

Online Team-Based Learning: Building Social Presence for Success

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Introduction

- Team: Anton, Heather, Sam
- Action Research as we go
- Three Underlying Concepts
 - 1. Team-Based Learning
 - 2. Social Presence
 - 3. Resistance



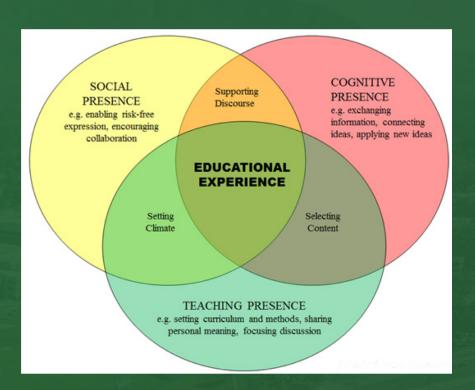
1. Team-Based Learning

- TBL: A form of collaborative learning
 - Diverse Teams, work together all semester
 - Readiness Assurance Process: (RAP)
 - Individual readiness quiz
 - Team Quiz
 - Also includes regular & ongoing team activities
 - Emphasizes individual AND Team accountability (peer evaluations)
- Problems with Online implementation:
 - RAP process asynch vs. synch
 - Asynch vs. synch team activities
 - Student resistance to TBL higher online than F2F (resistance is inevitable)



2. Social Presence

- "The ability of participants to identify with the <u>community</u>, communicate purposefully in a trusting environment, and develop interpersonal relationships" -- Garrison, 2009 (emphasis added)
- Studies have documented that social presence is a critical aspect for successful online learning
- In active learning environments, students use discourse to collectively create meaning (Cole et al., 2012)
 - Implies that social presence is central to content mastery





3. Student Resistance

- Students may resist active learning pedagogies
- Especially collaborative learning mostly due to negative prior experiences
 - Social loafing
 - Lack of rationale, relevance, or poor implementation
 - Leads to: "busy work", resentment/frustration
- Online, it is more intense
 - Students choose online due to difficult schedules
 - Students choose online to <u>avoid</u> collaborative work, to work on their own
- Resistance is systemic and needs to be addressed from the beginning (IMSR)
 - Increase relevance, effective team creation, meaningful interactions/social presence
 - Promote metacognition & self-responsibility



RAP Process & TTM Learning Survey

- Readiness Assurance Process (RAP) Example:
 - Take the short quiz being handed out and then put them in a pile for pickup
 - Then take the quiz again as a team discuss the answers and pick the best one
 - Raise your hand when your team is done
- Review and discuss results:
 - Which approach enhanced your learning most?
 - What is the role of social presence in this learning process?
- TTM Learning Survey:
 - Review the student survey
 - How could an instrument like this promote metacognition and help in creating teams?



Courses Studied Action Research Study

ZOOL1090 Anatomy & Physiology

- Meets general education requirement
- Lower division, required in many disciplines
- 71% Female, 29% male
- 46% First generation
- 49% Upper class
- Average Year in School: 2.5
- Avg GPA: 2.8
- 27% Drop/Withdraw

PSY3400 Abnormal Psychology

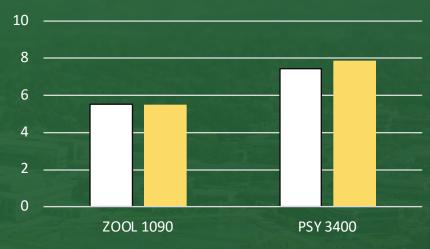
- Upper division, required in many disciplines
- 70% female, 30% male
- 36% First generation
- 91% Upper class
- Average Year in School: 3.6
- Avg GPA: 3.3
- 21% Drop/Withdraw



STEP 1: Baseline

- RAP process for BOTH courses:
 - Individual online content quiz
 - Quiz ends Wednesday
 - Team asynch discussion board opens to debate answers
 - Students take the individual quiz <u>again</u> by Sunday night
 - Then answers are revealed and scores for both quizzes
- Instructor provides feedback
- Students surveyed on satisfaction with the process, rated teams
- Qualitative comments gathered

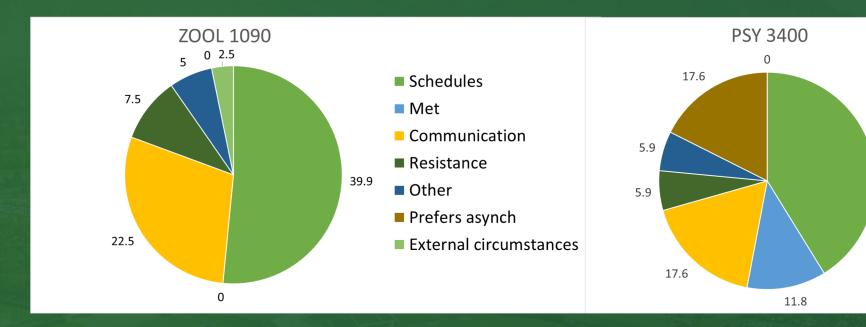
Figure 1. Student Average Perceptions – Team Quizzes



- Team Members Contribute to Learning (scale: 1-5, x2)
- Satisfaction with Team Quizzes (scale: 1-10)



Group Meeting Synchrously-Baseline



"I was unable to communicate with my group effectively and the plan to meet up was during a time that did not work for me. " -PSY 3400 Student

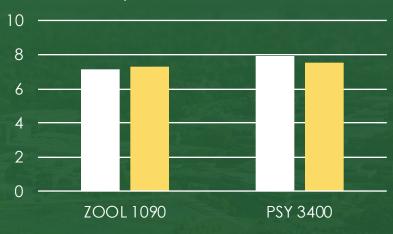


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Step 2: Encourage Live Meetings

- RAP Process unchanged for PSY3400
- <u>Intervention for ZOOL1090</u>:
- Instructor emailed students
 - Students who met synchronously had better performance and satisfaction
- Otherwise, RAP was the same
- Results: Sign More ZOOL 1090 teams met synchronously; significant improvement in satisfaction
- No sign difference between satisfaction scores for the classes





- Team Members Contribute to Learning (scale: 1-5, x2)
- Satisfaction with Team Quizzes (scale: 1-10)

Demonstration

Online Team Quiz from Step 2 onward



HOW PLAUSIBLE WOULD THIS RAP APPROACH BE IN YOUR ONLINE COURSES?

WHAT ARE THE STRENGTHS (IF ANY) OF THIS APPROACH?

WHAT ARE THE WEAKNESSES (IF ANY) OF THIS APPROACH?

Think-Pair-Share

2 min – write down your thoughts on the questions

4 min - discuss with a partner your answers

4 min - share and discuss with the group

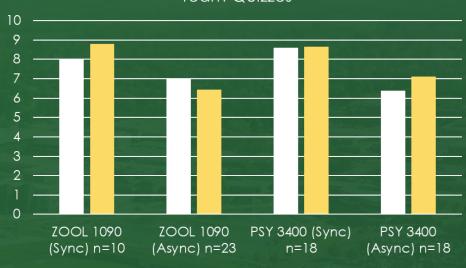


Further Findings from Step 2:

Regardless of class:

 Students working synchronously (increased social presence) showed greater satisfaction with team quizzing

Figure 3. Student Average Perceptions –
Team Quizzes



- Team Members Contribute to Learning (scale: 1-5, x2)
- Satisfaction with Team Quizzes (scale: 1-10)



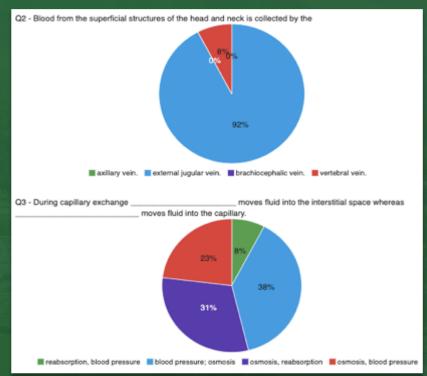
Step 3: Synchronous Team Quizzes Step 4: + Feedback

• Step 3:

- Make synchronous team quizzes mandatory
- Team "scribe" or "chooser"
- IFAT model: can answer multiple times
- Everyone receives same score

Step 4:

- Same process, but visual graphic of responses from individual quiz
- Warned students that just because most
 students picked an answer, may not be correct
- PSY3400 students were more consistent in their satisfaction than ZOOL1090 students in these steps





Most
Common
Concern
(among those who answered)



Final Results & Considerations

- Satisfaction scores for PSY3400 were higher than for ZOOL1090 across most steps
- Step 4 final satisfaction scores were the highest in both courses (not sign diff)
- Resistance to learning was higher in ZOOL1090





Does satisfaction with groupwork stabilize at some point?





Did Steps 3 and 4 not show major gains because students were getting tired of the action research model or because they felt less personal initiative?



Significant interactions between readiness to change (especially in teamwork) was linked to final grades in the course

May suggest an interaction between social presence and resistance (readiness to change)



Could the different course objectives play a role? (PSY3400 objectives were more directly consistent with team activities)

Discussion and Q&A



WRITE DOWN: 3-2-1





Thank you!

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