



Student Perception and Satisfaction with the Implementation of Team-Based Learning in a Landmark Trials Elective Course

Pearl Stier, PharmD, and Jill Borchert, PharmD, BCPS, FCCP
Midwestern University Chicago College of Pharmacy, Downers Grove, IL



BACKGROUND

TBL is a form of active learning that involves small groups of students working together to complete individual and team assessments

4 Principles

- Groups
- Accountability
- Assignment design
- Peer Evaluation

OBJECTIVES

- Evaluate students' perceptions and satisfaction with the implementation of team-based learning in a Landmark Trials elective course
- Compare student self-reported classroom engagement with team-based learning versus non team-based learning class sessions

METHODS

Design

- Prospective study over one quarter fall semester 2011
- Study Site
- Piloted in an elective course entitled "Landmark Trials in Primary Care" at MWU-CCP
- The course met once weekly for 2 hours over ten weeks
- TBL was implemented in two of the ten class periods
- N=17

Pre and Post Course Surveys

- 4-point Likert scale: 1 = strongly disagree; 2 = disagree; 3 = agree; 4 = strongly agree
- Assessments
 - Student satisfaction
 - Team impact on quality of learning
 - Student satisfaction with peer evaluation scores

Student Engagement Surveys

- 4-point Likert scale: 1 = never; 2 = little; 3 = somewhat; 4 = a great deal
- Compare results from TBL class sessions to non TBL class sessions
- 2 question survey at the end of each class period:
 - To what extent did you participate in class discussions today?
 - To what extent did you pay attention in class today?

RESULTS

Overall Satisfaction with Team Experience (n=16)

Positive Trends	
I have found working as part of a team to be a valuable experience	p = .480
Team members generally contribute as much as I do	p = .763
Team members work well together	p = .157
Other team members respect me	p = .157
Team activities allow me to see other's thought process	p = .102
Overall, team based activities are helpful and increase my understanding of the material	p = .739
Negative Trends	
I consider teamwork to be a productive use of course time	p = .739

Team Impact on Quality of Learning (n=16)

Positive Trends	
I have found that teams help me learn course material more than if I just studied alone	p = 1.00
I have found being part of a team improves course grades	p = .559
Negative Trends	
Team activities motivate my preparation prior to attending class	p = .233
Neutral	
Team activities increase the extent of my usual classroom involvement	p = .796

Satisfaction with Peer Evaluation Score (n=16)

Positive Trends	
I found that my peers have been fair in judging my contributions to a team	p = .180
Negative Trends	
I found that peer evaluation motivates me to work harder	p = .366
I found that peer evaluation motivates me to work more collaboratively	p = .206
I generally liked the use of peer evaluations as a part of my team experience	p = .763

RESULTS

Student Engagement Survey (non-TBL n=122, TBL n=34)

- To what extent did you participate in class discussions today?
 - More students felt they participated in TBL classes versus non-TBL classes (45.2% v. 88.2%, $p < 0.0001$)
- To what extent did you pay attention in class today?
 - Students did not feel they paid attention more in TBL classes ($p = 0.075$)

DISCUSSION

Pre- and Post-Course Surveys

Overall Satisfaction with Team Experience

- Teamwork was a valuable experience
- Team based activities were helpful and increased students' understanding of the material
- Teamwork was not a productive use of course time

Team Impact on Quality of Learning

- Teams helped them learn the course material more than if they just studied alone
- Team activities did not motivate students' preparation prior to attending class

Satisfaction with Peer Evaluation Scores

- Peer evaluations did not motivate them to work harder or more collaboratively

Additional Post-Course Survey Questions

- TBL should continue to be utilized in elective and other required courses (60.0%)

Student Engagement Survey

To what extent did you participate in class discussions today?

- A greater number of students felt they participated more in TBL classes than Non-TBL classes

To what extent did you pay attention in class today?

- Results were not significant; however, students may not have perceived active learning as an opportunity to "pay attention"

CONCLUSION

- Working as part of a team was a valuable experience and increased understanding of the material
- Consider implementing TBL in other elective and required course in an effort to increase student participation