teaching naked

José Antonio Bowen

A Practical Guide to Designing Better Classes

3Rs of Education: Relationships, Resilience and Reflection

Smart is the ability to change your mind
Thinking, Design and Integration are now more important
Technology is a tool, not a strategy
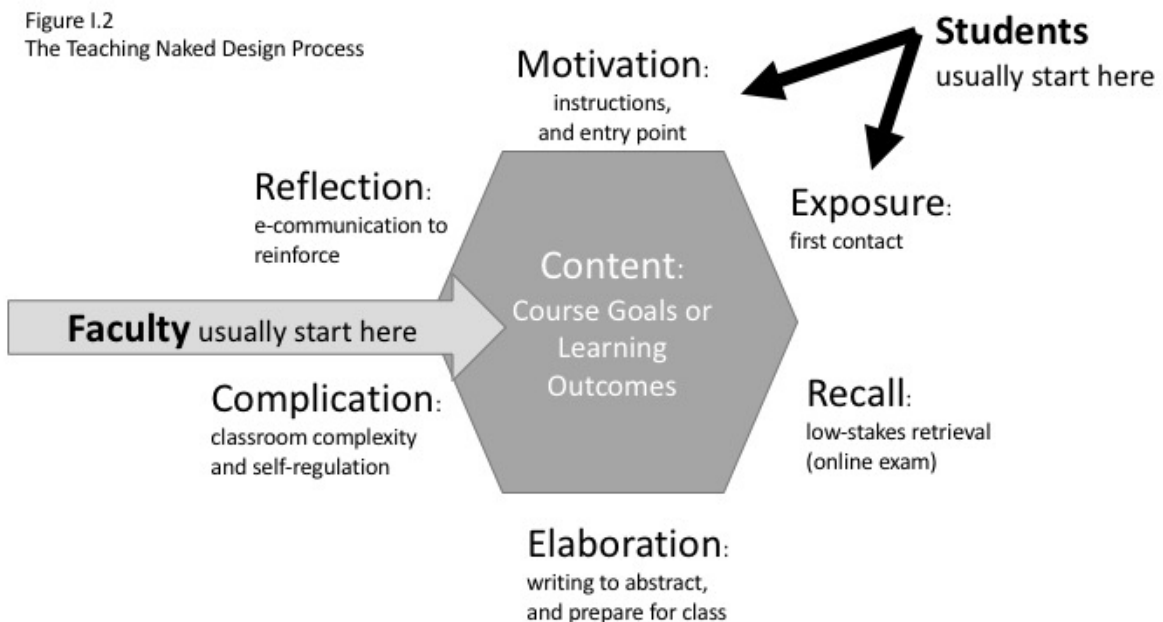Learning is about **change**

The Scholarship of Teaching and Learning

Make It Stick: *The Science of Successful Learning*. (Brown, Roediger & McDaniel)
Exposure, rereading, highlighting and massed practice = false fluency NOT learning)

- **Concrete and Personal** (matters to me, examples)
- **Knowledge is Necessary** (but not sufficient)
- **Retrieval and Self-Testing** (online exams, games)
- **Elaboration** (connections, analogies, writing)
- **Abstract** (extracting rules, larger context, mental models)
- **Failure** (add difficulty, attempts before solutions, feedback)
- **Interleaving** (varied practice, space out practice)

Teaching Naked Design Process

Figure I.2
The Teaching Naked Design Process

Students usually start here

Motivation: instructions, and entry point

Exposure: first contact

Reflection: e-communication to reinforce

Content: Course Goals or Learning Outcomes

Faculty usually start here

Recall: low-stakes retrieval (online exam)

Complication: classroom complexity and self-regulation
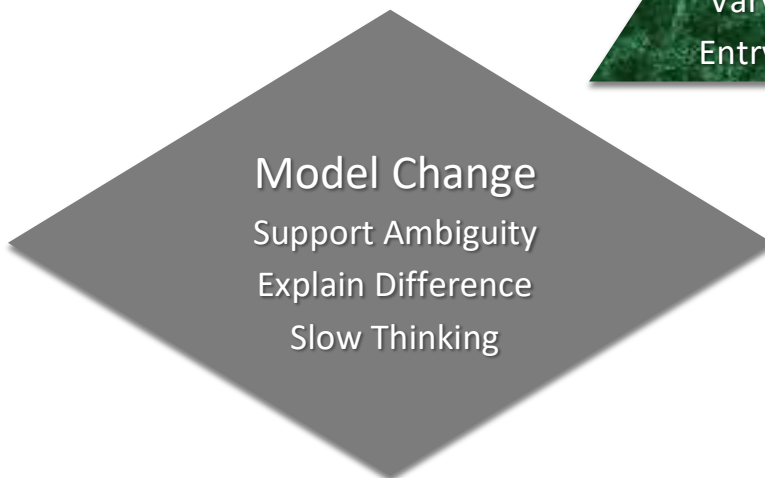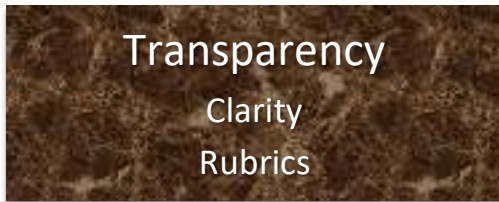
Elaboration: writing to abstract, and prepare for class

Targeted Universalism
john a powell (2008).
Post-Racialism or Targeted Universalism Denver University Law Review, 86, p. 785-806

Good Teaching is Inclusive Teaching

Transparency
Clarity
Rubrics

Scaffolding
Structure + Flexibility
Study Smarter
Vary Assessments

Belonging
Demonstrate Caring
Communication
Syllabus
Names & Pronouns

Engagement
Early Feedback
Real-world problems
Vary Teaching Strategies
Entry Points & Motivation

Model Change
Support Ambiguity
Explain Difference
Slow Thinking

<u>Learning Outcomes **(and why they matter)**</u>

- write a learning outcome and design a module

Remembering (know, define, repeat, describe, identify, recall, list, tell, locate match)

Understanding (comprehend, classify, convert, explain, summarize, predict, discuss, compare)

Applying (demonstrate, modify, arrange, solve, relate, apply, examine, classify, illustrate)

Analyzing (infer, estimate, order, separate, subdivide, distinguish, contrast, categorize)

Evaluating (critique, justify, discriminate, support, conclude, judge, verify, assess, argue)

Creating (synthesize, design, formulate, revise, construct, compose, invent, imagine, propose)

(Bloom, B.S.,Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Co Inc.1956,)Taxonomy revised by Lorin Anderson. Designed for higher education, it is now pervasive in almost all curriculum design—even dog trainers use this.)

<u>Syllabus</u>

Tone and Transparency Matter

See Template

eCommunication Policy

- The best way to contact me is: _____ (email, FB, Google+, LinkedIn)
- I will respond to e-mail (or FB chat, messages etc.) within _____ hours, except on ___ or between _____ (9pm and 9am etc.)
- I am online (FB/Skype/Twitter) _____ on ____days and also available for _____
- If you want an individual (physical/Skype/chat) appointment _____ me
- I accept/do not accept Skype/Facebook/LinkedIn friend requests (until graduation).

Backchannels in F2F Classrooms

Need	Sample Uses	Tools
Chat or Q&A	Share resources Ask question Respond to prompts Clarify Comment	GoSoapBox.com Twitter or Google Slides Mentimeter (Q&A type slide) Tricider Teams/Zoom Chat BackChannelChat.com
Word clouds & Open-ended responses	Lists of ideas Unclear concepts Rephrase an idea Examples or Applications	Mentimeter (word cloud, open-ended) AnswerGarden Padlet (visual board)
Voting, Polling & Quizzes	Discover baseline Answer questions Check understanding	Mentimeter Poll Everywhere Socrative Google Forms Tricider GoSoapBox ("confusion barometer")
Visual, Brainstorming or Jamming	Collect & connect ideas Share images Play with concepts	Padlet.com Mural.co Jamboard.google.com

Rubrics
See Template

Online Content and First Exposure
- identify discipline-specific online content or organize a podcast

1. Finding Tools and Content in Your Discipline
- Lectures & Demos: utubersity, iTunesU, Khan, YouTube, OpenYale, MITOpen
- Other Content: Merlot.org, Google, Wikipedia, universities, governments
- Courses: Udacity, UoPeople, Coursera, EdX, OpenYale, MITOpen

2. Podcasts
- Videos of lectures are a type of podcast
- Real podcasts are better: *teach to the many, not to the middle*.
    - use chapters: organize and give students more control
    - time is no longer an issue
    - use multiple, redundant and alternative examples
    - add something for advanced students (the others can skip
    - recycle
- Start Small

3. Games
- New Games
- Free Games: Merlot, SeriousGames, EducationArcade, iTunes (apps) GameScene, TheProblemSite, FreeOnlineGames, GameNode, MiniClip

Instructions and Entry Point
- find an appropriate entry point and write conditional instructions

1. Motivating Reading
- Consider the length of reading assignments in relation to your learning outcomes.
- Tell students *why* they are reading in advance.
- Analyze the opening *before* you assign the reading.
- Tell students in advance why the ending is important.
- Email students between classes about specific passages.
- Encourage students along the way using twitter or email.
- Require students to reflect on the entire reading in writing before class
- Give a reading quiz before every class
- Structure class activities or assessment to reward those who did all of the reading.
- Avoid punitive measures.
- Coordinate courses across the curriculum.

2. Using Summary Sites
  • Know and understand the competition: sparknotes, Wikipedia, CliffsNotes,
        PinkMonkey, gradesaver, enotes, bibliomania.
   • Convince students to read just a few chapters first.
   • Ask students to read the summary first and discuss how it changes the experience.
   • Ask students to compare summary sites.
   • Make your assignment more about style or character than plot.
   • Ask an unusual question (that won't be answered by the summary)

3. Entry Point
        • Start with what matters to students,
            then connect with what matters to you
        • Motivation and Contemplation
            "Find something interesting to you…"
            "Look for different perspectives…"
             "Stop, linger, and imagine…"

4. Conditional Instructions -- Teach with uncertainty
   • This could be the best solution, vs. This is the best solution
   • How could you design a bra that only opens if you are in love? vs. Could you?
   • What would be required for a nasal contraceptive to work? vs. Is it possible?
   • Usually you want the patient lying down, vs. First, get the patient to lie down.
   • The current theory is… vs. This is…

Online Exams to Improve Student Preparation for Class
        • formulate sample test questions using Bloom levels
        • Create more class time
        • Use your LMS
        • Improve your preparation
        • JiTT

Question Format:
Question 1 (Analysis Level)
    The following are all true statements.
    Which are most likely to be used by Dems/Repubs to support government policy?
    Check all that apply. Partial credit is avail
    • Government spending creates jobs.
    • Tax cuts stimulate job creation.
    • Uncertainty is bad for business
    • A large debt can hurt the economy.
    • Government spending cuts can hurt the economy.

Which are fact, opinion or judgement?
Which are most relevant in arguing for Y?
Which are most relevant in arguing against Y?

Better Multiple Choice Exams with Bloom Levels

KNOWLEDGE (recall and recognition)
- Which of the following are important theories of X?
- Identify which of the following are symptoms of X?

COMPREHENSION (understanding examples, meaning, and extrapolating)
- Which of the following is an example of X?
- Which of these are summaries of X?

APPLICATIONS (organize or solve with new situations or terms)
- Which of the following Y might be most useful to X?
- What would be the best way to improve X?

ANALYSIS (breaking apart, compare and contrast, generalizing)
- Which of the following statements from article X are fact/opinion?
- Which of the following facts (all true) are most relevant for the argument X?

SYNTHESIS (combining elements into a new patterns)
- Which of the following statements about X (all true) would be best evidence in SUPPORTING the argument Y?
- Which of the following are restatements of the thesis in article X from a person who disagrees?
- Which of the following develop the thesis of X further?

EVALUATION (presenting and defending judgments)
- Which of the following statements about X (all true) would be best evidence in REFUTING the argument Y? (Same set of answers to chose from.)
- Which of the following represents the strongest argument for why…?
- Which critique of X is most compelling?

Assignments

- create an assignment as class preparation

Motivation: **why** are we doing this? (goal & how it connects to learning outcomes)
Clarity: around **expectations** (how long & how should this time be divided?)
Checklists: what are the **parts**? (do I think, research, write, draft, edit?)
Rubrics: share **in advance** (what matters and is most valuable)
Spacing and Interleaving: (can I do this all in one sitting?)
Relevance: (can I enhance motivation by choosing better examples?)

1. Types of Assignments

Practice - problem sets
Writing - more focused prompts
Prepare for something -
Make a list -
Find something -
Analyze something -
Case Study -

2. Writing to Process and Prepare for Discussion.

- Index cards: Position Papers, Favorite Quote, Biggest Hole, Most Powerful
- Bring essays to class and have students respond in writing to each other.

3. Better Prompts

- What does the text say?
- How do you/others interpret this text?
- What problem might there be with this method/theory?
- What is the main argument the text is making?
- What is the most important evidence for this argument?
- What is the main bias or assumption of the author?
- How do you understand this text?
- How does this text do a good or poor job of conveying its message?
- Why is this passage important?
- Why is this passage disturbing?

4. Peer-Review Writing

- Tell students it will be read by other *students*.
- Share essays online before class on a discussion board.
- Peer-Review Rubrics
- Calibrated Peer Review (CPR)
- Inkshedding

Active Classrooms
* develop class activities as extensions and applications

EXAMPLE: Bring to class a pitch for a meeting in New York. Then in class, surprise:

1. Alter conditions
    * the meeting has been moved to Tokyo
    * the client has changed the request
2. Change data
    * the product failed a recent test
    * the demographic data you used was flawed
3. Extend conditions
    * the marketing person is sick: you're on
4. Complicate
    * your competition has just released a better technology/product
5. Use in activity
    * 10-20 minutes to do new research and make the changes.
    * make presentations, submit revised plans or write about the change process.
6. Use in discussion
7. Reframe the problem
    * how might you have prepared differently?

Other forms of interaction (no-tech)
* Active Learning to Motivate Change
* Role Playing: Reacting to the Past: http://reacting.barnard.edu/
* Collaborative Learning
* Writing and Editing
* Reading
* Problem Solving
* Reflection
* Studios or Labs

Primary Sources Assignments
* Controversy
* Error Regression
* How Does it Work?
* Needle in the Haystack
* The Creative Process

Better Discussions

Thinking with others
Group polarization

Clarify good student discussion behaviors
  --comments that introduce substantive points
  --comments that deepen the discussion
Structure (be flexible)
Grading (be creative)
Practice (student and faculty)
        --Discourse on Pizza (online)

- **Anonymous Polls First (like a jury)**
- **Prepare Opening Statements (or write first)**
- **Neutral and Two-Sided Questions**
    - When private beliefs are at stake, you dig in
    - "How many different explanations can you…"
    - "Can you think of both an example and a counter-example?"
- **Build Common Purpose/Problems/Goals**
    - Groups build trust over time
    - Encourage compliments
    - Explain Relevance
- **Articulate Academic Process**
    - Use a Rubric
    - Engage in Meta-Analysis of the Discussion
    - Create Ambiguity
    - Assign Roles (Evidence Watchdog)
    - Structured networks - Shield identities
- **Diverse Groups & Encourage Outliers**
- **Clear Learning Outcomes**
    --find the right entry point
    --enhance intellectual curiosity
    --confront contradictions
    --challenge beliefs
    --deepen investment in the material
    --reflect on the significance of material
    --connect information across disciplines
    --demonstrate the human dimension
- **Preparation (student and faculty)**
    --provide in advance:
            model of good behaviors
            learning outcomes
            reading guide and questions
    --ensure student preparation
    --prepare a short list of different types of questions

Study Scaffolding https://teachingnaked.com/study-smarter/

- customize study habits and time on task framework
- see templates

Study Smarter: Part 1

    Reflect: How much time did you need to get the grade you want?

    Choose Strategies: Which resources and activities will be most useful

    Plan & Implementation: What will you do when and where?

Study Smarter: Part 2

    Reflect: What did you actually do?

    Adjust: What worked the best?

    Revise Your Plan: What will you do differently?

Cognitive Wrappers

- customize a cognitive wrapper (see template)

    Reflect

    Compare

    Adjust

More Inclusive Teaching

Acknowledgement and Self-Awareness

  Your accent and "common sense"

  Demonstrate your own failings

  Set expectations for diverse viewpoints (class + syllabus)

Demonstrate Caring and Support

  Acknowledge differences

  Learn names and pronouns (pre-class survey)

  Articulate difficulty

Transparency

  Structure, clarity, scaffolding, checklists

  Rubrics make visible your own assumptions, biases and expectations

Content

  Diversify your content and perspectives

Diversify Examples and Analogies

  Vary names, problems and analogies

Different Questions

  What assumptions led to this discovery?

  Who benefited?

  Who is missing and why?

Highlight scholarly achievements of minorities
   Who else can you highlight?

Ask for early and specific feedback

Inclusive Teaching & Difficult Issues

1. Develop Trust
   Listen First: Listen before you speak and question your own assumptions.
   Talk Straight: Be honest and tell the truth. Use simple language.
   Demonstrate Respect: Show you care for others genuinely.
   Create Transparency: Be honest, open and authentic.
   Right Wrongs: Apologize quickly and make restitution.
   Give Credit: Be loyal to the absent.
   Hold Yourself Accountable First: Take responsibility.
   Extend Trust: Don't withhold trust because there is risk involved
   (Adapted from The Thirteen Behaviors of a High Trust Leader in Stephen Covey from The Speed of Trust)

2. Start with How
   Leonid Rozenblit & Frank Keil (2002). The Illusion of Explanatory Depth

3. Articulate the Underlying Tension
   Distinguish between **problems** (to solve) & **tensions** (to manage)
           Innovation & Efficiency
           Safety & Cost
           Control & Freedom
           Change & Stability
           Individual & Collective
           Liberty & Justice
           Freedom & Equality
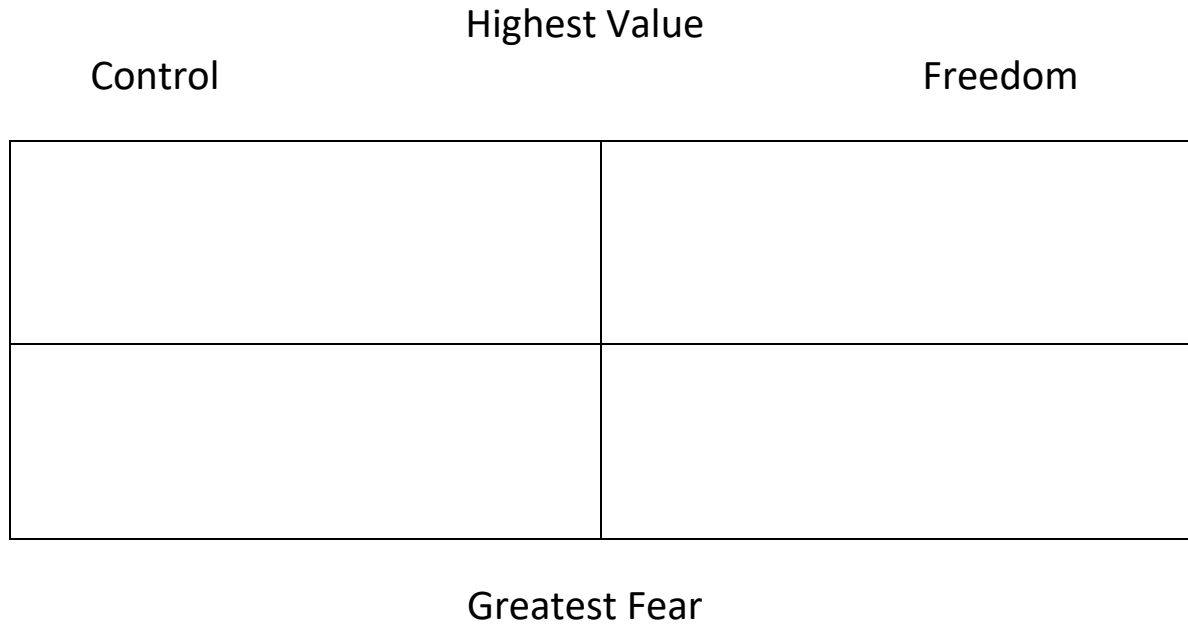   Problems to solve have endpoints and choices.
   Tensions are not choices.
        Multiple solutions, No right/wrong; No endpoint: Yes/Yes.
        Choosing sets up the pendulum.

Polarity Map

<div align="center">

Highest Value

</div>

Control	Freedom

<div align="center">

Greatest Fear

</div>

## 4. Build Bridges and Find Shared Values

Start by acknowledging your opponent's greatest fears (the downside of your preference).

Invite others to hold complexity and tolerance for ambiguity.

Integrated Course Design

- Edit and reduce content: what do you want students to remember in five years?
- Integration is more important than volume of content.
- Course design integrates goals, activities and assessment.

FIGURE 3.1. KEY COMPONENTS OF INTEGRATED COURSE DESIGN.
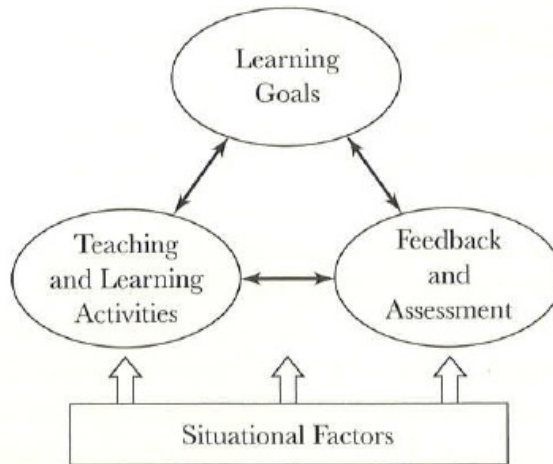
- Sequence should support learning goals.
- Technology expands the possibilities for what happens where.
- Class time is expensive and precious: put the most difficult learning there
- When and where is the best first contact and can you facilitate the entry point?
- When are opportunities to deepen learning or provide feedback?

Design a Learning Module

Before Class		In-Between		In-Between	
	In Class		In Class		In Class