Improving Teaching
Face-to-Face and Hybrid Teaching

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Topics

• Why Improve Teaching?

• 45 Teaching Errors

• What is Good Quality Teaching?

• Lean Teaching Pedagogy
My Viewpoint

We Will Suffer if We Continue to Teach the Way We Were Taught.

If We Don’t Improve, Our Leaders “Improve” For Us

How Will We (and others) Suffer?
Usual Way Universities “Improve”
Zero-Sum (win-lose) “Solutions” to Budget Problems

**Staff**
- Furloughs
- Salary Freezes
- Cut Wages and Benefits
- Reduce Hours
- Delay Hiring
- Layoff Staff

**Faculty**
- Furloughs
- Salary Freezes
- Cut Wages and Benefits
- Reduce Hours
- Reduce / Eliminate Overload Pay
- Delay Hiring
- Layoff Faculty
- Hire More Adjuncts; Faculty Manage Supply of Adjuncts
- Raise Number of Students to Run Grad Courses

**Students**
- Reduce Scholarships
- Require Students to Tutor Underclass
- Reduce Teaching Assistants
- Cut Athletic Programs
- Eliminate Student Clubs
- Increase Class Size
- Cancel Classes
- Cut Student Services

**Academics**
- Close Departments / Programs
- Combine Departments / Programs
- Reduce Course Sections
- Offer More Courses Online

**Facilities**
- Delay Construction
- Delay Renovations
- Outsource Maintenance
- Demolish Expensive Old Buildings
- Lease Trucks and Heavy Equipment
- Cut Contractors

**Administration**
- Raise Prices
- Administrators Teach Courses
- Reduce / Eliminate Travel
- Four-Day Workweek
- Differential Tuition Pricing
- Outsource IT, HR, Legal, Bookstore, etc.
- Increase Fundraising
- Spend Down the Endowment
- Share Services With Other Campuses or Universities
- Leverage Purchases with Other Campuses or Universities
- Expand Administrator Duties
- Cut Consultants
- Cut Food in Meetings, etc.
- Cut Book / Journal Budget
- Increase Room Temperature in Summer
- Decrease Room Temperature in Winter
- Negotiate Lower Prices for Food, Electricity, Oil, Gas, IT Service Contracts, etc.
- Reduce Telecommunications Expense
- Use Open Source Software
- Endowment in Higher Yield (Riskier) Investments

Nobody Wants to Be the Loser

Source: Various articles from *CHE, 2007-2013*
Outsourcing Instruction

'It's a whole lot easier to tell a company 'You're not performing properly' than to tell a tenured faculty member that.'

The For-Profits Will Be Relentless. HE Leaders Cannot Stop It.

http://chronicle.com/article/How-For-Profit-Education-Is/234550 and Google.com
Paying for Teacher Training Courses

Association of College and University Educators

ACUE helps raise the quality of college instruction to improve student learning through its Course, Certificate, and Community.

ACUE is a new organization founded in 2014 by leaders in higher education to advance effective instruction and support college educators whose primary responsibility is to teach. Currently, ACUE is focused on the creation and distribution of world-class faculty development resources.

The ACUE Course

ACUE’s Course in Effective Teaching Practices covers the essential skills and knowledge that college and university educators should possess to make their work more impactful and rewarding in classrooms and online, regardless of discipline.

It includes practical, research-based techniques that can be put to use—right away.

The course is structured into five major competencies based on ACUE’s Effective Practice Framework:

- A state-of-the-art Course in Effective Teaching Practices, aligned to ACUE’s Effective Practice Framework. The Course is informed by the latest research in effective instruction. It covers essential skills and knowledge that every college educator should possess.
- A Certificate in Effective College Instruction to distinguish faculty who are better prepared to lead class sessions that result in stronger student outcomes.
- An online Community of Professional Practice to promote professional development outside of and beyond ACUE’s Course.

Source: http://acue.org/course/ and http://acue.org/about/
Major Change HE Value Proposition

In Era of Globalized Labor Resulting in Flat or Declining Wages

Value Must Match or Exceed Price

Not Our Fault, Yet We Own the Problem
And Major Change In HE Competition

FROM

Sellers’ Market
Organized Work for Benefit of Professor & Staff

TO

Buyers’ Market
Must Organize Work for Benefit of Student

The Change Began ca. 1900
Noticeable Effect Beginning in ca. 2000
Competition Drives Change

Actual Time

University Time

University Time is Non-Competitive
How To Respond?

What Professors Have Long Wanted to Do

• Eliminate Academic “Dissipations” (Costly Mission Creep)
  ➢ NCAA Athletics (Replace with Strong Intramural and Wellness Programs)
  ➢ Various Clubs and Activities, Etc.
  ➢ Use Savings for Instruction & Instructional Support

• Eliminate/Consolidate Top Positions

• Annual Election of Rector by Faculty Senate

• What About Compete on Instructional Quality
  ➢ Who Does That?

Thorstein Veblen, ca. 1917
Basic Professional Competencies

Do You Like an Electrician Who…

• Comes to your home unprepared?
• Reads how to fix the problem from a manual?
• Fails to apply work experience to your problem?
• Fails to tell you what the problem is?
• Explains things in a complicated way?
• Charges you for expensive parts not used?
• Habitually late in arriving to your home?
• Speaks to you in condescending ways?
• Does something different than what he said?
• Gives poor instructions on how to operate system?
• Actual fee charged does not reflect estimated fee?

Do Students Like a Teacher Who…

• Comes to class unprepared?
• Reads from the book?
• Fails to add knowledge or perspective to a topic?
• Fails to engage class in the discussion?
• Focuses on theory; lack of real-world examples?
• Requires expensive book, but does not use it?
• Habitually late to class?
• Speaks to students in condescending ways?
• Coursework is different than the syllabus?
• Gives poor assignment work instructions?
• Actual grading does not reflect syllabus?
45 Teaching Errors Disengage Students

- Cannot teach
- Do not know the material
- Cannot answer questions
- Get frustrated when students ask questions
- Cannot explain the material
- Come to class unprepared
- Go too fast
- Read from the book
- Fail to add teacher’s knowledge or perspective to a topic
- Fail to engage class in the discussion
- Fail to use teaching technologies
- Style remains stagnant for 25 years

- Does not use real-world examples
- Frequently changes book or edition
- Requires a big expensive book, then does not use it
- Habitually late to class
- Class runs past end time
- Talk about themselves or tell life stories that are irrelevant
- Explain topic only one way
- Tenured teachers who don’t care or give up
- Randomly teaching different topics
- Not communicating what students are expected to know
- Required courses that assume extensive background or prior knowledge
- Base entire grade on 2 or 3 exams

- Attendance does not count as part of the grade
- Do little more than show lots of PowerPoint slides
- Ignore student feedback
- Acting in vengeful ways
- Coursework is different than the syllabus
- Give poor assignment work instructions
- Ambiguous assignment work instructions
- Actual grading does not reflect grading on syllabus
- Poor feedback on projects and presentations
- Professor acknowledges complexity of a topic or assignment but fails to explain it to students
- Many cancelled classes (and sometimes not telling students)
- Too much PowerPoint

- Too many videos
- Insufficient classroom activities
- Use of outdated teaching materials
- Testing that is not responsive to student’s individual strengths; e.g. multiple choice vs. essay (essay being the way some students would prefer to answer test questions)
- Standing in queue outside of professor’s office to get help
- Pop quizzes
- Professors who say: “You should drop the course, but I’ll still be teaching it next semester”
- Professors who say: “I’m not here to teach you. That’s your job. I’m here to test you”
- Speaking to students in condescending ways

Unforced errors are defined here as errors that can only be attributed to poor judgment or poor execution by a teacher.
Teaching Errors Disengage Students

Top 15 Teaching Errors

- Error #1: Cannot teach.
- Error #2: Fail to engage class in the discussion.
- Error #3: Do not use real-world examples.
- Error #4: Cannot explain the material.
- Error #5: Fail to add their knowledge or... (truncated)
- Error #6: Ambiguous assignment work instructions.
- Error #7: Poor feedback on projects and...
- Error #8: Explain topic only one way.
- Error #9: Base final grade on just 2 or 3 exams.
- Error #10: Read from the book.
- Error #11: Get frustrated when students ask...
- Error #12: Explain topic only one way.
- Error #13: Cannot explain the material.
- Error #14: Fail to add their knowledge or...
- Error #15: Require a big expensive book, then do...
3 or 4 really good profs out of 40

Equipment
- Does Not Use Equipment
  - Old Equipment
  - Cumbersome Equipment
  - Ineffective Equipment
  - Equipment Underused
  - Equipment Overused

People*
- Lack of Management Experience in Industry
  - Don't Know
  - Ignore Feedback
  - Don't Care
  - Seeking Tenure
  - Awarded Tenure

Environment
- Management Does Not Know
  - Students Fear Complaining
  - Complaints Ignored
  - Poor Leadership
  - Management Complacency
  - Focus on Results (enrollments and graduation rate) vs. Process (learning)

Methods
- No Teacher Training
- Poor Teacher Training
- Teaching Methods Not Shared
- Focus on Results vs. Process
- No Mentoring
- Ineffective Mentoring

Measures
- No metrics
- Poor Metrics
- No Follow-Up
- Metrics Not See by Leaders
- Metrics Ignored
- Batch Processing

Materials
- Too Many
- Too Much
- Unfocused / Confusing
- Not Relevant
- Out of Date
- Batch Processing

* No-blame
The 10 Percent Problem

• Were the Other Professors that Bad?

• Or Merely Forgettable as a Result of Average Teaching Abilities?

• Is Response Driven by Bias (personality, age, looks, race, weight, gender)?

• Or an Accurate Reflection of the Quality of Instruction?

• Or are There Only 3 or 4 Courses that Undergraduate Student are Really Interested In?
Q1 - What three mode(s) of learning assessment are most beneficial for you personally, to help you learn the most in a course?
Q2 - What three mode(s) of learning assessment do you hate the most?
Status-Quo In HE For Quality

Cycle Of Abuse In Higher Education

- Professor Makes Basic Teaching Mistakes
- Students Get Annoyed (passive-aggressive)
- Professor and Students Accept Mistakes
- Professor and Students Move On

This is What Makes Alternative Solution Attractive to Students and Administrators

Status-Quo In HE For Quality

Cycle Of Abuse In Higher Education

- Professor Makes Basic Teaching Mistakes
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- Professor and Students Accept Mistakes
- Professor and Students Move On

This is What Makes Alternative Solution Attractive to Students and Administrators
Status-Quo In HE For Quality

If You Can’t Compete on Research, You Better Compete on Teaching
Good Teaching Should Be…

- Free of Teaching Errors
- Engage Most Students
- Create Interest / Enthusiasm for Subject Matter
- Connect to Student’s World (vs. Prof’s World)
  - Combination Non-Perishable / Perishable Information
- Answer Important Questions
- Useful in Work and in Life
- Memorable (in a good way)
- Continuously Improved (ongoing experiment)
### What Is Good Quality Teaching?

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Teaching</th>
<th>Delivery</th>
<th>Assessment</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connects with each student (vs. names on a class roster).</td>
<td>Teaches in ways the every student can learn from (understand vs. memorization).</td>
<td>Does not read what's on the PowerPoint slides.</td>
<td>Uses different methods used to evaluate student learning.</td>
<td>Available to help answer questions, help with homework, etc.</td>
</tr>
<tr>
<td>Motivates students to want to learn.</td>
<td>Balances theory and practice (weighted towards practical).</td>
<td>Remains on-topic.</td>
<td>Gives lots of small assignments so one bad result does not result in low final grade.</td>
<td>Easy to reach.</td>
</tr>
<tr>
<td>Treats college students as adults.</td>
<td>Uses hands-on activities related to the subject matter (to make theory come alive).</td>
<td>More hands-on, less lecturing, followed by discussion of the learning.</td>
<td>Verifies that students understand the material before testing.</td>
<td>Responds promptly to students.</td>
</tr>
<tr>
<td>Passionate about the subject (competent).</td>
<td>Makes boring subject matter interesting or exciting.</td>
<td>Articulates complex / technical information clearly and understandably.</td>
<td>Less emphasis on number of assessments and grades; more emphasis on learning.</td>
<td>Gives timely feedback.</td>
</tr>
<tr>
<td>Makes students feel comfortable in asking and answering questions.</td>
<td>Provides real-world examples related to the material (vs. just lecture).</td>
<td>Speaks clearly, with appropriate tone and volume.</td>
<td>Gives right amount of work (vs. under work) and no exams.</td>
<td>Gives specific feedback.</td>
</tr>
<tr>
<td>Makes expectations clear for course at start: every assignment and assessment</td>
<td>Engages class by asking probing questions and facilitate in-class discussions.</td>
<td>Makes class more interactive.</td>
<td>Gives practical assignments that reinforce the learning.</td>
<td>Available for one-on-one discussion.</td>
</tr>
<tr>
<td>Holds student's attention.</td>
<td>Has clear learning goals.</td>
<td>Makes the learning relevant to me &amp; my future.</td>
<td>Gives reasonable (not mean) assignments.</td>
<td>Verifies that students actually learned.</td>
</tr>
<tr>
<td>Empathizes with students (e.g. workload, cost of books, schedule, etc.).</td>
<td>Makes new or complex material easy to understand. Simplifies the material.</td>
<td>Speaks with energy and enthusiasm.</td>
<td>Gives sensible tests (not high pressure exams).</td>
<td>Researches answers to student's questions (vs. make it up)</td>
</tr>
<tr>
<td>Recognizes that real-world examples have value to students and helps them learn.</td>
<td>Understands questions or issues that students have about the material. Uses picture and diagrams to illustrate concepts.</td>
<td></td>
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</tr>
<tr>
<td>Does not talk down to students.</td>
<td>Does not teach out of the book. Generates class discussions (vs. PowerPoint presentations).</td>
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<td></td>
</tr>
<tr>
<td>Easy to deal with, talk to, and a good listener.</td>
<td>Course follows logical progression (one step of learning builds on the next).</td>
<td>Gives real examples, tells stories, or from own experience relevant to subject (help retention).</td>
<td>Project focus requiring interdisciplinary work.</td>
<td></td>
</tr>
<tr>
<td>Encourages students and believes in them.</td>
<td>Shows &quot;what's in it for me&quot; (to motivate students want to apply what they learned).</td>
<td>Uses appropriate humor.</td>
<td>Challenges students to think beyond the obvious idea or solution.</td>
<td></td>
</tr>
<tr>
<td>Well organized, thorough.</td>
<td>Goes with the flow of students when it helps learning.</td>
<td>Moves at a fast pace to keep students interested and paying attention.</td>
<td>Creative in assignments given to students.</td>
<td></td>
</tr>
<tr>
<td>Makes students want to come to class.</td>
<td>Organized: information and materials easy to find and use.</td>
<td>Willing to discuss counter-arguments.</td>
<td>Returns assignments quickly.</td>
<td></td>
</tr>
<tr>
<td>Takes constructive criticism and uses it to improve.</td>
<td>Gives many (though-provoking) examples and analogies.</td>
<td>Sticks to the syllabus / schedule.</td>
<td>Quality feedback on work (not just a check with no comments).</td>
<td></td>
</tr>
<tr>
<td>Learns along with the students and continuously educates self.</td>
<td>Challenges students to think critically.</td>
<td>Effectively uses Socratic method.</td>
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</tr>
<tr>
<td>Understands students have other classes.</td>
<td>Challenges students to step outside comfort zone / go beyond what students think is possible.</td>
<td>Uses flip chart / white board to illustrate points (vs. all PowerPoint).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respects students and identifies with students.</td>
<td>Communicates well at different levels.</td>
<td>Conversational (vs. authoritative) style.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher is a practitioner on the subject.</td>
<td>Knows latest trends in subject.</td>
<td>Uses simple terms and concepts to explain complicated things.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serves as a role model.</td>
<td>Brings in material from multiple sources (material complimentary to book).</td>
<td>Challenges students, but with purpose.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient and fair.</td>
<td>Rigorous.</td>
<td>Requires adherence to instructions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes learning a pleasant experience.</td>
<td>Gives good answers to questions.</td>
<td>Is concise and to the point.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has high expectations of students.</td>
<td>Teaches things their way, rather than by the book.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Focused on learning, not grades.</td>
<td>Gives lots of practical examples.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>See teaching as a cooperative learning (vs. autocratic) process.</td>
<td>Course is current and refers to things happening at the present time.</td>
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</tr>
<tr>
<td>Makes education valuable from student’s point of view.</td>
<td>Focuses on things that students are most likely to use.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoys teaching.</td>
<td>Leaves a positive impression on students.</td>
<td></td>
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</tr>
</tbody>
</table>
Value of Degree Programs

UNDERGRADUATE STUDENT SURVEY RESULTS - AUGUST 2014 - PROF. BOB EMILIANI

QUESTION 1: What do you value in a degree program?

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Course - General</th>
<th>Course - Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to what career in real world will be like</td>
<td>Clear explanation of expectations for course</td>
<td>Assignments related to what is covered in class</td>
</tr>
<tr>
<td>Hands-on use of relevant software or machines</td>
<td>How information presented relates to the real world</td>
<td>Limited group work</td>
</tr>
<tr>
<td>Variety of courses</td>
<td>New insights or views of problems and solutions</td>
<td>Example of what assignments look like</td>
</tr>
<tr>
<td>Knowledge and experience it gives for the real world</td>
<td>How information presented relates to the real world</td>
<td>Challenging work</td>
</tr>
<tr>
<td>Broad overview of problems we may encounter in our field of study</td>
<td>Engaging / interesting topics</td>
<td>Provide students with relevant hands-on activities</td>
</tr>
<tr>
<td>All the necessary preparation courses [to work] in the field</td>
<td>Expanding knowledge or gain deeper understanding of the material</td>
<td>Provide different readings for alternate points of view</td>
</tr>
<tr>
<td>Real-world knowledge to prepare us for the real world</td>
<td>Mind stimulated (not boring Power) Slide after slide</td>
<td>Teacher / class interaction via different activities</td>
</tr>
<tr>
<td>Set student up to be more than an average employee</td>
<td>Information that can be used elsewhere (e.g., job)</td>
<td>Hands-on projects</td>
</tr>
<tr>
<td>Sounded education without fillers</td>
<td>Usefule and clear information that can be applied to degree or career</td>
<td>Assignments that make me step outside my comfort zone</td>
</tr>
<tr>
<td>Courses relevant to the field / degree</td>
<td>How well it is structured</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Grading system</td>
<td></td>
</tr>
<tr>
<td>Usability</td>
<td>Practical knowledge</td>
<td></td>
</tr>
<tr>
<td>Gained knowledge beyond any book could teach</td>
<td>Discussion of topics (vs. lecture)</td>
<td></td>
</tr>
<tr>
<td>Gained opportunity as a result of having it</td>
<td>Directly relates to material required to complete degree program</td>
<td></td>
</tr>
<tr>
<td>Prepare you for the workforce</td>
<td>Course used as a building block for other courses</td>
<td></td>
</tr>
<tr>
<td>Job placement</td>
<td>Information that matters and can be recalled months or years later</td>
<td></td>
</tr>
<tr>
<td>Applies to the real-world</td>
<td>Have a fun experience</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>Learning things that can be applied out of school</td>
<td>Willing to help</td>
</tr>
<tr>
<td>Skills and tools that I can use</td>
<td>Knowledge / information to solve problems and work more efficiently</td>
<td>Interested in students</td>
</tr>
<tr>
<td>Applicable to job</td>
<td>Teach to think in new ways, try new things, and learn new methods</td>
<td>Can explain the subject and do so in different ways</td>
</tr>
<tr>
<td>Limit gendex requirement to 12 credits that I can choose from</td>
<td>Effort that I put into it</td>
<td>Available to answer questions</td>
</tr>
<tr>
<td>Prepares people for entry into the field they have chosen</td>
<td>Learn to think logically</td>
<td>Real-world experience</td>
</tr>
<tr>
<td>Learning useful stuff (vs. earning a piece of paper)</td>
<td>Fair workload</td>
<td>Mutual respect</td>
</tr>
<tr>
<td>Credibility resulting from perseverance</td>
<td>Fair / reasonable grading</td>
<td>Professor's effort</td>
</tr>
<tr>
<td>A better quality of life</td>
<td>Schedule that allows students to plan accordingly</td>
<td>Explain the material (vs. reading from slides)</td>
</tr>
<tr>
<td>Life-long learning</td>
<td>Information and assignments provided in an organized manner</td>
<td>Face-to-face-time with professor</td>
</tr>
<tr>
<td>Helpful academic advisors</td>
<td>Communication between students and professor</td>
<td>Professors with knowledge of both real world and theory</td>
</tr>
<tr>
<td>Clear expectations</td>
<td>Focus on understanding the material rather than covering the material</td>
<td>Makes sure that students understand the material</td>
</tr>
<tr>
<td>Practical</td>
<td>No tests, mid-term, or finals</td>
<td>Take time to answer questions</td>
</tr>
<tr>
<td>Being able to say &quot;I did it&quot;</td>
<td>How to contact professor about course material</td>
<td>Responsive; does not ignore students</td>
</tr>
<tr>
<td>Key Findings:</td>
<td>© bobemiliani <a href="http://www.leanprofessor.com">www.leanprofessor.com</a></td>
<td></td>
</tr>
</tbody>
</table>

KEY FINDINGS:

Students value professors with real-world work experience.

Students like it when degree program and courses have a real-world (practical) focus; professors are responsive to student's needs; professors focus on student learning and comprehension

Students don't like: to be confused, needlessly struggle, have their time wasted, unresponsive professors; courses that lack real-world relevancy, degree programs that don't connect to the real world

PRACTICAL IMPLICATIONS

On average, faculty are less responsive to students than faculty think they are

- Hire faculty with practical, real-world work experience or demonstrated ability to connect subject matter to real-world

CTDF Workshop

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# Value of Degree Programs

**Key Findings:**

Students value professors with real-world work experience.

Students like it when degree program and courses have a real-world (practical) focus and job-related application; current information, professors are responsive to student's needs.

Students don't like to have their time wasted, unresponsive professors, courses that lack real-world relevancy, degree programs that don't connect to the real world.

**Practical Implications**

Hire faculty with practical, real-world work experience or demonstrated ability to connect subject matter to real-world.

Courses and degree programs be current, with relevance and practical application made clear.

---

### Table: Value of Degree Programs

<table>
<thead>
<tr>
<th>Degree Program</th>
<th>Course - Professor</th>
<th>Course - Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>The curriculum and content of courses</td>
<td>Learn things that I can apply to my job, workplace, or life</td>
<td>Grades and feedback given promptly (following week)</td>
</tr>
<tr>
<td>Real-world application</td>
<td>Clear and concise resources to refer to when not in class</td>
<td>No busy work</td>
</tr>
<tr>
<td>Competent teaching staff</td>
<td>Information presented in an interesting way</td>
<td>Evaluations that accurately assess learning</td>
</tr>
<tr>
<td>Content applicable to current business environment</td>
<td>Mentally challenging / use critical thinking skills</td>
<td>Hands-on work</td>
</tr>
<tr>
<td>Engaged professors with real-world experience</td>
<td>Interesting content related to current events</td>
<td>No tests</td>
</tr>
<tr>
<td>Courses are logically connected and have little or no overlap</td>
<td>Real-world examples</td>
<td>Frequent evaluations and feedback throughout the course</td>
</tr>
<tr>
<td>University reputation / ranking</td>
<td>Content relevant</td>
<td>Collaborating with peers on projects</td>
</tr>
<tr>
<td>Helpful academic advising</td>
<td>Networking with other students and faculty in major</td>
<td></td>
</tr>
<tr>
<td>Career development / enhancement / opportunities</td>
<td>Relate course material to real-life situations</td>
<td></td>
</tr>
<tr>
<td>Knowledgeable and experienced professors</td>
<td>Stay current</td>
<td></td>
</tr>
<tr>
<td>Provide foundation for a career in the field</td>
<td>Worthwhile classroom experience</td>
<td></td>
</tr>
<tr>
<td>Worthwhile classroom experience</td>
<td>Understand changes in subject matter over time</td>
<td></td>
</tr>
<tr>
<td>Allow for paced self-learning</td>
<td>Course that makes you think and inspire new ideas</td>
<td></td>
</tr>
<tr>
<td>Degree recognized and respected by employer / industry</td>
<td>Classroom discussion / interaction</td>
<td></td>
</tr>
<tr>
<td>Invest in yourself</td>
<td>How much I actually learn</td>
<td></td>
</tr>
<tr>
<td>Interesting and useful courses that keep me wanting to learn</td>
<td>PowerPoint slides that can be reviewed at a later time</td>
<td></td>
</tr>
<tr>
<td>Information on different subjects to be confident at work and in career</td>
<td>Not using obsolete textbooks</td>
<td></td>
</tr>
<tr>
<td>Duration of program</td>
<td>New terminology and processes</td>
<td></td>
</tr>
<tr>
<td>Ability to fit into my schedule (evening, hybrid, online courses)</td>
<td>In-class activities</td>
<td></td>
</tr>
<tr>
<td>Learn a variety of new things</td>
<td>Share thoughts and ideas in class</td>
<td></td>
</tr>
<tr>
<td>Connecting learning to the real world</td>
<td>Real-world experienced instructors sharing experiences</td>
<td></td>
</tr>
<tr>
<td>Reference to current and future goals</td>
<td>Understanding the subject</td>
<td></td>
</tr>
<tr>
<td>Deep understanding of the topic learned</td>
<td>External / supporting learning resources that I can assess on my own</td>
<td></td>
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<tr>
<td>Experiential learning</td>
<td>Strengthen my knowledge in a specific field</td>
<td></td>
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<tr>
<td>Program that is respected by industry and academia</td>
<td>Increase my curiosity</td>
<td></td>
</tr>
<tr>
<td>Ability to present what I learn to others</td>
<td>Build on previous courses</td>
<td></td>
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<tr>
<td>Find a better job</td>
<td>Balance of practical and academic experience</td>
<td></td>
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<tr>
<td>Expand professional network with well-educated people</td>
<td>Up-to-date and relevant information</td>
<td></td>
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<tr>
<td>Knowledge of professor who I can learn from</td>
<td>Available for extra help</td>
<td></td>
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<tr>
<td>All required courses relate to the degree</td>
<td>No filler - what is valuable. Stick to what is important.</td>
<td></td>
</tr>
<tr>
<td>Efficacious courses to expand my personal interests</td>
<td>Ability to think</td>
<td></td>
</tr>
<tr>
<td>Fresh subjects that change with the times</td>
<td>Respect me / my time / my opinions</td>
<td></td>
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<tr>
<td>Online classes (need flexibility for work-related travel)</td>
<td>Relaxed classroom experience</td>
<td></td>
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<tr>
<td><strong>Key Findings:</strong></td>
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</tbody>
</table>

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**CTDF Workshop**

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Lean Teaching Pedagogy

Application of Lean Principles and Practices to Teaching

Eliminate Teaching Errors Using Methods and Tools Derived From Lean Management
Why Lean Teaching?

• Mediocre Outcomes: Teaching, Courses, and Student Learning

• Rapidly Improve Value Relative to Current Price of HE
  ➢ Eliminate Teaching Errors, Waste in Academic Processes, etc.

• Only Non-Zero-Sum (win-win) Way to Improve

• Develop Human Resources in HE
  ➢ Congruent with HE Mission to Learn and Educate

• Improve Human Health Among Stakeholders
  ➢ Reduce Stress and Frustrations

Improvement and Learning, Not Cost Savings, is the Raison d’Etre of Continuous Improvement
Lean Teaching Pedagogy

Basic Application (2004)

Improving business school courses by applying lean principles and practices

M.L. Emiliani

Introduction
Many manufacturing and some service businesses today are using lean management principles and practices as a means to improve business processes, which in turn improves productivity and competitiveness, and delivers greater value to end-use customers (Bowen and Young, 1998; Goodall et al., 1998; Lean Enterprise Institute, 2003; Steward, 2003; Shingo, 2004; Womack, 2004). The lean management system was initially developed by Toyota Motor Corporation (Ottke, 1988; Womack et al., 1990; Mundel, 1993; Womack and Jones, 1996; Toyota, 2003; Emiliani, 2004a, b) beginning in the mid-1950s, with elements of the management system dating to the late 1800s (Toyota, 1995; Kanter, 1992). It borrowed key concepts and practices from Henry Ford and Charles Schwinn (Ford, 1980; Swanson and Williams, 1990; Ohman, 1990), as well as Frederick Taylor (Taylor, 1907). Importantly, the lean management system as it is known today did not start out that way. It has evolved piecemeal over time, driven by practitioners, in alignment with Toyota’s corporate purpose (Basso, 1995) and its key principles (Ohno, 1988; Toyota, 2003), and by applying the scientific method to the practice of management:

1. Observe a phenomenon;
2. Formulate a hypothesis to explain the phenomenon;
3. Conduct experiments to prove or disprove the hypothesis;
4. Reach a conclusion that validates or modifies the hypothesis.

Thorough application of lean principles and practices results in many benefits, including higher quality products and services, increased market share, increased revenue, lower costs, and higher customer satisfaction. Importantly, a key focus of lean management is to identify and remove waste, with the intent of improving responsiveness to customers and ensuring that associates’ lives are not only improved but also meaningful at work doing necessary things (Manzoor, 2002). Businesses that practice lean management will be formidable time-based competitors because information (e.g., parts, documents, verbal communication) flows with fewer errors or interruptions (Pitelka, 1999; Emiliani et al., 2000).

Lean management is distinctly different from conventional, or “batch-and-queue” (BBQ) business practices (Mundel, 1993; Womack and Jones, 1996; Emiliani et al., 2003). Batch-and-queue means that materials are processed in large batches, which result in long queue times between

15 Years of Evolution (2015)

LEAN TEACHING
A Guide to Becoming a Better Teacher

Bob Emiliani, Ph.D.

For College and University Professors

CTDF Workshop
Imaginary Customers

Most professors and many administrators have great difficulty accepting the idea of students as customers. Some put great effort into finding ways to describe students as anything but customers. They are partners, they are empowered learners, they are producers, and so on.

The resistance to accept students as customers is perhaps because most people do not like to serve others, even though it may be their job to do so. In truth, we would rather be served. Let’s face it; many highly educated professors view it as a professional come-down to “serve” 18 year old “know-nothing” students. Professors who would rather be served by students are likely to be poor teachers compared to those who see it as their duty to serve students.

Couple that with the many problems that exist in higher education with respect to teaching: cost, quality, value, graduation rate, etc. If faculty cannot accept students as customers, then it is unlikely that problems associated with teaching – the core mission of colleges and universities – will be recognized and corrected.

The inability to accept students as customer in higher education is an interesting problem that perhaps can be solved by looking to the field of mathematics. It is reminiscent of the long-ago fight among mathematicians who resisted the idea of imaginary numbers (e.g. 3i, whose square is -9). Complex numbers, the correct term for imaginary numbers, were not widely accepted by mathematicians until the late 1700s – nearly 1700 years after they were conceived.

Negative numbers were an abstraction up to the middle 1500s. It made intuitive sense to have 3 apples, but it did not make sense to have -3 apples. What does it mean to have -3 apples? You have have 3 apples or no apples, but not -3 apples. Once mathematicians began to accept the idea of imaginary numbers, it enabled them to solve important real-world problems that they could not otherwise solve, or solve important problems in simpler ways (i.e. polynomials).

So it is with students as “customers.” Thinking of students as imaginary customers, Ci, is useful for solving important real-world problems in higher education or making those problems easier to solve: cost, quality, value, graduation rate, etc. (see What is Good Quality Teaching?, Are You Satisfied With 10
Percent?, 45 Teaching Errors, and The Value of Higher Education).

Professors invariably think of “customer” in the context of consumption and commercial transactions, which they abhor because they comprehend the university as something other than a business. Consumption and commercial transactions are concrete contexts that our minds immediately default to. But, customer can also be used to denote attitudes and desires – abstract contexts that we are much less familiar with. Yet, this would help us comprehend what humans – students – want and focus our efforts on providing that.

Automatic reversion to the concrete context of “customer” is an excuse to preserve the status quo and ignore the need to recognize and correct problems. This leaves professors stuck in the past, wedded to ineffective pedagogies, mistake-filled teaching, students who forget what they learned the moment the last class is ends, and so on.

We can think of students as partners, empowered learners, and producers and keep teaching as we have always done, or we can think of students as imaginary customers, Ci, and get on with the work of solving important real-world problems in higher education and fulfill our role as professors who serve students.

Let’s hope it does not take another 700-plus years since the founding of University of Bologna in 1088 for Ci to be widely accepted by academics in higher education.

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This entry was posted in Continuous Improvement, Conventional v. Lean Thinking, Respect for People on January 13, 2015 [http://www.leanprofessor.com/2015/01/13/imaginary-customers/] .

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2 thoughts on “Imaginary Customers”

Jim Kyte
January 15, 2015 at 8:55 am