Teaching with Team-Based Learning: “You have to be prepared for class or it’s just awkward”
Carol Hostetter, PhD

The Problem
- Professor diligently created PowerPoints
- Students seemed unengaged
- Time spent on PowerPoints left little time for application
- Two tests and final research paper created little room for feedback loop
- Students seemed unprepared for professional work
- End of semester evaluations: “I never read the textbook”

Intervention: Team-Based Learning
Team-Based Learning (TBL) supports:
- Students do readings before class
- Cover main points through tests
- Discuss items they miss on tests
- Content gets covered
- Active learning through application
- Team members accountable to self and team

Team-Based Learning
Strengths
- Students have different learning styles
- Students learn best when they are engaged and reflective
- Works in large classes as well as in small
- Learning about teamwork is important lesson (Bonwell & Eison, 1991)

Challenges
- Students are initially skeptical
- Stronger students fear doing all the work
- A lot of instructor time is taken up in designing frequent exams
- Keeping track of so many exams and assignments is daunting
- Empowered students are ... empowered!

Course Design
Course objectives:
- Learn research method, design, and skills
- Interpret literature
- Critique reliability, validity, etc.
- Understand political dimensions of research

Course process:
- Eight units in semester
- Each unit starts with testing process
- Test individuals first, then teams
- Discuss test
- Apply concepts in activities (majority of time here)

Individual work
- Eight tests
- Ethical dilemma brief assignment
- Empirical article brief assignment
- Short literature review paper

Team work
- Eight tests
- Nine brief assignments to help with research project
- Complete research project
- Research paper
- Poster presentation

The Details
- Assign teams to ensure diversity of academic strengths
- Rapid feedback
- Scaffold short assignments, build from those
- Midterm and final evaluation of team-mates
- Project helps direct and motivate team

Data Collection
Anonymous responses to:
- What life skills and professional skills did a team-based learning approach to learning in research and policy classes provide you?

Results
- Students seemed more engaged
- Classroom felt more lively
- Struggling students gained support
- Quiet students learned to express their knowledge
- Prepared students learned through teaching their peers
- Students appeared to apply concepts well
- Students learned to value diverse opinions
- Students learned to build communities of practice
- Student evaluations highly positive about TBL
- No one said they didn’t do the readings

Examples of comments:
- “Team-based learning helped prepare me for working with others in a professional setting and taking responsibility for my individual work.”
- “Learning to trust others to do quality work and not see the need to control every aspect of group work.”
- “Provided important insight on what working in a team in the professional sector would be like.”
- “TBL taught me how to trust in my teammates and rely on each other to get tasks done.”
- “You have to be prepared or it’s just awkward.”

Research on TBL
- Michaelsen finds teams outperform individuals vast majority of the time
- Michaelsen finds students are more accountable and learn valuable team-work skills
- Teams learn co-regulation skills (Michaelsen)
- Koles et al. find that medical students in TBL significantly outperform others on exams
- Koles et al. find that lower-performing students benefit more from TBL

Conclusion
- Results not generalizable – case study
- Results consistent, however, with TBL literature
- More study needed on “why does this intervention work” (Kathleen McKinney, 2011)

Word cloud from class feedback Wordl.net
