“There are three constants in life... change, choice, and principles.”

“If you focus on principles, you empower everyone who understands those principles to act without constant monitoring, evaluating, correcting, or controlling“

“Effective leadership is putting first things first. Effective management is discipline, carrying it out”. 
1. The Unfolding Environment we Face: End of the American Century?

- U.S. as no. 2 economy by 2018?
- Rise of China as no. 1 economy and rival.
- Risks of global economic breakdowns, multipolar world’s instability and revolutions: interconnected systems of networks in finance, production and civil society: inhibited growth in developed world after 2008.
- Spread of science and technology: spreads instantly and widely now.
- Climate change and resource depletion.
- Disease organism resistance to medicines and epidemics.
- Slowing population growth worldwide: demographic shifts.
- Broadest rise in global standards of living in history.
- Election results no longer assure ability to govern in the developed countries.
Grantham runs GMO, a Boston-based asset management co. with $97 billion under management.

--U.S. productivity slowing

-- Exponentially-growing demand for resources: China, India etc: increasing cost of resources distorts gains in GDP.

-- long-term U.S. growth outlook 1.5%, not 3%.

-- reduction in global economic growth from climate change and resource costs.
Resource Costs: Grantham’s view
Feb 16 on BBC radio.

- Resource prices tripled between 2002 and 2008: greater than during World Wars I and II

- History: 33 commodities: declined in real dollars over 100 years. Spiked temporarily during the world wars and 1973-74 oil crisis. But spike in last decade marks a new increasing real cost trend.

- “Incredible growth of China and India” China uses half of all cement, 45% of coal, 45% of all copper worldwide. Within 10 years resource use double again? Sustainable? No: Chinese growth rates should slow down.
But Meanwhile, China Overtakes the U.S.

source: Economist magazine

Overpowering
Year in which China: **overtook / overcomes** the United States

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<td>GDP at PPP*</td>
<td>09</td>
<td>2011</td>
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**GDP at market rates**

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<td>Stockmarket cap.</td>
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<td>0.8</td>
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<td>Consumer spending</td>
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<td>0.8</td>
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<td>0.4</td>
<td>0.6</td>
<td>0.8</td>
<td>1.0</td>
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Sources: BP; CEIC; IMF; ITU; Thomson Reuters; WIPO; World Bank; WFE; World Steel Association; *The Economist estimates*
Composition of Chinese GDP

Chinese GDP Composition

- Consumption
- Investment
- Government
- Trade

Trillions ($)

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

+216.5%
+76.5%
+101.5%
+279.5%
Between 1990 and 2008 around 27 million new jobs were created in the U.S.

Of these only 600,000 (net) were in the most productive “tradable” sectors: (goods and services tradable around the world). Manufacturing lost jobs during this period (note: productivity was very high).

26.4 million were in the less productive and generally lower paying “non tradable” sectors: retail, health care, construction etc. Some 98% of job creation is expected to be in the service sector to 2020. Spence: “this is not sustainable...”

Productivity gains are much harder in services.
Michael Spence is an American-born, Canadian-raised economist and recipient of the Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel, along with George A. Akerlof and Joseph E. Stiglitz, for their work on the dynamics of information flows and market development.
Major shifts in energy picture: technologies are making the U.S. more self-sufficient, even an energy exporter.

Low inflation, increasingly competitive labor force, stagnant wages.

Still leads in innovation, sunk resources in STEM facilities, intellectual capital, good entrepreneurial environment.

Great resources in higher education: endowments, faculty and researchers.

Still large public funding of R & D, basic research.
“By a range of measures, the industrialisation of the emerging economies justifies the title ‘the greatest ever economic event’ “

Even though growth is likely to slow sharply in China, rising relative prices and a rising exchange rate mean that it will become the world’s largest economy in the 2020s. (McWilliams compares the economic impact of the emerging economies to the discovery of the Americas and the industrial revolution).

India may eventually overtake China around 2050.
World long term outlook for GDP for large economies (assumption: China’s growth slows to 4%).

Americans largely not aware of the extent and coming impact of these disruptive economic changes.

- Little understanding or acknowledgement of these transforming global changes
- Winners and losers? What does this mean for the U.S. long-term?
- U.S. political process an impediment to economic transformation: domestic focus.
- U.S. not likely to fare well without a revolution in thinking, organizing economic activity, politics and in education.
- The 2008 Crisis and slow recovery with high debt was just the beginning... credit crunch could persist for many years (McKinsey study), thus continued rapid shift of global economic power to the East. Future economic crises are likely to be global too.
Nobel committee seldom awards American literature the prize now: complain about an isolation and insularity that makes American lit. of little relevance to others;

Political dynamics underscore American insularity: oblivious to global challenges.

Could be fatal given the challenges outlined earlier! Not a dark age, but U.S. no longer center of the universe!
A new challenge?

- Constitutional democracies not up to 21st century challenges? Election results do not ensure governance: minorities can block legislation and executive action: gridlock

- Economic advantage growing in collective societies in Asia: economies of scale, industry clusters: rapid assimilation of technologies and commercial scale-up.
Suntech (China): largest solar silicon panel modules producer in the world, operating at such efficiency that U.S. govt. loan guarantees for Solyndra ($535 million) could not stave off bankruptcy.

Solyndra and others claimed collusion and predatory pricing by the top 3 Chinese makers. U.S. levied countervailing and anti-dumping duties against a number of Chinese suppliers. $3.1 billion in solar panels imported in 2011 from China.

China’s Suntech’s impending bankruptcy: consolidation of the global solar panel industry, but China is still likely to dominate it, having suppressed Japanese, German and U.S. competition through subsidized overcapacity.
Impact of Globalization

- Global Production Networks (GPNs), Industry Clusters
- Economies of scale and dominance of product standards have become keys to industrial success.
- Hybrid management techniques in Asia:
  -- Western: e.g., Deming QC methods
  -- Traditional: Confucian ethics and culture
  -- Even adaptation of communist mobilization techniques in Chinese corporate cultures.
- The impact of IT: rapid spread of technologies including production knowhow. Lags are not as long, so countries do not retain any technological advantage for long.
Haier Co. of China: Overtaking U.S. appliance makers

China’s Haier Sets Up Marketing Chain Process Model
China’s Industry Clusters ("Strategic Centers")
Industry Clusters

“Clusters are groups of inter-related industries that drive wealth creation in a region, primarily through export of goods and services.”

“An industry cluster is different from the classic definition of industry sectors because it represents the entire value chain of a broadly defined industry from suppliers to end products, including supporting services and specialized infrastructure.”

Global Production Networks (GPNs)


Global production networks are inter-linked production networks in which design, production and applications work takes place in several or many countries. Key terms: Outsourcing, Value-added.
“...So far, most institutions have tried one-time fixes, not structural reform. Moody’s says they must address “the entrenched cost drivers of the business model”: heavy faculty involvement in governance, inefficient classroom instruction, tenure and lavish amenities – “student life services”, as they are known. Taking on such sacred cows will require “strong leadership”, Moody’s observes, and could trigger institutional conflict. But the alternative may be institutional decay.”

-- “Forsaking the paper chase, All institutions of higher learning should be concerned that fewer people are seeking law degrees”, editorial in the Washington Post newspaper, February 4, 2013.
Much of U.S. Higher Education Is Not Coping With Such Overwhelming Transformation (Though Elite U.S. Universities like MIT are Helping to Drive It...)

- Budget Constraints
- Aging Faculty
- Administrative Burdens and Overhead
- Lack of a National Mission (No “Sputnik” here yet!) and incentives
- Lack of Common Understanding of How to Add Value to Student Experience
- Lack of Assessment and Outcome Metrics
- Ineffectual plans and strategies in institutions: piecemeal adoption of new objectives such as incorporation of “analytics” (large data mining, for example, into the curriculum).
Criticism of U.S. higher education not scarce or new! Often ideological.


“...The mass hiring of adjuncts, however, is all the proof one needs that higher education is trying to meet the needs of the students about whom it cares least — undergraduates and part-time adults — on the cheap, reserving the big bucks for the tenured faculty, the burgeoning administrative fiefdoms and the revenue-producing research endeavors.”

--“In the Basement of the Ivory Tower” gets a failing grade
By Jonathan Yardley, Washington Post May 06, 2011
The Nature of the Problem

- It’s not one of a lack of innovation--going back to New Math. Reams of suggestions and advice. Some good, some useless.

- To begin with, it is one of deficient standards and mediocre and poorly relevant curriculum, and a lot of not very useful theory about the solutions to poor student learning outcomes and performance. “Student-centered learning” has little practical meaning yet–no consensus on how to create it or what it contributes to learning outcomes and applicability.

- It is one of a higher educational complex that is diverging from globalized requirements.

- Lack of accountability, though a lot of language in meetings and institutional documents about student outcomes.
The Problems Are Basic and Well-Known But We’re Still Back There in the Weeds.

- Undergraduate: class sizes too large in introductory courses (4 year colleges more so than community colleges)
- Poor writing and math skills of entering students.
- Core requirements not well thought out at many colleges.
- Lack of common yardsticks in higher education to measure outcomes (unlike in primary or secondary schools).
- Distorted grading systems to cope with widespread poor performance of students.
- Textbook content lags developments in the field in spite of expensive new editions being frequently published.
- Mistaken emphasis on technology and elaborate facilities in addressing such basic problems.
- **Resources devoted to the back end, not the front end of higher education. Result: low retention rates or delayed graduations: waste of resources.**
Example from my own discipline and experience: economics

In Virginia no thought is given to the correct sequence of principles courses in 4 year state schools and in the community colleges. Not conform to best practices.

Macroeconomics is ECON 105 or ECO 201
Microeconomics is ECON 106 or ECO 202

Yet microeconomics is the market principles-based foundation for macroeconomics.

Students will naturally take them in the wrong sequence.

Simple solution: Course numbers should be reversed and micro should be recommended or required to take first.

Problem: no consensus that this is a problem and inertia.
The Opportunity Cost..

- “It’s good for students to revisit the microeconomic principles in macro”.  
  -- economics instructor’s comment to me on the current system in Jan, 2013

- The opportunity cost: a host of things like international economics and trade principles, skills development labs, data-related workshops, learning on platforms like Excel, you name it! There is simply no time for these if 25-30% of the course is revisiting market principles and we must meet state-wide curriculum requirements!
Some community colleges understand the new paradigm

- In Feb 2013 Anne Arundel Community College announced a new full-time economics faculty position.

- Explicitly links social science like economics to a major STEM initiative at the college.

- Requirement for the position: current proficiency with statistical software: STATA or SPSS.
1. Example: at Yale University the micro Principles course is a prerequisite for macro. 
http://yalecollege.yale.edu/content/economics

2. Resistance in my own institution to making the introductory curriculum more quantitative even in an applied sense. ("students won’t be able to cope with it", "transfer math requirements can be put into the catalogue"). Given the challenges the U.S. faces such objections are (let’s be honest!) ridiculous and outdated...
Lack of practical or essential content: examples from my field:

- No mention in leading introductory textbooks or curriculum of widely used tools in industry and forecasting like leading economic indicators.

- International or global factors insufficiently covered (often no principles introduced at all).

- No emphasis on finding, selecting and using data, navigating statistical websites.

- No quantitative or skills workshops or labs to apply classroom knowledge as in the elite institutions.
At my campus we were advised of a program of classroom observation of instructors by peers in our discipline.

It never was implemented. Everyone is “too busy”.

It’s a good idea. Professional feedback can be very useful for continual improvement. There is a voluntary program: “Teaching Squares”: http://blogs.nvcc.edu/cetl/category/teaching-squares/
Address basic deficiencies head-on, as Michelle Rhee did as schools chancellor in Washington D.C.

The problem she faced: 8 percent of 8th graders were at grade level in math while 92 percent of teachers were getting good evaluations.

-- Michelle Rhee on the John Stewart show, Feb 4, 2013.
Good Leaders have Great Role Models..

Jaime Escalante  
(film: Stand and Deliver, 1988)

Michelle Rhee  
(book: Radical, 2013)
Set the bar high as Jaime Escalante did in his East L.A. inner city school. Leading by example and integrity.

His goal was to have his underprivileged students pass the calculus AP exam. He succeeded with a number of students.

Nobody believed he could do it. Great opposition in his school.
Problems were so fundamental and destructive of outcomes that they had to be addressed head on with debris cleared away before progress can be made. Time is of the essence or the reform effort will break up.

Attacked basic problems first: when textbooks weren’t delivered in time to schools she went personally to warehouses as traffic cop: like General Patton!
3. The Challenge and the Task Ahead

- To make hard-won reforms and gains lasting.

-- Are East L.A. students still passing the AP calculus test after Escalante’s death in 2010?

-- Are Michelle Rhee’s reforms still being implemented in D.C. schools after her premature departure due to the election defeat of her boss, mayor Adrian Fenty?
Get back to basics in the undergrad front-end and make them work. Concentrate on the foundation before the roof. Go step-by-step to correct deficiencies in a common sense way.

Do not tolerate incompetence and laziness in myself or others: make sure there is accountability and feedback. “Quality begins with me”.

Ensure a deep and wide acceptance of common principles and their application to ensure better outcomes and continuity: key task of leadership. Make them institutional.
1. “Incomplete and obsolete paradigms thrive in our current working environment”.
2. Paradigm shift means moving from maps to a compass of enduring principles because “we are in a wilderness”.
3. This requires breaking the “human barrier”, like breaking the sound barrier.
4. There are no quick fixes. “Growth is a natural process” -- “agricultural principles”.
5. Principle is a mind-set, not just a practice.
Principle Centered Leadership
by Stephen Covey

FOUR LEVELS OF PRINCIPLE-CENTERED LEADERSHIP WITH KEY PRINCIPLES

- Practice from the inside out
- Each level is necessary but not sufficient
- Book Divided into sections
  1. Trustworthiness & Trust
  2. Empowerment & Alignment
MORAL COMPASS

YESTERDAY’S MAPS DON’T REFLECT THE PRESENT OR THE FUTURE
YOUR MORAL COMPASS IS MUCH MORE RELIABLE IN NEW FRONTIERS
“New initiatives die in swamp conditions where there is much politicking, defensive communication, protective communication, interpersonal rivalry, interdepartmental contests, positioning and manipulating. No sooner is the new initiative announced than massive resistance is marshalled against it”.

“The foundation lies with people and relationships. When we ignore the foundation, our improvement initiatives will fail or falter. Effective communication is based on trust. And trust is based on trustworthiness, not politics”.

“Growth is a natural process. Reap as you sow”.

“Algebra before calculus”.

“Retain a long-term perspective”.

Problem: how to break institutional log-jams?
If retention rates are horrible, there’s something wrong:

-- either many of these students should have another viable path available to a livelihood--

-- or there’s something wrong in the institution or curriculum.

*Reform runs up against the long-term financial viability of a college as it is increasingly tuition-and enrollment driven. But enrollment starting to fall naturally as economy recovers in many colleges and disciplines.
“Studies show that the 21st Century Student prefers coursework that is problem-centered and application based, permitting them to immediately apply what they learn in the classroom to their workplace and their lives”

“A 21st Century Model for Higher Education: Innovative Design and Its Implications for Student Learning and Institutional Viability”
by John J. Donohue, Ph.D.
Chief Learning Officer, Synergis Education, Inc.
A liberal arts, largely academic approach no longer will have the resources available to sustain it. Get worse in future. Critical thinking less valuable than critical skills in the workplace?

Key skills deficiencies in the economy need to be identified and resources allocated through a collaborative private industry, government and educational institution effort: nascent attempts have begun but not widespread in higher education yet.

Innovation is expensive. Creativity cannot be the driver alone without adequate commercialization or application. Opportunity cost becoming higher as other countries are better equipped to capitalize on U.S. innovations. Public funding for innovation may decline relative to GDP in the U.S.
Improved content and curriculum: need to be value-added

- Not all instructors have the capability or time to develop good practical curricula and labs on their own.

- This needs to be a collaborative, collective effort.

- Challenge: The U.S. culture of the rugged individual: promoting collaboration is herding cats! East Asian societies have a culture of common goals, expectations and purpose. Necessity drives an applied approach in education and research. Growing economic constraints impel the U.S. in the same direction?
VCCS was considering a program of non-long term full time status to adjuncts including benefits under a proposed VCCS program. At Germanna CC: 75% of instructors are adjuncts, major trend at higher ed institutions. Focus on teaching, not admin or guidance.

Not implemented so far; it’s a good idea. Compensation and benefits would be improved by this device and a more committed tier of faculty attracted.

4 year colleges may have “special purpose” 9 month contracts. Criteria include selection on either “academic” or “professional” qualifications. But usually not well developed with clear objectives.
Technology?

- Hard skills: more technical
  - e.g. Excel, and Excel-derived software skills
  - Facilitate instructor’s materials and student skills, applications: accounting, statistics, randomized problems can be set up by students themselves. Cheaper than publishers’ on-line resources!

- Soft skills: social media, blogs, other communication
Anne Arundel Community College is reviewing applications for a full time economics instructor.

Explicit link between a nationally-supported STEM initiative and social science discipline like economics.

Explicit requirement for econ. Prof: “current proficiency” in statistical software like STATA and SPSS.
• Application of technology cannot be a substitute for knowledge
Principle-centered leadership

- Build the foundation before the roof, move step by step to restore core learning and skills, add workshops and labs to classroom lectures.

- Critical to reduce introductory class sizes and restore more individual attention to student learning development on the front end. Teaching process becoming increasingly automated. Instructors no longer as aware of specific student weaknesses.
Example of What is Needed: My Own Discipline at the Front End

- Theory can be concentrated into 4 or 5 main modules: opportunity cost and resource optimization, market principles and competition, economics of production, Keynesian principles, trade and new trade theory and new ideas in the field.

- More emphasis on applications: key knowledge and skills development: risk and probability, investment principles, finding and working with data, cost-benefit analysis, applied math, data and graphing workshops, application of economic principles to professions like engineering, architecture, real estate, finance and business in general, statistical labs including Excel and other software practice. More internships.
4. Principles-Centered Leadership to Bring it About...

- Creating awareness of the urgency and need for reform in U.S. higher education.
- Focus on the undergraduate level: make content more applied and improve outcomes. Graduate education is alive and well in the U.S.!
- Forge consensus and collaboration toward reform.
- Make reforms institutionalized through internalized principles.
Key Prerequisites for Successful Reform Leadership

- **Vision**
- **Strategy (making winning choices)**
- **Implementation:**
  -- Ability to forge consensus.
  -- Ability to overcome inertia and opposition.
  -- Ability to organize support, coalitions and action.
  -- Ability to foster institutional and political drivers of reform and long run commitment to it.
“..Collaborative model requires each student to engage in application based learning activities outside the classroom that will support class work and also demonstrate how course content is both relevant and dynamic in real world situations. “
The Obstacles

1) a deficient status quo defended by interest groups threatened by reform.

2) lack of focus or basic or common understanding of the problem (what problem? Or, it’s not my problem, can’t change it).

3) ideological polarization and perspectives.
Covey’s philosophy

- Paradigms: a conceptual or theoretical framework of a scientific discipline, demonstrateable facts and results, but these can become obsolete as societies change.

- Natural laws (principles), “agricultural” process

- Values (are internal and subjective)

“incomplete and obsolete paradigms thrive in our current working environment”. 
1. Principle-centered leadership works when the values of the leader and colleagues overlap— if the leader can serve to develop a common perception and understanding of a problem;

2. A common strategy can then be pursued, meaning a plan to find the resources and common purpose for making the right choices and tactics to win, to improve outcomes;

3. The leader's example is followed because of the strength of his or her character and ideas, but teaching must also be explicit;

4. A objective of leadership must be to create positive change in an organization enabling it to meet changing needs and requirements. The vehicle to get there must include forging an effective consensus to overcome inertia and resistance to change.
The need is for a revolutionary transformation of institutions, curricula and content to meet both evolving academic and vocational requirements in an increasingly complex and competitive world. Easy to say. Hard to do. But a window of opportunity may open as students vote with their feet as we see in law school enrollments.

As many in any organization will not agree, it is the task of the leader to present a strong case and forge a consensus toward a better strategy and allocation of resources. Sometimes override opposition and “lance the boil”.

The solo practitioner or lone ranger is an anachronism in a networked and more interdisciplinary world in which the collective societies in Asia are assimilating the latest technologies and are rising economically relative to the mature economies of the West.
Desired Principles in Higher Ed.

- Curriculum should have applied, practical value to students.
- Commonly accepted assessments that meet global standards.
- Reduction of class sizes in introductory classes and addition of labs or workshops.
- Less cautious updating of curricula to reflect new developments in each field.
- Fostering of collaboration in teaching as well as research.
- Fostering of interdisciplinary sharing of knowledge and techniques (e.g., social sciences and STEM).
5. Discussion: Opportunities and Challenges

-- But is being a highly effective (competent) and trustworthy leader enough?

-- Is it enough to lead by example?

-- Is being principles-centered enough to be a successful leader in an individualistic, fragmented and polarized society?

-- What pathways to effective leadership?
Open the floor to discussion.
Are Stephen Covey’s Ideas Practical in Today’s Environment?

- Too idealistic and utopian?
- An under-appreciation of human inefficiencies?
- On occasion dysfunction may be so deep-rooted that “shock therapy” may be needed to clear the log-jam. But capitalizing on the change created is a major challenge; can Covey’s principles help in institutionalizing change in such cases? Any reformer needs allies.
Decisive executive action where a necessary condition for initiating reform is to override opposition. Control of budget or resources makes it much easier to manage resistance.

Principle centered leadership that institutionalizes such reform actions over time: elicit buy-in by stakeholders including those in opposition over time. Use budget to provide incentives toward reforms.
Let’s be critical thinkers. What does this mean?

“We want to bring about a shift in pedagogy,” said Caputo of North Schuylkill SD (PA). “We want our teachers to become facilitators of learning, we want to encourage critical thinking and analysis skills. Once they are comfortable using technology, we’re confident that we can bring about change.”

Source: Leadership in the 21st Century: The New Visionary Administrator
Dipak K. ("Dee") Roy

Dipak has a B.A. in economics from Antioch College and a Master of Public Administration degree from Columbia University with a concentration in international economic policy and management.

His career spans international trade, government and financial services prior to teaching economics. He was a vice president at Mitsubishi International Corporation, a co-founder and president of a food technology company in Canada and a consultant to UNDP in its Iraq reconstruction program.