A Method – Team Based Learning –
To Teach Non-Economists
Economics-based Policy Analysis

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Overview

- Where I wanted to go

- What the problem was

- TBL as a technique to get there

- Summary

In the movie Untouchables, what is Al Capone doing, in economic terms, when he takes a baseball bat to a fellow mobster's head during a dinner meeting?

The Learning Problem

- Students must:
  - "own" or master certain concepts

  - become adept at applying these skills/concepts to new problems/situations

  - learn to make decisions, rather than spit back memorized answers.

Specifically, Students Must:

- Understand
  - Market equilibrium
  - Monopoly rents (and inelastic demand curves)
  - The incentive to cheat in cartels
  - Schelling's argument that the point of mobs is to create and/or extract monopoly rents
- Recognize, after watching movie, that this group is a cartel
- Decide that Capone is using violence to prevent cheating in the cartel

The Practical Problem

- Students don't read the book

- Students often memorize without understanding

- Students are uncomfortable making informed decisions

- Faculty pushing students to accomplish these tasks confront "pushback"

Other Related Problems

- Students don't know how to work together

- No one is having any fun

Possible Solutions

- Give up:
  - Not my job to motivate students

- Coerce the students to "do what good students do"
  - Mandatory attendance
  - Online quizzes on reading
  - Guided study sessions

Problems with These Responses

- Depressing

- Labor intensive

- Not really getting at application/decision-making

- Still not fun

Team-Based Learning

- Larry Michaelsen, Professor of Organizational Psychology

- Developed method to teach large classes (N=130) in a business school
  - Students needed to learn application/decision-making skills.

- Proven to work/broadly applicable

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TBL Principles

1. Permanent teams (5-7) with diverse skills
2. Students must be accountable for pre-class preparation, contributions to team assignments
3. Assignments must require teams to make complex decisions that can be reported simply
4. Students must get frequent and timely feedback

6 Step Process

1. Substantial reading assignment

2. Readiness Assurance Process

3. Clarification of lingering confusion (lecture)

4. Team applications using material to delve more deeply into complex ideas in class

5. Assessment of learning (team and individual exams)

6. Debrief/summary

Readiness Assurance Process

- Individual takes 10 question closed book RAT on the reading that both assesses understanding and simple application

- Same 10 question closed book RAT taken by the team with a scratch-off sheet

- Appeals process with access to readings

- Clarifying lecture on questions missed by teams

IMMEDIATE FEEDBACK ASSESSMENT TECHNIQUE (IF AT®)

Name _____   Test # _____

Subject _____   Total _____

SCRATCH OFF COVERING TO EXPOSE ANSWER

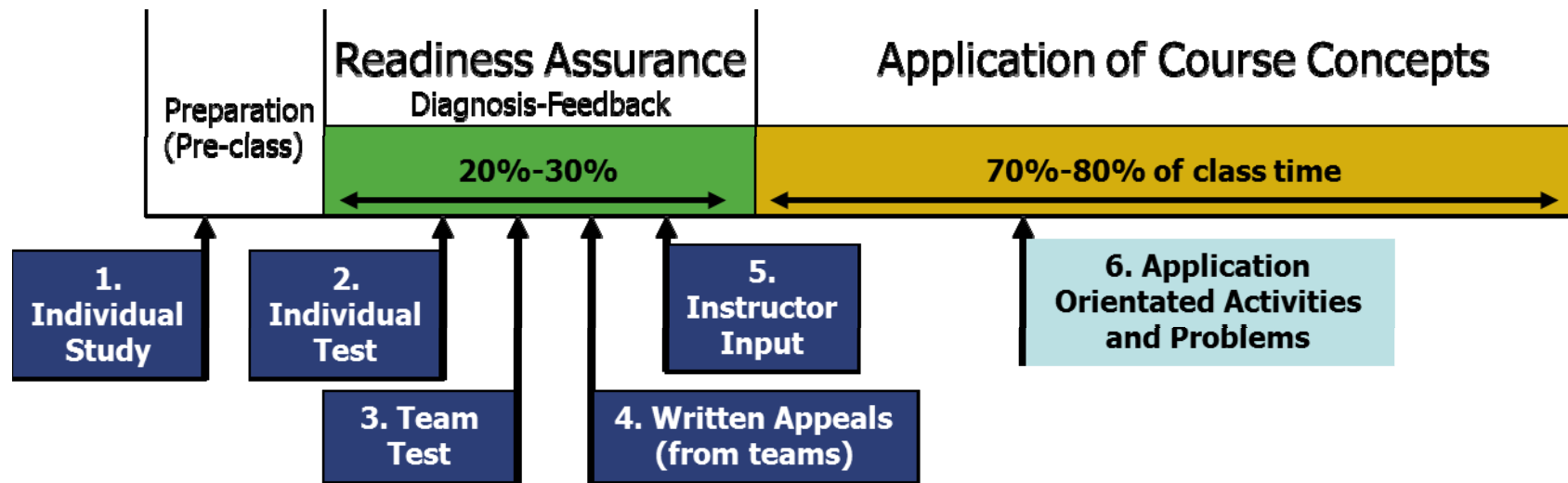|	A	B	C	D	E	Score	
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Why This Works

- Individual RAT ensures students do not free-ride

- Team RAT inspires real discussion about the material

- Team RAT requires team to practice decision making

Reminder about structure

Preparation (Pre-class) | Readiness Assurance — Diagnosis-Feedback — 20%-30% | Application of Course Concepts — 70%-80% of class time

1. Individual Study
2. Individual Test
3. Team Test
4. Written Appeals (from teams)
5. Instructor Input
6. Application Orientated Activities and Problems

- From TBL presentation by Jim Sibley at *cis.apsc.ubc.ca/wiki/images/d/d5/**TBL**Assignments.ppt*

Team Applications:3 S's

- Teams all work on the SAME problem, case or question

- Teams must use course concepts to make a SPECIFIC choice

- Teams report their choices SIMULTANEOUSLY

My Experience-Before

- Standard lecture class

- Terrible teaching evaluations (2/5)

- No student buy in

- Frustration, all around

TBL

- Students adapted surprisingly quickly

- TBL strangely comfortable

- Preparation radically improved

  - Median student reports reading more than 5 hours outside of class

  - Students read differently – and they know it

- Teams actively involved

- Performance much improved on exams

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Other Outcomes

- Improved teaching evaluations (5/5, both class and instructor)

- Peer observation report involved students actively engaged for full three hour class

- FUN!!

- Four other faculty members in School now adopting

Caveats

- Some students don't adapt well
  - "You are not teaching"
  - Committed dualists

- Hard to make good assignments/RATS

- Lose performance aspect of class (less about you)

Scalability

- Individual RATS are scannable.

- Managing teams, not people
  - 200 person class ~30 teams

- UAlbany has had success with TBL in large classes, even in old lecture halls.
 - Improved retention, attendance and performance

Summary

- TBL is a technique designed to help students accomplish following objectives

  – Master subject matter

  – Develop ability to use course concepts to solve problems

  – Become better "learners"

  – Develop interpersonal/team interaction skills

  – Have fun

Resources for Learning More

- http://www.learning.apsc.ubc.ca/tbl

- http://www.teambasedlearning.org
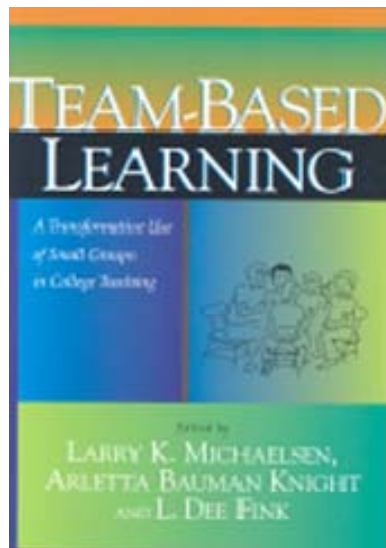
Team-Based Learning: A Transformative Use of Small Groups in College Teaching by Larry Michaelsen, Arletta Bauman Knight and L.Dee Fink

Other Similar Goals

– Which statistical test should I use to test the change in people's weight after a 4 week exercise program (N=100) (Undergraduate statistics)

– Take a random sample of articles on homicide from the NY Times in order to compare the proportion of homicides in NYC that have female victims to the proportion of articles in NY Times about NYC homicide victims that have female victims. (Graduate research methods)