Published online: 2-16-2017

Getting Started With Team-Based Learning

Deborah A. Davis
Ball State University, dadavis@bsu.edu

Recommended Citation

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Introduction

In contrast to the lecture approach, organizing an active learning course requires effective pre-semester planning. For those who are considering problem-based learning (PBL), *Getting Started With Team-Based Learning* (Sibley & Ostafichuk, 2014) is an easy-to-follow guidebook for incorporating team-based learning (TBL), a PBL variant, into postsecondary classes. Specifically, this book not only provides all of the "how-to" steps but also the intellectual reasoning for making a change to TBL, as many faculty were taught to teach via lecture. As a form of PBL, it fits into many different classroom structures and topics by adding a structured, collaborative element. This book is especially beneficial for those who are interested in exploring an active-learning format for the first time because it is structured in such a way that emphasizes direct applicability. From an overview of the methodology to research to specific examples and tools, the book includes basic information for implementing TBL in virtually any discipline.

As described in the book, TBL is similar to PBL in that the students are required to prepare before class, work in teams, and solve problems. However, TBL is more structured regarding the teams, the preactivity testing, and the formation of the problems. In previous literature, Michaelsen and Sweet (2011) defined the four common elements of TBL as (1) strategically formed, permanent teams, (2) readiness assurance, (3) application activities that promote both critical thinking and team development, and (4) peer evaluation.

Authors Jim Sibley and Peter Ostafichuk have personally utilized TBL in the classroom and speak from experience. Together with additional insights from contributors Bill Roberson, Billie Franchini, and Karla A. Kubitz, as well as

46 other instructors who have utilized TBL in the classroom, they share the positives and the pitfalls, as well as tips for and examples of each. In the contents of the book, Sibley and Ostafichuk share an overarching theoretical umbrella, as well as extensive details that are valuable to anyone who is new to TBL. While the authors have attended to many details, more specific examples, especially as they relate to test questions and activities, would have been more helpful. The text also includes multiple references to a companion website (team-basedlearning.org); however, only basic resources are available without a membership.

Book Organization

The book begins with a forward from Larry K. Michaelsen, the founder of TBL, sharing his own experiences incorporating small group learning in a specific, regimented pattern. The chapters that follow are divided into three sections: (1) "Overview of TBL," (2) "Essential Elements of TBL," and (3) "Getting Yourself Ready," as well as an extensive appendix with additional resources. Each section naturally complements the previous one, moving from a general summary to specific steps in setting up a TBL course. The final section helps faculty emotionally prepare for the mental challenges in moving from a typical lecture-based format to one that requires different planning, course structure, and assessment.

Throughout the book, practical recommendations from the size of teams (five to seven students) to pre-class preparation assessment (online vs. paper) are discussed in great detail, providing a fairly easy-to-follow model for those designing or redesigning a course to align with TBL. The authors acknowledge the challenges for both faculty and students by moving to a TBL format. Using their own experiences as well

as specific quotes from the faculty who were interviewed, the 10 chapters in the book follow a linear progression through course design to evaluation and reflection. Each includes graphs, quotes, and specific examples such as grading policies to help the novice evaluate and determine how best to implement the model.

Part One—Overview of TBL (Chapters 1–4)

In this section, the authors provide a detailed explanation of the changing role of the instructor and how it differs from traditional classroom formats. In the first chapter, the authors introduce TBL and describe its differences from other forms of learner-centered teaching. However, like any change in course design, the authors posit that TBL requires a new look at course goals, redevelopment of course materials, and a personal recognition that the teaching experience will be distinctive. The authors provide new information about TBL and distinguish it from other similar instructional strategies, such as PBL and project-based learning. While the distinctions are helpful, it would have been helpful to also better explain how it fits into the continuum of PBL methodologies previously discussed (Hung, 2011).

The second chapter provides an in-depth look at TBL course design, using helpful examples from a wide range of subjects including psychology, business, and literature. The authors first focus on developing a module, then expanding to full course design. They provide actionable specifics such as different ways to organize the content, aligning course policies, module timeframes, assessment design, and relatable examples, even for those outside the disciplines discussed. For example, they dedicate several pages to designing the modules around the course objectives rather than around traditional chapters or chronological events. They shared an example from Tim Lindberg at the University of Missouri and his experience. Rather than designing a course surrounding the American presidency from Washington to Obama, readers see how Lindberg organized the course into six sequences, including creating the presidential war powers and backlash, as well as dilemmas of the modern presidency. Once again, this provides the readers with the opportunity to review a specific example and transfer the lessons learned to their own courses.

In the third chapter, the authors focus on the course experience for faculty and share challenges of moving from a traditional classroom structure. Some of the topics readers might find helpful include communication, rhetoric, and course policies. As described in the chapter, they especially highlight the importance of organization and structure for a successful TBL implementation. Given the significant change in design required by TBL, one recommendation of the authors is to carefully construct the first day of the course

as a practice session using the new instructional strategy. The authors also provide detailed advice on peer accountability and overcoming student concerns about group work, including specific messaging for pre-semester communication. Sibley and Ostafichuk go on to address overcoming student resistance, preparing for class, creating mock exercises, and ending the course successfully. Since many students have had negative experiences with group work, the chapter also includes actionable exercises to incorporate into the first day, attempting to provide a positive foundation.

In the fourth chapter and final chapter of the "Overview of TBL" section, contributing author Kubitz synthesizes the research regarding TBL and the following topics: why faculty should switch to the TBL teaching method; what doesn't work; and applicable theoretical frameworks of learning from Vygotsky, Bruner, Perry, and Zull. She also addresses reaction to TBL from instructors including "increased excitement" and "increased stress" (p. 56), as well as higher engagement and higher frustration from students. While students appreciate the ability to be more engaged, they are also less comfortable with ambiguity and uncertainty. Overall, the presentation of this research provides readers with the justification, rationale, and context for designing their own TBL course.

Part Two—Essential Elements of TBL (Chapters 5–8)

As the book describes throughout, all TBL courses follow the same four elements: team effectiveness, readiness assurance process, application activities, and accountability. Overall, the authors utilize these chapters to carefully explain the methodology but also implementation in a variety of classroom sizes, types, and settings. The first element is explored in depth in chapter five (team effectiveness and the creation of successful teams). Effectiveness begins with team readiness; for instance, the chapter briefly describes how students will not be able to complete assignments without completing the reading. Group dynamics are affected if everyone is not ready to fully participate. There is also a structure to building the teams themselves. The chapter provides practical TBL tips, such as creating teams that are balanced, diverse, large (5–7 students), and permanent. Team development is also critical. Moreover, the authors share multiple frameworks from Tuckman and Wheelan on how to form the teams, and then apply the formats to both small and large classes, including how to reach diversity and balance, by aligning the students based on multiple categories (such as work experience, college major, etc.).

The second element, highlighted in chapter six, focuses on the Readiness Assurance Process (RAP). The process described in this chapter progresses through five stages: student pre-class preparation, Individual Readiness Assurance

Test (iRAT), Team Readiness Assurance Test (tRAT), appeals process, and then a mini-lecture/clarification. As illustrated in the chapter, TBL is similar to other flipped classroom models that require pre-class preparation and assessment, but differs in its focus on readiness rather than testing by utilizing the same multiple-choice test for both the iRAT and the tRAT. The chapter then discusses iRAT, which promotes individual accountability, while the tRAT forces a deeper understanding of the material and engagement. Because testing is so critical, the authors dedicate ten pages to question development and item analysis in order to support development of the iRAT/tRAT. As the book describes, students can appeal grades on questions that they felt were unclear following the tRAT. Since the team must prepare an argument, the process "pushes students back into the reading or other preparatory material, right where they are having the most difficulty" (p. 86). With the real-time feedback on the iRAT and tRAT, students and the instructor can determine what needed further discussion in the final stage, rather than spending time covering material that is already understood.

The third element is the Application Activity, highlighted in chapter seven. The chapter provides a discussion about how the, "the teacher devises, organizes, and manages the activity, and the students learn by working together to apply the material" (p. 115). The book also suggests and details the following structure of the course Application Activity: an introduction, team discussion/activity completion, team reporting of the answers, and class discussion. The book highlights activities that are structured based on Michaelsen's "4S" Framework: Significant Problem (means that the activity cannot be solved by a simple internet search), Same Problem (implies that all teams work on the same problem), Specific Choice (clear, finite answers or multiple-choice responses for each activity), and Simultaneous Reporting (teams share their responses at the same time).

An additional bonus is that the seventh chapter also includes advice from multiple faculty members with TBL experience on topics such as what to do if an activity doesn't go as expected, or if the activity is too simple, too difficult, or too long. They also provide insights on how to handle challenges of class discussion and if everyone has the same response to the activity questions. Finally, specific examples, timeframes, and pitfalls are also examined in the chapter. One example of an Application Activity is from an economics course where the student teams were given a series of facts and asked to determine the best location for a dry cleaner.

In the last chapter in this section (chapter eight), the authors focus on the fourth element, the importance of accountability, by examining different peer evaluation methods and grading. The authors introduce six potential peer evaluation methods, such as a rubric-based model, a divide-the-money

approach, the Fink Method, the Koles Method, the UT Austin Method, and online software options. Each is used so the reader understands there are multiple options to include effective peer evaluation. The chapter concludes with the authors exploring different methods of structuring the grading schema, including a couple of examples such as a second-year engineering course and discussing whether or not to grade the team Application Activities.

Part Three—Getting Yourself Ready (Chapters 9–10)

In the final section, Sibley and Ostafichuk provide hypothetical case studies including challenges that are created when planning and introducing TBL. In chapter nine, they also explore issues for new adoptees as well as those who are experienced faculty. For instance, they provide helpful details about how to ensure coverage of the course material, increase overall student participation, and overcome anxiety about aspects of TBL where power is shared. One particularly interesting strategy proposed in the chapter is the appeals process. By integrating the appeals process into his course, students in the case study adopted a more assertive critical thinking perspective. The last portion of the ninth chapter discusses the emotional journey that faculty members incur by switching to an active-learning format.

The concluding chapter includes 10 tips for success that focus on design, instructor's habits in preparing for and implementing TBL, external support, and simply having fun. These contain ways to ask questions, embracing backward design and organization, and helping students see the value of the TBL structure. Many of the tips include individual comments from the dozens of TBL faculty who were interviewed for the book on topics such as the amount of pre-semester work that TBL requires. For instance, another faculty member suggested pre-testing course materials on a select group of students. Once again, the chapter is yet another example of the practical recommendations that can be found in this book.

There are also four sections in the appendix that provide the reader with practice resources and tools. Appendix A incorporates additional resources such as books, workshops, and materials available on teambasedlearning.org, including some free resources as well as members-only content. Appendix B walks the reader through additional ways to engage students during the simultaneous reporting phase. As the reader will find, some are more focused on science-related courses, while others are also applicable to the humanities and social sciences. Appendix C provides a retrospective from two faculty members on how a TBL training academy was used to introduce the method to a larger group of faculty (who could then collaborate with each other on campus—since often TBL is initiated by one professor without collegial support on

campus.) Lastly, Appendix D provides the names and course topics of the 46 interviewees who provided insights for the book. While most are in medically related positions, some are in humanities fields. This list shares the perspectives of those who provided background as well as a pool of potential readers to follow up with and ask questions. While the resources are helpful, they are presented in short segments, which at times makes the examples hard to follow and apply fully. One way to improve the book would have been to stick with a handful of examples throughout the book as each element was explained. Such deeper examples are available on the teambasedlearning.org website, but a membership fee is required to access them.

Summary

In conclusion, the book provides a strong introduction to the merits, opportunities, and challenges of TBL. While TBL is not as widespread as other inquiry-based classroom methods such as problem-based or project-based learning, it provides a more regimented structure for students to engage in their learning. It also provides more specific guidelines than other methodologies on team structure, student readiness, and activity format. As a form of active learning that can provide a structure for a wide range of course topics and class sizes, more faculty should explore TBL. The specific guidelines for team creation, the Readiness Assurance Process, the Application Activities, and assessment detailed in the chapters provide a strong, practical foundation to encourage deeper understand and engagement with the course material. Overall, this book provides an excellent step-by-step guide for considering, designing, implementing, and evaluating team-based learning.

References

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