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The University of British Columbia’s Centre for Instructional Support

The TBL Collaborative

The University of Texas Medical Branch

Epstein Education

TEAM-BASED LEARNING

2009 CONFERENCE

THE UNIVERSITY OF TEXAS AT AUSTIN

March 5 and 6, 2009 - Thompson Conference Center
Thursday, March 5, 2009

7:00 a.m.
Registration and Breakfast
Lobby / Auditorium

8:00 a.m.
Plenary: A Conversation with Larry Michaelsen
Auditorium
Larry K. Michaelsen, University of Central Missouri

9:00 a.m.
F Fundamentals:
Writing Effective Questions for a TBL Module
Room 2.110
Dean Parmelee, Boonshoft School of Medicine, Wright State University
Paul Koles, Boonshoft School of Medicine, Wright State University

I Innovations:
Posters and Concept Maps: An Alternative to the
Multiple-Choice-Question Team Application Exercise
Room 2.110
Karla A. Kubitz, Towson University

I Innovations:
A Free-Text Audience Response System
to Enhance Team Learning
Room 3.122
NOTE: Session limited to 24 participants and wireless device
(laptop or iPhone) required for full participation.
Robert Badgett, University of Texas Health Science Center at San Antonio

11:15 a.m.
Plenary: Showcase of the Best Oral Presentations
Auditorium

12:30 p.m.
Lunch and TBL Student Panel
Room 3.102

1:45 p.m.
F Fundamentals:
Designing Group Work That Really Works
Room 2.122
Larry K. Michaelsen, University of Central Missouri

I Innovations:
TBL Best Practices:
Mining the Wisdom of the TBL Listserv
Room 2.110
Jim Sibley, University of British Columbia

I Innovations:
Implementing TBL Online
Room 3.122
NOTE: Session limited to 25 participants and wireless
laptop required for full participation.
Sunay Palsole, University of Texas at El Paso

4:00 p.m.
Poster Reception
Room 2.120

5:30–8:00 p.m.
Dinner at Serrano’s Mexican Grill
1111 Red River St. (512) 302-1400
Transportation provided
Sponsored by University of British Columbia’s Centre for Instructional Support
and University of Texas Medical Branch at Galveston
CASH BAR
Shuttle bus departs from Thompson Conference Center at 5:30
Friday, March 6, 2009

7:30 a.m.
Registration and Breakfast
Lobby / Auditorium

8:00 a.m.
Plenary: A Conversation with
Dee Fink and Arletta Bauman Knight
Auditorium
Dee Fink, Dee Fink and Associates
Arletta Bauman Knight, Dee Fink and Associates

9:00 a.m.

Fundamentals:
Facilitating Well in the TBL Classroom
Room 2.122
Michael Sweet, University of Texas at Austin
Dan Mayer, Albany Medical College

Innovations:
Critical Thinking: The Foundation of Expertise
Room 2.110
Herbert Janssen
Kathryn McMahon
Paul L. Foster, School of Medicine, Texas Tech University Health Sciences Center

Innovations:
Using TBL to Give Graduate Students Effective and Efficient Feedback on Analytical Writing Assignments
Room 3.122
Sophie Sparrow, Professor of Law, Franklin Pierce Law Center
Margaret Sova McCabe, Professor of Law, Franklin Pierce Law Center

Innovations:
MedEdPORTAL & Educational Scholarship Training Workshop
Room 3.102
Michael Saleh, MedEdPORTAL

11:15 a.m.

Workshops

Fundamentals:
Designing and Implementing Peer Evaluations
Room 2.122
Ruth E. Levine, University of Texas Medical Branch, Galveston
Paul Koles, Boonshoft School of Medicine, Wright State University

Innovations:
Advancing a Scholarship Agenda for Your TBL Activities
Room 2.110
Michael E.PETTY, Rush University Medical Center

Innovations:
K-12 and TBL: How I Incorporate State Standards into a Project-Based 7th Grade Classroom
Room 3.122
Scott Kubista-Hovis, Hayfield Secondary School

1:15 p.m.
Lunchtime Conversation with the TBL Sages
Room 3.102

2:30 p.m.
Conference Concludes, Thank You for Attending.

Conference Co-Chairs:
Michael Sweet, University of Texas at Austin
Ruth E. Levine, University of Texas Medical Branch, Galveston

Conference Committee:
Dean X. Parmelee, Wright State University
Jim Sibley, University of British Columbia

Detailed Program Descriptions on Following Pages
TBL Program Detailed Descriptions
Thursday, March 5, 2009

Registration and Breakfast
7:00 a.m.
Lobby / Auditorium

Plenary: A Conversation with Larry Michaelsen
8:00 a.m.
Auditorium
Larry K. Michaelsen, University of Central Missouri

When is Team-Based Learning not Team-Based Learning?
Chat with Larry about how we can ensure that the benefits of TBL remain intact, as teachers use it more often and in different ways.

Writing Effective Questions for a TBL Module
9:00 a.m.
Room 2.122
Dean Parmelee, Boonshoft School of Medicine, Wright State University
Paul Koles, Boonshoft School of Medicine, Wright State University

Using a Team-Based Learning (TBL) format, this session is designed to empower instructors to write better learning objectives and craft well-written and effective multiple-choice questions (MCQs) that reflect those objectives. The success of a TBL module depends on the quality of the questions asked, in both readiness assurance and application exercises. Participants will read a short article about objectives and multiple-choice questions prior to the workshop.

After completing the workshop, participants will be able to:
• Recognize features of measurable learning objectives and the direct connection between objectives and MCQs that assess mastery of objectives
• Apply criteria to identify specific flaws in MCQs
• Discriminate among three levels of learning assessed by MCQs and determine which level is addressed by a sample MCQ
• Define difficulty index and discrimination factor and use them to analyze MCQs
• Identify MCQs that are best suited for the Readiness Assurance process and the Group Application exercise

Posters and Concept Maps: An Alternative to the Multiple-Choice-Question Team Application Exercise
9:00 a.m.
Room 2.110
Karla A. Kubitz, Towson University

Effective application exercises must meet four criteria: (a) focus on significant problems, (b) deal with the same problem, (c) require students to make a specific choice, and (d) create a product that can be presented simultaneously. One alternative to the multiple-choice-question team application exercise is the poster or concept-map application exercise. Students apply course material to a problem and create a poster or concept map depicting their thinking process. Concept maps meet the four criteria for an effective application exercise—students deal with the same significant problem and make specific choices to determine what information to include on their maps, which can be presented simultaneously. In meeting the four criteria, these application exercises are an alternative to the multiple-choice-question team application exercise.

By the end of this workshop, participants will be able to create a poster or concept map.

A Free-Text Audience Response System to Enhance Team Learning
9:00 a.m.
Room 3.122
Robert Badgett, University of Texas Health Science Center at San Antonio

NOTE: Session limited to 24 participants and wireless device (laptop or iPhone) required for full participation

A key feature of team learning is the simultaneous revealing of team responses during class. Electronic Audience Response Systems (ARS) have emerged for this task. While “clickers” allow simultaneous revealing, they limit responses to a forced-choice format and require all learners be in the same location. We developed UT Responder, an internet-based ARS that accepts both forced-choice and free-text answers and that can be accessed from desktop or handheld computers. After completing the workshop, participants will be able to:
• Recognize the educational value of ARS in Team-Based learning
• Explore the advantages and limitations of free-text ARS in small classroom settings through hands-on participation
• Improve awareness of novel methods for simultaneous revealing of team answers.

Plenary: Showcase of the Best Oral Presentations
11:15 a.m.
Auditorium

Introduction of a Team-Based Learning Format into an Interdisciplinary Course on Health Care in America
Diane Howard, Rush University Medical Center
Michael E. Petty, Rush University Medical Center

Team Based Learning in a Business Simulation Context: Welcome to Cornerstone Enterprises
Lesley Tomaszewski, Mays Business School, Texas A& University
Carol A. McBraye, Mays Business School, Texas A& University

Comprehensive use of Team-Based Learning in First Year Medical School: Challenges and Excitements
Janil Puthucheary, Duke-NUS Graduate Medical School Singapore
Sandy Cook, Duke-NUS Graduate Medical School Singapore

Initial Results of a Free-text Audience Response System to Enhance Team Learning
Robert Badgett, University of Texas Health Science Center at San Antonio
Glen Medellin, University of Texas Health Science Center at San Antonio

MedEdPORTAL: Publishing and Accessing Peer-Reviewed TBL Materials
Michael Saleh, Association of American Medical Colleges.
Lunch and TBL Student Panel  
12:30 p.m.  
Room 3.102

Designing Group Work That Really Works  
Time: 1:45 p.m.  
Location: Room 2.122 
Larry K. Michaelsen, University of Central Missouri

WARNING: Group assignments often do more harm than good. The most common sign of trouble is when students—especially the better ones—feel they are doing more than their fair share of the work. When that happens, the real problem may not be with the students, but with what you are asking them to do.

In this session, participants will engage in activities that:

Demonstrate why most problems with learning groups are caused by poorly designed assignments 
Illustrate four keys for designing group assignments so that they:

- Promote higher-level learning
- Consistently produce positive student attitudes about group work
- Can be graded easily and fairly.

TBL Best Practices: Mining the Wisdom of the TBL Listserv  
Time: 1:45 p.m.  
Location: Room 2.110  
Jim Sibley, University of British Columbia

We will explore some of the historical conversations about best practice from the TBL listserv. We will specifically explore the topics of student resistance and motivation, fairly assessing team work and grading application activities, and the Readiness Assurance Process, both its design and implementation.

We will use a classroom response system to gather individual and team responses, and we will use worksheets to research additional information and identify alternative methods and practices.

After completing the workshop, participants will better understand best practices for TBL. Feedback from the session will be compiled and shared with workshop participants and the TBL community. This information will be used to create a draft set of community best practices for TBL that includes the wisdom of the listserv and workshop participants.

Implementing TBL Online  
1:45 p.m.  
Room 3.122  
Sunay Palsole, University of Texas at El Paso

NOTE: Session limited to 25 participants and wireless laptop required for full participation

Team-Based Learning (TBL) works well in the traditional face-to-face format. The same techniques can be used online, with attention to differences between the traditional face-to-face classroom and the online course. Participants will learn about tools for building a TBL exercise for use in an asynchronous online classroom. If participants have laptops, some part of the process will be demonstrated by working online.

After completing the workshop, participants will be able to:

- Identify basic differences between TBL in a traditional and an online setting
- Articulate the use of various online tools for implementing TBL in an online setting
- Appreciate the value of planning the implementation of TBL online
- Work out the basic implementation steps of TBL in online settings.

Poster Reception  
4:00 p.m.  
Room 2.120

Team-Based Learning in a Foundations of Biology Course  
Sue Wick, University of Minnesota

Using eInstruction CPS "clickers" and Reports to support Team Based Learning  
HerbColemen – Austin Community College

Introduction of Team-based Learning into a Traditional Lecture/Problem-Based Course in Gross Anatomy, Histology and Embryology for First Year Medical Students  
Paul McGuire, University of New Mexico School of Medicine, Deana Richter, University of New Mexico School of Medicine, Summers Kalishman, University of New Mexico School of Medicine, Sharon Wayne, University of New Mexico School of Medicine

The Effect of TBL on Student Learning and Satisfaction in a Political Science Classroom  
Melissa R. Michelson - California State University, East Bay

Team-Based Learning:  
A Generationally Appropriate Model for Medical Student Education in Second Year Pediatrics  
Amanda R. Emke, Washington University School of Medicine

Student Improvement and Feedback on  
Team-Based Learning versus Lecturing in an Electrical Engineering Course  
Adalet Baris Gunersel, Temple University, Robert Yantorno, Temple University

Assessing Team-Based Learning in the First-Year English Classroom  
Roxanne Harde - University of Alberta, Augustana Faculty

Using Alternate Forms to Increase Deliberation and Improve Team RAT Performance  
Dan Robinson, University of Texas at Austin

Implementation of Team Based Learning within a Traditional Pathology Course  
Jennifer Lorek, Medical College of Wisconsin, Julie Brinkerhoff, Medical College of Wisconsin

Promoting Active, Adult-Centered Learning in a Core Internal Medicine Clerkship Curriculum – Team Based Learning  
Elizabeth Miller, Virginia Commonwealth University, Stephanie A. Call, Gonzalo Bearman
Peer and Self Assessment: An Innovative Approach to Training and Implementation in a Team-Based Learning Environment
Stacey A. Jackson, Indiana University School of Medicine – South Bend
Edward E. McKee, Indiana University School of Medicine – South Bend
Rudolph M. Navari, Indiana University School of Medicine – South Bend

Maximizing Teams in the 21st Century
Kelly Ottman - Milwaukee School of Engineering
Chriss Cazayoux - Roundbox Global

Integrating Self-Regulated Learning Into Medical Education
Casey B. White, University of Michigan Medical School

Not Just Reading or Hearing about Biology, but Doing It.
Robert Brooker - University of Minnesota, Twin Cities
Brett Couch - University of Minnesota, Twin Cities
Mark Decker - University of Minnesota, Twin Cities
David Mathes - University of Minnesota, Twin Cities
Vanessa Pompei - University of Minnesota, Twin Cities
Deena Wassenberg - University of Minnesota, Twin Cities
Susan Wick - University of Minnesota, Twin Cities
Robin Wright - University of Minnesota, Twin Cities

Team-Based Learning Enhances Biomedical Sciences Graduate Education
Wayne McCormack, University of Florida College of Medicine

Observations on Using Team-Based Learning for the First Time in our Osteopathic Medical School Curriculum
Marina Ioudina, Touro University Nevada College of Osteopathic Medicine
Terrence Miller, Touro University Nevada College of Osteopathic Medicine
Jutta Guadagnoli, Touro University Nevada College of Osteopathic Medicine

A TBL Collaboration between Basic Sciences Courses and the Health Sciences Library: Using Web-Based Delivery of Clinical Case Scenarios and Information Evaluation Skills
Kristina T. Panizzi Woodley, University of Alabama, Birmingham
Patricia C. Higginbottom, University of Alabama, Birmingham
Lee A. Vucovich, University of Alabama, Birmingham
Louis B Justement, University of Alabama, Birmingham
Dennis J. Pillion, University of Alabama, Birmingham
Peter G. Anderson, University of Alabama, Birmingham

Team-based Learning in an Interdisciplinary Health Management Course
Diane Howard, Rush University
Michael Petty, Rush University

Emerging Infections Case-Based Studies: A Student Team Teaching Approach in Pharmacy Education
Patrick J. Davis – University of Texas at Austin

Pharmacotherapeutics Lab: A Team-Based Approach to Treating Patients in Pharmacy
Roxanne E. Cantu - University of Texas at Austin
Rochelle M. Roberts - University of Texas at Austin

Monday Evening:
Dinner at Serrano’s Mexican Grill
5:30–8:00 p.m.
1111 Red River St  (512) 302-1400
Transportation provided
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CASH BAR
Shuttle bus departs from Thompson Conference Center at 5:30 p.m.

TBL Program Detailed Descriptions
Friday, March 6, 2009

Registration and Breakfast
7:30 a.m.
Lobby / Auditorium

Plenary: A Conversation with Dee Fink and Arletta Bauman Knight
8:00 a.m.
Auditorium
Dee Fink, Dee Fink and Associates
Arletta Bauman Knight, Dee Fink and Associates

In this discussion, we will address two questions. First, what are the values that our larger society is beginning to see, for effective teamwork? Second, how much of the value of students learning about teamwork, can be achieved by using pieces of TBL?

Facilitating Well in the TBL Classroom
Time: 9:00 a.m.
Location: Room 2.122
Michael Sweet, University of Texas at Austin
Dan Mayer, Albany Medical College

For some teachers, an energized classroom can feel surprisingly unfamiliar. A room of students prepared to engage the content, confer with each other, and even challenge the teacher can demand a ready combination facilitation skills—especially if the teacher has mostly lectured in the past. This session will focus on both the task and social dimensions of the “whole class discussion” and how the teacher can leverage the unique energies of TBL to keep the discussion simultaneously provocative and on-topic.

After completing the workshop, participants will be able to:

- Describe Parker Palmer’s six paradoxes of the classroom
- Articulate specific strategies to manage Palmer’s paradoxes, from moment to moment in class discussion
- Plan ahead in specific ways to set up the conversational “container” for maximum student engagement and focus.
Critical thinking is a way of life, a process used by self-aware individuals to improve their performance in all aspects of life. Critical thinkers systematically examine themselves, their thought process, and their interactions with others. Continued improvement of critical thinking skills, coupled with knowledge in a given discipline, is the foundation on which expertise is built.

Research suggests that acquiring expertise in a given discipline requires deliberate practice over ten years. “Teaching” critical thinking skills as cognitive information is of little value. Such skills must be “learned” so that they become part of a person’s problem-solving armamentarium. Used properly, Team-Based Learning offers an excellent opportunity for students to learn and practice critical thinking techniques. Using TBL allows instructors to continue to provide content instruction while shifting focus to the thought process used to achieve course goals. As learning objectives also shift from the cognitive domain to highlight critical thinking processes used by individuals and teams, students are encouraged to practice the critical thinking skills that are the hallmark of the expert.

After completing the workshop, participants will be able to:

- Define critical thinking
- Describe the link between critical thinking skills and the development of expertise
- Write objectives that stress the development of critical thinking skills and explain how TBL can be used to present content and develop such skills.

Using TBL To Give Graduate Students Effective and Efficient Feedback on Analytical Writing Assignments

9:00 a.m.
Room 3.122
Sophie Sparrow, Professor of Law, Franklin Pierce Law Center
Margaret Sova McCabe, Professor of Law, Franklin Pierce Law Center

Applying Team-Based Learning strategies in writing courses can leverage resources, allowing students to write more drafts, maximize their learning from each other, and decrease the amount of teacher-provided individual feedback.

Teaching writing is frequently a labor-intensive process focused on the relationship between teacher and student. In many writing courses, students learn to write effectively by regularly drafting assignments and then receiving teacher feedback, requiring significant teacher resources and small classes, typically with fewer than 20 students. In larger classes, students usually write less or receive less feedback. Team-based learning can leverage resources to maximize student learning.

Using team-based learning in analytical writing classes provides students with opportunities to learn from each other and to engage in higher-order thinking skills by evaluating and collaborating on writing assignments. In addition, using readiness assurance tests (RATs) in a writing course focuses students’ attention and maximizes out-of-class learning. RATs also measure students’ understanding of effective writing by gauging their ability to recognize it. We have used Team-Based Learning in a range of courses to improve students’ writing.

After completing the workshop, participants will be able to:

- Identify two ways to use TBL to provide students with feedback about effective writing
- Respond to and analyze Readiness Assurance test questions designed to develop students’ ability to identify effective and ineffective writing
- Work in teams to evaluate students’ writing and compile effective examples of written work
- Draft one Readiness Assurance test question designed to develop students’ ability to identify effective and ineffective writing.
Advancing a Scholarship Agenda for Your TBL Activities
11:15 a.m.
Room 2.110
Michael E. Petty, Rush University Medical Center

The expansion of Team-Based Learning in health science education and higher education should encourage an increasing body of research concerning TBL methodology. With few studies presently in the health science literature, evidence of TBL’s effectiveness is still meager. Based on our experience assisting faculty in curriculum development and research design, as well as our experience with TBL as a curricular topic, we will assist new researchers in the field to develop research plans.

After completing the workshop, participants will be able to:

- Identify studies in the research literature
- Describe concepts relevant for research in TBL
- Identify steps in developing research plans
- Apply these to their current areas of interest in TBL

K-12 and TBL: How I Incorporate State Standards into a Project-Based 7th Grade Classroom
11:15 a.m.
Room 3.122
Scott Kubista-Hovis, Hayfield Secondary School

One of my biggest challenges in using TBL was creating hands-on, real-world activities that teach core concepts. The engineering design process provides an easy tool to help students develop a framework in which to approach a wide diversity of challenges, while simplifying the educators’ task of developing class projects aligned with specific course objectives.

After completing the workshop, participants will be able to:

- Integrate specific objectives within the engineering design process
- Apply the engineering design process to solve real world problems
- Take away specific tools that can be applied directly to curriculum

Lunchtime Conversation with the TBL Sages
1:15 p.m.
Room 3.102

Conference Concludes
2:30 p.m.
Thank you for attending.