Thursday, May 23, 2019

**Team-Based Learning™ 101: Flipping the Training Room to Develop
Competence, Critical Thinking, and Collaboration**
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Team-Based Learning™ (TBL) is an evidence-supported, collaborative learning and teaching strategy developed in the late 1970's by Larry Michaelsen. Most knowledge transfer takes place outside the training room or classroom; face to face time is used to apply knowledge to solve complex, real-world problems. TBL™ provides active learning opportunities to apply knowledge and concepts to build both understanding and practice competence. TBL™ is intentionally leveraged to parallel the process of teaming in practice with children and families. Learners experience teams outperforming individuals and that inclusion and empowerment of all voices is more likely to reach successful solutions.

TBL™ has been used successfully in child welfare-related courses in the University of Pittsburgh's MSW program for the last seven years, as part of Pennsylvania's IV-E Child Welfare Educational Partnership. Pennsylvania's Child Welfare Resource Center (PCWRC) is incorporating TBL™ to onboard its new child welfare professionals, in *Foundations in Child Welfare Practice: Building Competence, Confidence, and Compassion*. Concurrently, PCWRC is developing TBL™ expertise among its instructors.

Further information is available at the PCWRC website, http://www.pacwrc.pitt.edu/ and the Team-Based Learning Collaborative website, http://www.teambasedlearning.org/

Learning Objectives:
Participants will be able to:
- Identify and describe the basic elements and sequence of TBL™.
- Appraise the value of TBL™ as an effective method for teaching and learning the knowledge and skills required for child welfare practice.
- Appraise how TBL™ supports the transformation of a small group into a productive learning team.

Agenda:
1. Welcome and General Overview
2. Forming Teams
3. Preparation and Knowledge Acquisition
4. Readiness Assurance Process
5. Application
6. Closing Discussion

Introduction to Team-Based Learning

TBL is a uniquely powerful form of small group learning. It provides a complete coherent framework for building a flipped course experience.

TBL lets you achieve two important things:

1. Students come to class prepared by using TBL's ingenious Readiness Assurance Process.

2. Students learn how to apply the course concepts to solve interesting, authentic, real-world problems using TBL's 4 S framework.

It's like a courtroom jury ...

Think of a courtroom jury that sifts through large amounts of evidence, statements, and transcripts to come up with a simple decision: guilty or not guilty. Imagine your work on a jury; you rise to state the jury's verdict, but another person rises from a different jury team in the same courtroom and states a different verdict. You naturally want to talk to them; you naturally want to ask "why?" This simple comparability between decisions, and the natural tendency to ask the question "why" is at the heart of TBL. This "why" motivation provides the instructional fuel to power insightful debates between student teams.

Guilty

Not Guilty
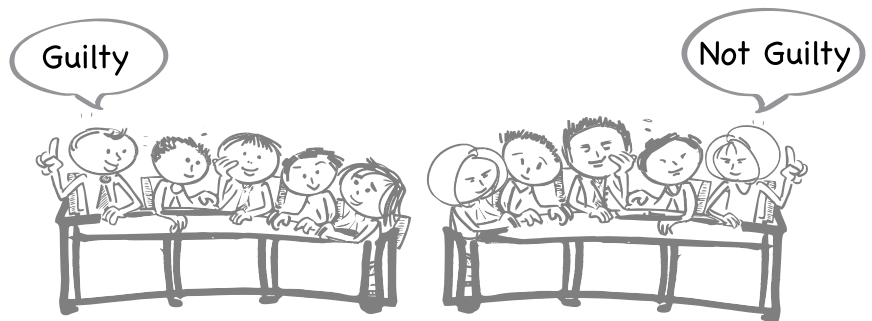
The rhythm of TBL

TBL courses have a recurring pattern of instruction that is typical of many flipped classrooms. Students prepare before class and then students spend the bulk of class time solving problems together. TBL gives you a straightforward whole course framework to design and implement your flipped classroom.

A typical TBL course is divided into five to seven modules. Each module has a similar rhythm, opening with the Readiness Assurance Process that prepares the students for the activities that follow, and then moving to Application Activities that often grow in complexity and length as the module progresses. As the module is ending, you provide some closure and reinforcement. Module length varies in different contexts. In some courses an entire cycle is completed in one long session and in other courses the cycle may be spread across multiple class meetings.

As the next module begins, the familiar TBL rhythm starts to build: out-of-class preparation, the Readiness Assurance Process, followed by Application Activities.

Typical TBL Cycle

Readiness Assurance Process	Multiple Application Activities

Readings
iRAT
tRAT
Appeals
Mini-lecture
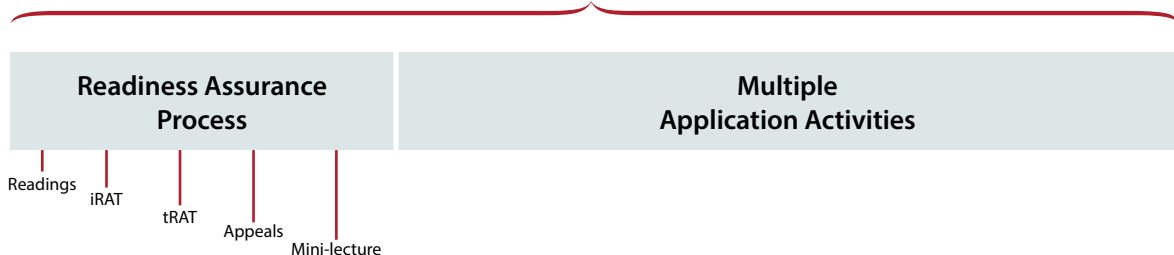
How TBL Works

Readiness Assurance

Getting Your Students Ready

During this 5 stage process at the beginning of each module, students progress from initial preparation to true readiness to begin problem-solving.

Following the Readiness Assurance Process, the bulk of class time is spent with students applying course concepts and solving problems.

1 Pre-Class Preparation

Students are assigned preparatory materials to review before start of each module. The preparatory materials can be textbook chapters, articles, videos, or PowerPoint slides. The preparatory materials should highlight foundational vocabulary and the most important concepts the students need to begin problem solving, but not everything they need to know by module end.

2 Individual Readiness Assurance Test

To begin the classroom portion of the RAP process, students complete a 15-20 multiple-choice question test. They first complete the test individually (iRAT), and then repeat the same exact test with their team (tRAT). The iRAT holds students accountable for acquiring important foundational knowledge from the preparatory materials that will prepare them to begin problem-solving. The questions are typically written at Bloom's levels: remembering, understanding and simple applying.

3 Team Readiness Assurance Test

The Team Readiness Assurance Process Test (tRAT) is the exact same test as the iRAT. A special type of scoring card known as an IF-AT should be used (scratch and win style testing). With IF-AT's, the teams must negotiate which answer to choose, they then scratch off an opaque coating over their answer choice, hoping to find a star that indicates a correct answer. If the team does not discover a star, they continue to discuss the question and sequentially select other choices. The tRATs are high energy learning events.

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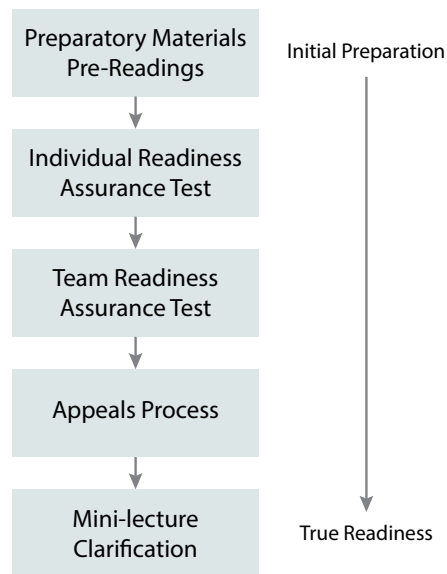
4 Appeals

During the closing of the team test, the instructor circulates around the room and encourages teams to consider creating a written appeal for questions they got incorrect. This forces students back into the reading material exactly where they are still having difficulty. The team then researches the "right" answer and may choose to complete the appeals form with their rationale and defense for their alternate answer. The appeal must consist of (a) a clear statement of argument, and (b) evidence cited from the preparation materials. The instructor collects these forms and considers them after class.

5 Mini-lecture

To conclude the Readiness Assurance Process, the instructor focuses a short mini-lecture only on the concepts that are still problematic for the students.

In the words of Bob Philpot at South University, "TBL helps me understand the 10-15% of the course material I really need to talk to the students about."

Preparatory Materials Pre-Readings → Individual Readiness Assurance Test → Team Readiness Assurance Test → Appeals Process → Mini-lecture Clarification

Initial Preparation

True Readiness

In Class Activities

4S Problem-Solving Framework

- **Significant Problems**
- **Same Problem**
- **Specific Choice**
- **Simultaneous Report**

In the TBL classroom, the bulk of class time is spent having student teams solve, report, and discuss solutions to relevant, significant problems. Structuring the problems using TBL's 4S Framework lets you leverage the power of team processing without many of the problems that are inherent in other forms of small-group learning. The structure of the TBL activities gives individuals, and teams, many opportunities to make decisions and get timely feedback on the quality of their thinking and their process for arriving at their answer.

4S Framework

| Significant Problem |
| Same Problem |
| Specific Choice |
| Simultaneous Report |
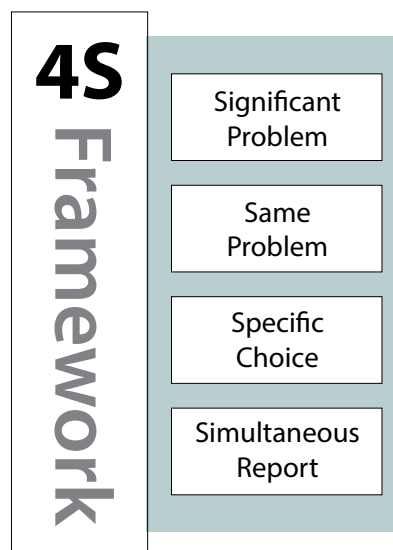
1 Significant Problem

Examples of Significant Problem

- A historian reconciles conflicting sources.
- A doctor decides the best course of action.
- A businessperson picks the best location for a business.
- A writer identifies the most powerful passage or best example.

You must use a significant, relevant problem that captures the interest of students. The quality of the problem ultimately controls the effectiveness of an application activity. Problems must require students to use course concepts to solve them.

2 Same Problem

Teams work on the same problem. This ensures the comparability of team solutions and this naturally acts as a potent discussion starter. Having students work on the same problem lets you create reporting opportunities for teams to defend, challenge, discuss, and examine each other's thinking and problem-solving process. Working on the same problem, ensures that students are interested in what other teams decided.

3 Specific Choice

Teams select the best choice from a limited list of options. This ensures that teams can easily compare their final decisions to the decisions of other teams. It is this comparability that drives the rich reporting discussion as teams examine and critique other teams decisions and defend their own.

Examples of Specific Choice

- Which of these is the **best** example of X?
- **Most** important piece of evidence in support of Y?
- Which statement would the author **most** agree with?

4 Simultaneously Report

Simultaneous reporting is most simply accomplished with holding up of a coloured card indicating a particular choice. When a team sees that another team has made a different decision, they naturally want to challenge the other teams' decision. In the ensuing conversation, the teams challenge each other and defend their own thinking. The reporting requires teams to articulate their thinking to other teams – putting their thoughts into words. This helps cognitively with the process of creating enduring, deep understanding. The feedback from their peers is immediate and focused on "how did you arrive at your decision" and not "which is the right answer."
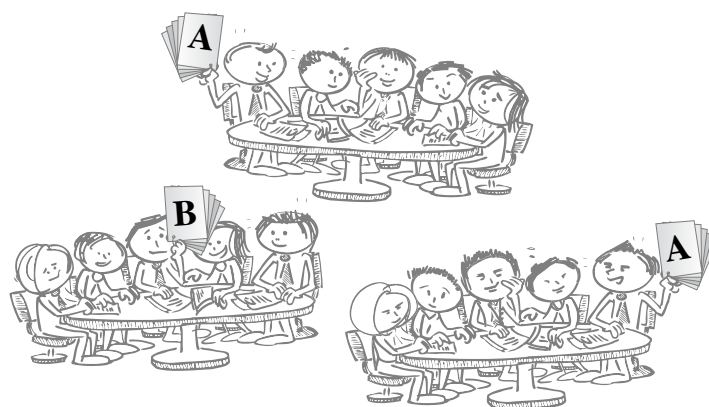
4 Essential Elements of TBL

Teams must be properly formed and managed

TBL works best with large, diverse teams. TBL teams should have 5-7 students. Teams should be created by instructor and uniformly distribute the student assets you feel are important for team success. Teams need to be permanent so team cohesion has time to build.

Getting Students Ready

The magic of the Readiness Assurance Process is that it builds on the initial preparation, changing it into true readiness to begin problem-solving. At the simplest level, the RAP is a series of multiple-choice tests. First the test is taken individually, and then the same test is immediately retaken in teams.

For more information on how to get started.

Visit
www.teambasedlearning.org

Classroom materials, books, videos, workshop schedules and more!

Teachers Say It Works!

The enthusiasm and energy of students. It's just so much fun!

Larry Michaelsen
University of Central Missouri

Students excited about learning and faculty falling in love with teaching. The way learning should be.

Holly Bender
Iowa State University

Students are so engaged in conversation with each other and the task that, literally, they don't know I am there. My favorite days are when I have to tell them to leave.

Laura Madson
New Mexico State University

I think the genius of TBL is that it maximizes the advantages of group learning while minimizing the disadvantages.

Brent Maclaine
University of Prince Edward Island

Applying course concepts

Use the 4 S problem-solving framework to have students make complex decisions and then get rich, immediate, and specific feedback on the quality of their decisions. The give-and-take discussions that follows after teams publically report their decisions is a powerful opportunity deepen students understanding.

Making students accountable

Making students truly accountable is key. There is individual accountability from the iRAT, but what is most motivating is the accountability to teammates during the tRAT's and Application Activities. Peer evaluation is key to giving the grading scheme enough teeth to motivate students.

The Literature Says It Works!

Students are more engaged

Students reported higher level of engagement in TBL courses (Chung et al., 2009; Clark et al., 2008; Kelly et al., 2005; Levine et al., 2004).

Increased excitement in the TBL classroom

Teachers report increased excitement and engagement in their classrooms (Andersen et al., 2011; Dana, 2007; Jacobson, 2011; Letassy et al.; 2008; Nicoll-Senft, 2009).

Teams outperform best members

The worst team typically outperforms the best student. In 20 years of results Michaelsen (1989) found that 99.95% of teams outperformed their best member by an average of 14%.

Students perform better on final and standardized exams

TBL students outperform non-TBL students on examinations (Grady, 2011; Letassy et al., 2008; Persky, 2012, Zingone et al.; 2011, Koles et al., 2005; Koles et al., 2010; Thomas & Bowen, 2011).

A large class can be an asset

Michaelsen, Knight, Fink (2002) found that students actually perceived a larger class size as beneficial to their learning with TBL.

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Readiness Assurance Test (RAT)

1. Identify the MOST important outcome of well-designed and well delivered training using Team-Based Learning™?
   a. Increased knowledge of facts by learners
   b. Increased competence applying knowledge
   c. Development of better life-long learning skills
   d. Development of better team-working skills

2. It is important to create TBL™ teams that are:
   a. Diverse and instructor selected
   b. Made up of people who usually work together
   c. Made up of those with similar skill sets
   d. Learner selected to minimize learner resistance

3. Most of class/training time in TBL™ is spent on:
   a. Reviewing important course content
   b. Working on team writing assignments
   c. Using course content to solve problems
   d. Listening to lectures, interspersed with activities

4. The order in which TBL™ activities occur is:
   a. Individual preparation; Individual RAT; Team RAT; Appeals; Application activities
   b. Individual Readiness Assurance Test (RAT); Team RAT; Application activities; Appeals
   c. Lecture; Individual RAT; Team Readiness Test; Appeals; Application activities
   d. Individual preparation; Lecture; Team RAT; Appeals; Application activities

5. What are the four S's in a 4-S application?
   a. Significant problem; Same problem; Specific choice; Sequential report
   b. Significant problem; Same problem; Specific choice; Simultaneous report
   c. Significant problem; Strange problem; Specific choice; Simultaneous report
   d. Significant problem; Similar problem; Specific choice, Simultaneous report

Item 2 adapted from J. Sibley (2016) http://learntbl.ca/

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Handout #3, Page 1 of 1

Application Activity: Mackenzie

Case Scenario:

Two-year-old African American toddler, Mackenzie, was placed in the home of a single, Caucasian resource mother named Nell Kramer nine months ago, after your agency completed an exhaustive search for an African American resource family. The only African American family with openings at the time were the Parkers, who did not want the child because they were holding space for another child whom they had committed to adopt. There are no relatives who have expressed an interest in being a placement resource.

Mackenzie has adjusted well to placement and has formed an attachment to Ms. Kramer and her two older children. You now have Mackenzie and her family on your caseload. You filed a termination of parental rights petition because Mackenzie's mother and father are not making progress to remedy the safety concerns which brought Mackenzie into care. Both parents are willing to relinquish their rights.

Ms. Kramer wants to adopt the Mackenzie. Although Ms. Kramer provides good care for the child, she lives in a predominantly white neighborhood. Ms. Kramer states she loves Mackenzie like her own children, and when she looks at her, she does not see another race. You are concerned that she is unfamiliar with the African American experience and culture. You also fear the challenges Mackenzie could face in her local community as she grows up because Ms. Kramer might not have the capacity to support her.

You get a call one day from the adoption worker for the Parkers, the African American family who were unable to adopt Mackenzie because of their prior commitment to another child. The termination of parental rights for that child was not granted. Since they are unable to adopt the child they were originally planning on, they are now requesting to be considered as an adoptive resource for Mackenzie.

What is the **_BEST_** way to respond to this situation?

    A. Refer child for a bonding assessment to determine the extent to which Mackenzie is securely attached with the Kramer Family and if she could attach to a new family

    B. Maintain the placement and conduct outreach to Makenzie's extended family to see if they would be willing to be a supportive resource to the Kramer Family

    C. Hold several pre-placement visits between the Parkers and the Kramers to facilitate a gradual transition to the Parker home if it goes well

    D. Hold a Family Group Decision Making Meeting between the two families to determine who would be the best resource and discuss mutual support

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Readiness Assurance Test (RAT) - Instructor Version

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Item 2 adapted from J. Sibley (2016) http://learntbl.ca/

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Instructor Guide #1, Page 1 of 1

Why it makes sense for Child Welfare training

TBL™ is competency-based and many TBL™ processes parallel practice processes. We want training participants (the instructor's clients) to be more able to solve practice problems than before training. The guiding question is **What do we want an able colleague to be able to DO in this situation?**

What does it mean for instructors?

The instructor becomes more *'Guide on the Side'* and less *'Sage on the Stage'*. The role of providing all the answers can be a challenging one to give up! It is also intensely satisfying to see people struggle with material and then 'get it'. Learners are more likely to retain what they have learned when they have engaged more deeply with it in case-based problems.

> **TBL™ Processes include…**
>
> ✓ Being supported as both learner and expert
> ✓ Struggling with complex problems
> ✓ Experiencing how teams outperform individuals
> ✓ Learning there can be more than one right answer
> ✓ Collaborating in solving real world, messy problems
> ✓ Developing skills in giving strengths-based feedback
> ✓ Articulating rationales for case-related decisions
> ✓ Surfacing misconceptions, so they can be addressed

Facilitation – being the *'Guide on the Side'*:

Facilitators encourage participants to behave as working colleagues, rather than passive learners. So, TBL™ looks more like good supervision than lecture; it uses active listening skills such as empathy and non-judgmental responses. TBL™ instructors spend much more time asking thought-provoking questions and eliciting discussion, and much less time delivering content. Perhaps the most important skill for instructors to practice is waiting and trusting the teams' ability to figure it out. Instructors give the 'bottom line' by summarizing discussion and connecting it to practice and learning objectives. The structured nature of TBL™ allows the instructor to keep the process on track. During intra-team activities, instructors move among the teams to facilitate good team interactions, without giving answers or hints!

> **Some Facilitation Prompts for Intra-team Discussion…**
>
> ✓ 'Has everyone had a chance to give their thoughts on this yet?'
> ✓ 'It looks as though you may have a different view; I am wondering what you are thinking?'
> ✓ If someone tries to poll the team rather than really discuss, consider prompting discussion about the rationale for their chosen answer. E.G. 'How did you eliminate answer B?

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Post Workshop Resource, Page 1 of 4

After simultaneous report of team answers, instructors encourage active inter-team discussions, to fully air rationales for and against answers. This can surface the right answer for the wrong reasons and sometimes the wrong answer for the right reasons! Teams use critical thinking to debate each other (not justify answers to instructors). Ensure enough time for those who take longer to articulate responses.

Curriculum Design: Backwards Design

Guided by the question, *'What do we want an able colleague to be able to DO?'*, the writer develops learning objectives, then designs application activities to demonstrate the competencies, and then designs the Readiness Assurance Test. The last step is designing or selecting appropriate preparation materials. Writers often find that they can reduce content volume to target competencies more accurately. Curriculum design is an iterative process and writing good application activities may be the most challenging part. Including real world 'messiness' is critical, as is including irrelevant information, since sifting out compelling but irrelevant facts is an essential practice skill. As in child welfare practice, time spent on earlier design stages saves time in the later stages.

Backward Design Stages	Detail	Task
The 'Big idea'	Abstract concept/s	Select concept/s, such as 'Engage in evidence-based practice'
Specific understanding or competency	What you want learners to understand or be able to do	Apply 'big ideas' to area of study to develop specific understandings & competencies
Evidence	What constitutes evidence of understanding or competency	Using Bloom's Revised taxonomy, design learning objectives
Tasks	The performance tasks which provide evidence of the understanding or competency	Develop relevant, realistic, challenging, engaging cases or problems. Select content and decide on the activity process.
Competency criteria	The method by which levels of competence can be judged	4-S activities, where learners select correct answers, and articulate rationale/s for and against selection
Content – what learners need to know	Readings, online work, podcasts, etc., that provide content and concepts	Develop Readiness Assurance Test Select/develop sources to provide appropriate and adequate preparation

Design Overview for Application *'Mackenzie'*

Background	Training for recently hired child welfare staff addresses making placement decisions.
Big idea	Participants will be able to make placement decisions that comport with strength-based and family-centered practice, and child welfare laws.
Examples of specific understandings	• The interaction of strength-based and family-centered practice and legal mandates is complex • The placement decision-making process, being so vital to the child's future, must be objectively and consistently applied and be responsive to the child's needs. • Placement decisions that are solely based on race are contrary to statutory law and must be avoided.
Evidence of desired competency (learning objectives using Bloom's taxonomy)	• Given a scenario, learners will appraise a placement dilemma and weigh how to use strength-based, family-centered practice and meet legal requirements to decide on a culturally responsive course of action.
What learners need to know (content of advanced reading assignments)	• Child development • Family-centered practice • Strength based practice • P.L. 96-272 • Major provisions of the Multiethnic Placement Act • Major provisions of the Inter-ethnic Placement Act

References and Resources

The Team-Based Learning™ Collaborative: https://www.teambasedlearning.org/ and, Getting Started: https://teambasedlearning.site-ym.com/page/started

List-serve for Team-Based Learning™ practitioners: https://www.teamlearning-l@lists.ubc.ca

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