5 TRANSFORMATIVE TEACHING PRACTICES

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Grand Rapids, Michigan
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5 High Impact Teaching Practices

Origin of Idea of “High Impact Practices”

• 2000: National Survey of Student Engagement (NSSE)
• 2008: “High Impact (Transformative) Educational Practices” (NSSE)

1. First-Year Seminars
2. Learning Communities
3. Service Learning
4. Undergraduate Research
5. Capstone Courses and Projects
Basic Argument:

We cannot improve student learning without improving our own teaching!

BOOKS WITH REALLY GOOD IDEAS ON TEACHING AND LEARNING:
1991 – ACTIVE LEARNING
1991 – COOPERATIVE LEARNING
1992 – LEARNING STYLES
1993 – CLASSROOM ASSESSMENT TECHNIQUES
1995 – CRITICALLY REFLECTING ON YOUR OWN TEACHING
1995 – EVALUATING YOUR OWN TEACHING
1995 – EMOTIONAL INTELLIGENCE

1996 – TEACHING STUDENTS HOW TO ENGAGE IDEAS
1997 – TEACHING PORTFOLIO
1997 – DEEP LEARNING
1998 – EFFECTIVE GRADING RUBRICS
1998 – IN-DEPTH UNDERSTANDING OF ONESELF AS A PERSON/TEACHER
1998 – 1999 (cont.)

1998 – SERVICE LEARNING
1998 – STRUCTURED ASSIGNMENTS FOR SMALL GROUPS
1999 – PEER REVIEW OF TEACHING
1999 – LEARNING COMMUNITIES

2001 – 2003

2001 – PROBLEM-BASED LEARNING
2002 – HOW THE BRAIN WORKS
2002 – LEARNER-CENTERED TEACHING
2003 – A TAXONOMY OF SIGNIFICANT LEARNING
2003 – INTEGRATED COURSE DESIGN
2004 – THEORIES OF LEARNING AND MOTIVATION
2004 – TEAM-BASED LEARNING
2004 – LEARNING PORTFOLIOS
2004 – INQUIRY-GUIDED LEARNING
2004 – FORMATIVE FEEDBACK
2004 – WHAT THE BEST COLLEGE TEACHERS DO

2005 – TEACHING INCLUSIVELY
2005 – LEADING DISCUSSIONS
2005 – FINDING JOY IN TEACHING
2006 – CONSTRUCTING COLLEGE COURSES
2006 – SKILLFUL TEACHING
2007 – 2012

2007 – TEACHING LARGE CLASSES

2008 – TEACHING CREATIVITY

2009 – EXAMPLES OF “INTEGRATED COURSE DESIGN

2010 – STUDENT ENGAGEMENT TECHNIQUES

2010 – HOW LEARNING OCCURS: 7 PRINCIPLES

2012 – TEACHING FOR CRITICAL THINKING

2012 – USING TECHNOLOGY OUTSIDE OF CLASS

2013 – 2014

2013 – CREATING SELF-REGULATED LEARNERS

2014 – ENGAGING STUDENTS AS PARTNERS
High Impact Teaching Practices

Getting Better Over Time

Quality of Teaching

When You Began Teaching  NOW  Near Future

“5 TRANSFORMATIVE TEACHING PRACTICES”

1. Change Students’ View of Learning
2. Learning-Centered Course Design
3. Team-Based Learning
4. Engage Students in Service – With Reflection (Service learning)
5. Be a Leader with Your Students
5 High Impact Teaching Practices

“5 TRANSFORMATIVE TEACHING PRACTICES”

1. Change Students’ View of Learning

Saundra McGuire, Louisiana State Univ.

Stephen Carroll, Santa Clara Univ.
Using Metacognition to Become an Expert Learner

Saundra McGuire and her colleagues at Center for Academic Success:

Students’ Big Needs:

1. Change their views about “Intelligence”

2. Change the way they study, i.e., the way they try to learn
Students’ Big Needs:

1. Change their views about “Intelligence”

Counting Vowels in 30 seconds

How accurate are you?

Count all of the vowels in the words on the next slide.
<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dollar Bill</td>
<td>Cat Lives</td>
</tr>
<tr>
<td>Dice</td>
<td>Bowling Pins</td>
</tr>
<tr>
<td>Tricycle</td>
<td>Football Team</td>
</tr>
<tr>
<td>Four-leaf Clover</td>
<td>Dozen Eggs</td>
</tr>
<tr>
<td>Hand</td>
<td>Unlucky Friday</td>
</tr>
<tr>
<td>Six-Pack</td>
<td>Valentine’s Day</td>
</tr>
<tr>
<td>Seven-Up</td>
<td>Quarter Hour</td>
</tr>
<tr>
<td>Octopus</td>
<td></td>
</tr>
</tbody>
</table>

*How many items in the list do you remember?*

1. 2 or less
2. 3 – 5
3. 6 – 8
4. 9 – 12
5. 13 or more
<table>
<thead>
<tr>
<th>Dollar Bill</th>
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<td></td>
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</tbody>
</table>

What are the words arranged according to?

**NOW how many words or phrases do you remember?**

1. 2 or less  
2. 3 – 5  
3. 6 – 8  
4. 9 – 12  
5. 13 or more
What were two major differences between the 1\textsuperscript{st} and 2\textsuperscript{nd} attempts?

1. We knew what the task was
2. We knew how the information was organized
The Study Cycle

**Preview**

- **Preview before class** – Skim the chapter, note headings and boldface words, review summaries and chapter objectives, and come up with questions you’d like the lecture to answer for you.

**Attend**

- **Attend class** – GO TO CLASS! Answer and ask questions and take meaningful notes.

**Review**

- **Review after class** – As soon after class as possible, read notes, fill in gaps and note any questions.

**Study**

- **Study** – Repetition is the key. Ask questions such as ‘why’, ‘how’, and ‘what if’.
  - Intense Study Sessions* - 3-5 short study sessions per day
  - Weekend Review – Read notes and material from the week to make connections

**Assess**

- **Assess your Learning** – Periodically perform reality checks
  - Am I using study methods that are effective?
  - Do I understand the material enough to teach it to others?

*Intense Study Sessions

<table>
<thead>
<tr>
<th>Step</th>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Set a Goal</td>
<td>1-2 min</td>
</tr>
<tr>
<td>2.</td>
<td>Study with Focus</td>
<td>30-50 min</td>
</tr>
<tr>
<td>3.</td>
<td>Reward Yourself</td>
<td>10-15 min</td>
</tr>
<tr>
<td>4.</td>
<td>Review</td>
<td>5 min</td>
</tr>
</tbody>
</table>

**The Story of Three LSU Students**

- **Travis**, junior psychology student
  - 47, 52, **82, 86**
  - B in course

- **Joshua**, first year chemistry student
  - 68, 50, 50, **87, 87, 97, 90 (final)**
  - A in course

- **Dana**, first year physics student
  - 80, 54, **91, 97, 90 (final)**
  - A in course
Stephen Carroll
Santa Clara University

“PRIMING STUDENTS FOR SELF-DIRECTED LEARNING”

http://www.youtube.com/user/LDeeFink

“Priming for Self-Directed Learning:
DOES IT MAKE A DIFFERENCE?”
1. **Dean’s List** (Top 10% of each class)
   - Juniors: ~40% of his students make this list
   - Seniors: ~45%
2. **Elected to honor societies:** More than 3 times the rate of the general population.
3. **Campus Leadership Positions:** Significantly over-represented in peer tutoring, EMT group, editor of Santa Clara Review, etc.

   “The quality of the work my students do now is better in every way than the work my students did before I started using these methods.”

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5 High Impact Teaching Practices

“**5 TRANSFORMATIVE TEACHING PRACTICES**”

1. Change Students’ View of Learning
2. **Learning-Centered Course Design**
“Learning-Centered Course Design”

Taxonomy of Significant Learning
5 High Impact Teaching Practices

In a course with significant learning, students will:

1. **Understand and remember** the key concepts, terms, relationship.

2. Know how to **use** the content.

3. Be able to **relate** this subject to other subjects.

4. Understand the **personal and social** implications of knowing about this subject.

5. **Value** this subject and further learning about it.

6. Know how to **keep on learning** about this subject, after the course is over.

**INTEGRATED COURSE DESIGN:**

**Key Components**

![Diagram of Integrated Course Design: Learning Goals, Teaching & Learning Activities, Feedback & Assessment, Situational Factors]
Criteria of “GOOD” Course Design

In-Depth Situational Analysis

Learning Goals

Teaching and Learning Activities
Active Learning

Feedback & Assessment
Educative Assessment

Significant Learning

Integrate

SITUATIONAL FACTORS

In-Depth Situational Analysis

5 High Impact Teaching Practices

3-Column Table Design Form
5 High Impact Teaching Practices

"5 TRANSFORMATIVE TEACHING PRACTICES"

1. Change Students’ View of Learning
2. Learning-Centered Course Design
3. Team-Based Learning
QUESTION:
Many colleges instructors are using small groups in recent years. WHY?

ANSWER:
Social Constructivism

But: Not all ways of using small groups are equally good.
5 High Impact Teaching Practices

The Sequence of Learning Activities in Team-Based Learning

- Covering a 2-3 Week Block of Time
- Covering One Major Topic Within the Course

Three Phases of Team Learning:

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Application (Practice with Feedback)</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.A.P.:</td>
<td>Group Work (Simple)</td>
<td>Group Work (Complex)</td>
</tr>
<tr>
<td>1. Individual test</td>
<td>(Continue pattern as long as desired)</td>
<td>(Simple)</td>
</tr>
<tr>
<td>2. Team test</td>
<td></td>
<td>(Complex)</td>
</tr>
<tr>
<td>3. Appeals</td>
<td></td>
<td>(Individual or Group)</td>
</tr>
<tr>
<td>4. Corrective Instruction</td>
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In-Class:

- Group Work
- Group Work
- Appeals
- Corrective Instruction

Out-of-Class:

- Reading
- Homework
- Homework
- Review

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Approximate Level of Content Understanding at Each Phase:

- 40%
- 60%
- 70%
- 90%
- 90-100%

Question:
What do professors and students think about Team Based Learning?

Video from Duke University:
http://www.youtube.com/watch?v=WFdVfycAWg4
**5 High Impact Teaching Practices**

"5 TRANFORMATIVE TEACHING PRACTICES"

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4. Engage Students in Service— with Reflection

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**Engage Students in Service:**

“Service Learning”, “Civic Engagement”: What does that mean?

- Link courses to SERVICE to a community group or organization.
- Service
- Service + Reflection
Engage Students in Service:

Service + REFLECTIONS:

- Reflect on:
  - what they experienced
  - The possible impact of those experiences on “My understanding of...”

1. The SUBJECT of this course, this discipline
2. OTHER PEOPLE – their background, their situation, their feelings, their behavior, etc.
3. ME – my beliefs, values, actions, life goals, career choices – How these need to change?

Engage Students in Service:

Service + REFLECTIONS:

- These Reflections can occur in the form of:
  - One-minute papers
  - Learning journals
  - Learning portfolios
“Students Reflecting on Their Own Learning”

Learning Portfolios: KEY QUESTIONS

1. WHAT did you learn?
2. HOW did you learn?
   • What helped and didn’t help you learn?
   • What does this tell you about: YOURSELF AS A LEARNER? About the NATURE OF LEARNING?
3. SIGNIFICANCE FOR YOU, of what you learned?
4. Plan for FUTURE LEARNING:
   • WHAT ELSE do you want or plan to learn?
   • HOW will you learn that?
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“Be a Leader With Your Students”

Ken Bain

FUNDAMENTAL TASKS OF TEACHING

Knowledge of the Subject Matter

Interact with Students

Designing Learning Experiences

Managing the Course

Beginning of the Course
**FUNDAMENTAL TASKS OF TEACHING**

- Knowledge of the Subject Matter
- Designing Learning Experiences
- Interact with Students
- Managing the Course

**LEADERSHIP:**
“Motivating and enabling others to do something important well.”

**Question:**
What can teachers do, to LEAD students?

**General Answer:**
Create the right kind of relationship with students – caring, respectful, collaborative
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Creating the Right RELATIONSHIP with Students: (Based on Bain)

1. Interact in a way that shows YOU CARE!
2. Interact in a way that MOTIVATES students.
3. Dynamic COMMUNICATION SKILLS
4. TRUSTWORTHY – in Power/Trust issues

1. Interact in a way that shows YOU CARE!
   • about students, student learning, teaching-learning process,
   • about the subject of the course

   (how many of you would like students to care more about the subject you care so much about?)
Creating the Right RELATIONSHIP with Students:

2. Interact in a way that **MOTIVATES** students.
   - Give praise in a way that motivates
   - Listen well to the learners
   - Motivate by interacting differently with different students

3. Dynamic **COMMUNICATION SKILLS**
   - Sense of drama, rhythm
   - Good use of language
     - Use language of “promises” rather than “demands”
     - Express belief in students’ ability to learn
     - Celebrate achievements
     - Use warm language
Creating the Right RELATIONSHIP with Students:

4. TRUSTWORTHY — in Power/Trust issues
   • Don’t use classroom to demonstrate power
   • Build trust relationships
   • Give power to students to make decisions about their own learning
   • Interact fairly (same policies for all)

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5 Transformative Teaching Practices:

1. Help students build a more dynamic view of learning and of themselves as learners
   - Re-Orient Students’ Views at start of course
   - Also supported by use of Learning Portfolios

2. Focus all course activities on significant learning goals
   - Learning-Centered Course Design

3. Create intense small-group dialogue around significant problems
   - Team-Based Learning

4. Provide new experiences serving others – and reflecting on the meaning of this experience
   - Service Learning + Learning Portfolios

5. Build a trusting, respectful community of engaged learners
   - Develop Leadership Skills
5 High Impact Teaching Practices

BENEFITS TO...

• Society
• Grand Valley State University
• Our Students
• Ourselves

Getting Better Over Time

Quality of Teaching

When You Began Teaching  NOW  Near Future