a time. Don't overload the person with a long list of issues.
4. Once you've made a point don't keep repeating it.
5. Deal only with actions the person can change. If you ask the person to do something he or she is unable to do, frustration builds in your relationship.
6. Avoid sarcasm. Sarcasm signals that you are angry at people, not at their actions, and may cause them to resent you.
7. Avoid words like always and never. They usually detract from accuracy and make people defensive.
8. Present criticisms as suggestions or question if possible.

9. Don't apologize for the confrontational meeting. Doing so detracts from it and may indicate you are not sure you had the right to say what you did.

10. Don't forget the compliments. Use what I call the "sandwich" in these types of meetings:

Complement ---Confront ---- Compliment

## VI. CONCLUDING REMARKS

I now have a few concluding remarks for students in the audience. I have, in this lecture, gathered some recollections which hopefully illustrated some guidelines for leadership. There are many things that I have missed, or you may disagree with much of what I said. If I have aroused your interest in pursuing the subject further, this hour has not been wasted. I should add that, even as a student, there are opportunities to practice your leadership skills – in the boy scouts, in student societies, and in community services.

Finally, as I said at the beginning, leadership is an art and not a science. I now close this lecture in a non-scientific way – with a poem. This poem is by the American poet Edwin Markham and is about having a dream in one's youth and seeing the dream come true in old age. At my request, my brother has kindly translated the poem into Chinese.

The original poem:

“Ah, great it is believe the dream,  
As we stand in youth by the starry stream,  
But a greater thing is to live life through,



And say at the end, the dream came true.”

And the Chinese translation:

少壯喜尋夢，  
觀星溪水濱。  
老年回首望，  
終覺夢成真。

May you all have a dream and that your dream will come true.

## VII. RECOMMENDED READING

[1] Steven B. Sample, “The Contrarian’s Guide to Leadership”.

[2] John C. Maxwell, “Developing the Leader Within You”

[3] Daniel Goleman, “What Makes a Leader”, Harvard Business Review, November-December 1998, pp. 93-102.