# Learner Perceptions of Team-Based Learning (TBL) Efficacy

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#### **Abstract**

This qualitative action-research study explored learner perceptions of Team-Based Learning (TBL) efficacy in a management course at a Japanese university. Integrating Self-Determination Theory and student engagement frameworks, the research examined how TBL aligns with students' psychological needs and engagement dimensions. Findings from thematic and quantitative analyses revealed that TBL significantly enhanced students' sense of competence, autonomy, and relatedness. It also fostered behavioral, emotional, cognitive, and agentic engagement. However, challenges such as language barriers, team dynamics, and peer evaluation fairness were noted. The study underscores TBL's potential in fulfilling basic psychological needs and promoting comprehensive engagement, highlighting the need for culturally sensitive adaptations and language support in TBL implementation. These insights are pivotal for educators aiming to enhance learner engagement and satisfaction in diverse educational settings.

Keywords: Team-Based Learning (TBL), Learner Engagement, Self-Determination Theory (SDT), Cultural Context in Education

#### 要旨

この定量的なアクションリサーチ研究では、日本の大学の経営コースでのチームベース学習(TBL)の効果について学習者の認識を探求しました。自己決定理論および学生エンゲージメントの枠組みを統合することにより、TBLが学生の心理的ニーズとエンゲージメントの次元とどのように整合するかを調査しました。テーマ分析および定量分析からの所見によると、TBLは学生の能力、自主性、関連性の感覚を著しく向上させました。また、行動的、感情的、認知的、および能動的エンゲージメントも促進しました。しかしながら、言語の壁、チームダイナミクス、およびピア評価の公平性に関する課題も指摘されました。この研究は、TBLが基本的な心理的ニーズを満たし、包括的なエンゲージメントを促進する可能性を強調しており、TBLの実施において文化的に敏感に適応する事と言語サポートの必要性を浮き彫りにしています。これらの洞察は、多様な教育環境において学習者のエンゲージメントと満足度を高めることを目指す教育者にとって重要です。

### 1 Introduction

In the evolving landscape of higher education, innovative teaching methodologies like Team-Based Learning (TBL) have attracted significant attention for their potential to enhance student engagement and learning outcomes. This research paper delves into the efficacy of TBL for management students at a medium-sized university in Japan.

The primary aim of this qualitative study is to gather insights into learners' perceptions of TBL as implemented in one representative course. By focusing on the learner perspective, this research seeks to contribute to the broader understanding of TBL's effectiveness, particularly in a Japanese educational context. This context is critical, given the noted preference among Japanese for hierarchical leadership, consensus-driven decision-making, and non-confrontational disagreement styles (Meyer, 2014) – cultural nuances that may significantly influence the reception and effectiveness of TBL.

Underpinning this study are two conceptual frameworks: Self-Determination Theory (SDT), especially its emphasis on the basic psychological needs of competence, autonomy, and relatedness; and student engagement, with a particular focus on cognitive and emotional dimensions. These frameworks guide the investigation into how TBL, with its core components of individual and team readiness assurance tests (RATs), application of key concepts, and peer assessment, aligns with or challenges these psychological and engagement needs in a Japanese university setting.

As TBL continues to evolve as a pedagogical approach, this study's findings should offer significant implications for educators and institutions, particularly in similar cultural contexts. By exploring Japanese university students' perceptions, the research hopes to illuminate the nuances of implementing TBL in a setting characterized by distinct cultural and educational dynamics, thereby contributing to the ongoing discourse on effective teaching methodologies in diverse educational settings.

## 2 Literature Review

Broad overviews of TBL and the conceptual frameworks of SDT and Student (Learner) Engagement are presented here, citing key studies or publications that have informed the current study.

## 2.1 Team-Based Learning (TBL)

Team-Based Learning (TBL) is an instructional method that transforms traditional teaching approaches into dynamic learning experiences. It involves structured pre-class preparation, individual and team readiness assessment tests (RATs), immediate feedback, and application exercises (Michaelsen & Sweet, 2008; 2011). Originating in the late 1970s (Michaelsen, Bauman Knight, & Fink, 2002), TBL differs from traditional group-oriented instruction by emphasizing structured group composition, focused class activities, and the development of group cohesiveness to foster student responsibility for their own and their peers' learning (Michaelsen, Watson, Cragin & Fink, 1982).

TBL addresses common issues found in traditional group work, such as coordination challenges and varying levels of contribution, by fostering continuous dialogue, reflection, and collaboration within teams (Dochy, Segers, & Sluijsmans, 1999). This approach aligns with the increasing emphasis in universities on collaboration and teamwork as essential graduate attributes and is grounded in social constructivism theory, which emphasizes the importance of social context in learning (Vygotsky, 1978). This theory focuses on learning as an active process where the learner engages in social interactions to construct knowledge. In TBL, this translates to an environment where students actively collaborate to understand and apply concepts.

TBL requires students to engage in social communication, fostering the development of team skills and critical thinking, and its constructivist approach involves scaffolding, where students receive structured support that gradually diminishes as their understanding and skills develop (Helliar, 2013; Wood, Bruner, & Ross, 1976). In addition to organizing students into strategic teams, working through various group activities across a semester (Johnson & Johnson, 1999; Michaelsen, Knight & Fink, 2002), this cooperative learning environment is shown to result in higher academic achievements and positive student experiences (Lightner, Bober, & Willi, 2007). Key elements include:

Flipped Classroom Approach: Pre-class preparation is vital, allowing in-class time to focus on applying principles through team activities (Lage, Platt, & Treglia, 2000).

Readiness Assessment Tests (RATs): These assessment opportunities ensure students are prepared for class discussions and promote teamwork (Michaelsen & Sweet, 2008).

Formative Assessment: This involves ongoing assessment through peer and teacher feedback, enhancing the learning process.

*Team Members' Performance Feedback*: Teams undertake peer-review processes for self and group assessment.

TBL is a powerful pedagogical approach that goes beyond traditional content delivery, focusing on active learning and skill development. Its application in various disciplines demonstrates its effectiveness in enhancing both technical understanding and essential professional skills.

## 2.2 Self-Determination Theory (SDT)

Self-Determination Theory (SDT), as outlined by Ryan and Deci (2000), emerges as a robust framework for understanding learner engagement. Central to SDT are the psychological needs of competence, autonomy, and relatedness, which are essential for healthy development and effective functioning (Deci & Ryan, 2000). These elements not only foster intrinsic motivation but also aid in integrating extrinsic motivation, thereby enhancing learner aspirations and engagement (Appleton, Christenson, & Furlong, 2008; Reeve, 2012).

Reeve (2012) emphasizes the interplay between student motivation, classroom support, and the teaching context, suggesting that student motivation and engagement are inherently linked to the learning environment and the role of the educator. This relationship is seen as reciprocal, where student engagement can influence and be influenced by the teaching context.

Ryan and Deci (2000) further elaborate on the evolution of their theories from focusing on intrinsic vs. extrinsic motivation to understanding the social-contextual conditions that enable or hinder self-motivation and psychological development. In this context, the continuum of intrinsic and extrinsic motivation becomes relevant, particularly in environments where learner engagement may vary, such as in English as a Foreign Language (EFL) settings.

In the realm of competence, Deci and Ryan (2000) note that perceived competence is crucial for positive educational outcomes and well-being. This is echoed by Goto Butler (2015) in the context of Japanese EFL learning, where classroom atmosphere significantly influences learners' willingness to communicate. Regarding autonomy, studies highlight the importance of autonomy-supportive teaching styles in enhancing learner engagement (Lawson & Lawson, 2013; Reeve, 2012). For instance, Reeve, Jang,

Carrell, Jeon & Barchet (2004) found that high school teachers trained in autonomy-supportive behavior could foster higher levels of student engagement. In terms of relatedness, research indicates the significance of teacher-learner relationships across different educational levels and contexts (Hawk, Cowley, Hill & Sutherland, 2002; Reeve & Tseng, 2011; Skinner & Belmont, 1993). This aspect is particularly relevant in Japanese educational settings, where relatedness is a prominent feature of the student-student and student-teacher dynamics.

#### 2.3 Student (Learner) Engagement

Student engagement, recognized as a crucial precursor to learning and academic achievement (Appleton, Christenson & Furlong, 2008; Zyngier, 2008), has garnered significant attention in educational research. Its importance is highlighted by a growing body of literature, including reports (Dunleavy & Milton, 2009; Fredricks & McColskey, 2011), books (Coates, 2006; Shernoff, 2013), and journal special issues (Sinatra, Heddy & Lombardi, 2015).

Engagement is multifaceted, encompassing students' cognitive, motivational, affective, and social processes in academic contexts (Azevedo, 2015; Hu & Kuh, 2002). Student Engagement generally refers to students' active involvement in learning activities (Reeve, 2012), and has been conceptualized as both a process and an outcome, with different temporal, existential, directional, and moral characteristics (Coates, 2006).

Engagement is widely accepted as a multidimensional construct, including behavioral, emotional, cognitive, and, as proposed by Reeve (2012), agentic dimensions: (a) *Behavioral Engagement:* Observable actions like attendance, participation, and involvement in academic tasks (Fredericks, Blumenfeld & Paris, 2004), (b) *Emotional Engagement:* Deep involvement reflected in caring, valuing, and identifying with school experiences (Linnenbrink & Pintrich, 2003), (c) *Cognitive Engagement:* Active investment of mental energy in learning, exemplified by questioning, persistence, and mastery (Linnenbrink & Pintrich, 2003), and (d) *Agentic Engagement:* Proactive efforts to enhance learning experiences (Reeve, 2012).

Engagement in language learning has been investigated through various lenses, including corrective feedback (Ellis, 2010) and task engagement (Svalberg, 2009; Philp & Duchesne, 2016). The concept of engagement is still evolving in SLA contexts, with a need for more detailed analysis at different levels (micro to macro).

## 3 Research Design

This study aims to explore learner engagement within the context of Team-Based Learning (TBL) in a Japanese university setting, specifically focusing on students in a management program. The research design integrates qualitative methodologies to gain a comprehensive understanding of how TBL influences learner engagement, considering the multidimensional nature of engagement and the specific educational and cultural contexts of the learners.

The research objectives are to (a) examine the behavioral, emotional, cognitive, and agentic dimensions of learner engagement in TBL settings, (b) investigate the role of TBL in facilitating or hindering learner engagement among Japanese university students, and (c) explore the interplay between cultural factors and learner engagement in a TBL environment.

#### 3.1 Participants

The study will involve second-, third-, and fourth-year students enrolled in a course titled *International Relations and Cooperation*, a course comprised of English lectures and Japanese readings dealing with the causes of war, pathways to peace, and intercultural understanding. The course is one of several elective courses that are required for graduation.

### 3.2 Data Collection and Analysis

Questionnaire: This instrument, comprised of both Likert-scale and open-ended questions will be used to assess various dimensions of engagement (behavioral, emotional, cognitive, and agentic) as well as attitudes and perspectives of TBL components and structure (Appendix 1).

#### 3.3 Data Analysis

Qualitative data from open-ended questions will be analyzed using thematic analysis to identify patterns and themes related to engagement in TBL. Quantitative data from surveys will be used to generate descriptive statistics (mean and standard deviation) with the aim of supplementing qualitative data regarding the connection between engagement levels and TBL experiences.

#### 3.4 Theoretical Framework

The study will be guided by self-determination theory (specifically the basic psychological needs) and student engagement to frame the understanding of TBL in this context. This multidimensional approach allows for a comprehensive understanding of how TBL impacts different aspects of learner engagement.

#### 3.5 Ethical Considerations

Informed consent will be obtained from all participants. Confidentiality and anonymity of the participants will be maintained throughout the research process. The study will adhere to the university's ethical guidelines for research involving human subjects.

### 4 Findings

Key themes identified in the survey data are presented here for each component of TBL, specifically the readiness assurance tests (RATs), applications, and peer evaluation, as well as the basic psychological needs of competence, autonomy and relatedness. This will be followed by descriptive statistics for the Likert-scale items.

#### 4.1 RATs

Thematic analysis of students' responses reveals that RATs contributed significantly to enhancing students' sense of competency through various means, including *improved* understanding, increased engagement, collaborative learning, a sense of preparedness, exposure to diverse perspectives, and boosted confidence. However, the need to address certain challenges to optimize the effectiveness of RATs is also evident.

Representative phrases like "効率よく復習できた" (efficiently reviewed) and "理解を深めることができた" (deepened understanding) highlight the role of RATs in promoting comprehension.

Responses like "積極的に発言した" (actively participated) and "自ら意見を言ったりした" (expressed opinions) suggest that RATs encouraged active participation and engagement in the learning process.

Phrases like "分からない所はお互いに助け合い" (helping each other with difficult parts) and "チームメンバーと協力して" (cooperating with team members) emphasize the importance of collaborative learning in enhancing competency.

Responses like "ちゃんと授業外で勉強をしなければいけないのだと意識が着いた" (realized the need to study outside of class) indicate that RATs fostered a sense of responsibility and preparedness among students.

Comments like "国際的な協力に関して、そのために何が重要なのかや、現状として世界で何が起きているのかなどの具体例と合わせて知ることで、より深く内容を理解できた" (understood the content more deeply by knowing what is important for international cooperation and what is happening in the world) suggest that RATs helped students view course content from various perspectives, leading to a more comprehensive understanding.

Statements like "自分が周りと同じ解釈を持っていると分かるとそのトピックに関して自信が生まれた" (gained confidence in a topic when I realized I had the same interpretation as others) reflect how RATs contributed to building students' confidence in their understanding.

Some responses indicate challenges, such as *time constraints* during team RATs leading to decisions by majority vote rather than consensus. This aspect highlights the importance of balancing the time given for discussions and decision-making in RATs.

#### 4.2 Applications

Thematic analysis identified that team application activities in the course significantly contributed to students' understanding of complex material through collaborative learning, exposure to diverse perspectives, active engagement, application of theory to real contexts, and the development of research and analytical skills. However, managing team dynamics and ensuring effective participation from all members remain areas that require attention.

Many students highlighted the value of working together and supporting each other in understanding complex topics. Phrases like "わからないことを助け合うことができる" (able to help each other with things we don't understand) and "お互い分からないところをアドバイスし合い" (advising each other on parts we don't understand) emphasize collaborative learning's role in deepening understanding.

Responses such as "アクティブラーニングにより" (active learning) and "理解を深めることができた" (deepened understanding) suggest that active participation in team activities fostered a more profound comprehension of complex aspects of the course.

Several students mentioned gaining new insights and perspectives through team discussions. Statements like "国の歴史や戦争にいろんな視点から見つめることができた" (able to look at the history and wars of countries from various perspectives) indicate the benefit of exploring multiple viewpoints.

Responses such as "世界で起こる様々な問題について学ぶことができます" (able to learn about various issues happening in the world) demonstrate the application of course theories to real-world situations, enhancing comprehension.

Students reported that team activities encouraged them to research and analyze topics in depth, as seen in responses like "一つのことを深掘りして調べることで様々な発見があった" (deep digging into one thing led to various discoveries).

Teams discussing who should take on which role, as indicated by "誰がどの役割を担ったらいいのかを話し合う能力がついた" (gained the ability to discuss who should take on which role), suggests improved communication and effective role distribution within teams.

Some students expressed an increase in motivation and interest in course topics through team activities, as indicated by responses like "自分のわかるところは教えて、わからないところは教えてもらうように協力した" (helped by teaching what I know and learning what I don't).

A few responses hinted at challenges, such as managing absences or balancing contributions, as seen in "プレゼン作りは、一人一人に役割が割り振られて、責任を持って仕事をすることができた。しかし、当日の欠席や遅刻に対応することが難しかった" (making presentations was about assigning roles and taking responsibility, but dealing with absences or lateness on the day was difficult).

#### 4.3 Peer-Evaluation

The peer-evaluation process in the International Relations course generally had a positive impact on students' learning experiences. It motivated them to contribute more, enhanced self-awareness, encouraged active participation and communication, and fostered a sense of responsibility. However, it also brought some feelings of anxiety and pressure for a few students. It also presented challenges in terms of fair evaluation, subjectivity, and communication within the team.

Many students felt that the peer-evaluation process *motivated them to contribute* more actively to the group. Responses like "It made me put on my effort more" and "欠はもっといい点を取ろうと向上心があがるきっかけにもなった" (Next time, I want to get better points, which motivated me to improve) highlight this trend.

The process allowed students to *view their contributions objectively* and understand their strengths and areas for improvement. For example, one student mentioned, "自分の評価を知ることができ、客観的になれた" (I was able to know my evaluation and become more objective).

Students appreciated the opportunity to *recognize and reward the efforts of their peers*, as in "評価があることで頑張ったメンバーを正確に教授に伝えることができる" (With the evaluation, we could accurately communicate to the professor the members who worked hard).

The knowledge that they were being evaluated by peers led some students to *take their roles and contributions more seriously*, as seen in "評価があると知ってからは、より自分の仕事やチームの仕事を意識するようになり、責任感が持てた"

(Knowing there was an evaluation made me more conscious of my work and the team's work, and I was able to feel a sense of responsibility).

A few students expressed *feeling pressure or anxiety* due to being evaluated by their peers, as indicated by "it made me little scared for it," while other students did not perceive a significant impact from the peer-evaluation process on their learning experience.

A number of students mentioned the *challenge of evaluating their peers* fairly, particularly when giving lower scores. Statements like "it's hard to evaluate others especially low point for specific people" and "明確にチーム内でやるべき事を決めておくと良かったと思う" (It would have been better if clear tasks were decided within the team) reflect this difficulty.

Some students felt that their *evaluations might be biased*, especially when evaluating friends or acquaintances, as noted in "知り合いの評価だとバイアスがかかってしまって偏りが出てしまうように感じた" (I felt that evaluating acquaintances could lead to biased and skewed results).

#### 4.4 Basic Psychological Needs

The International Relations course and the TBL approach appear to have largely met students' needs for competency, autonomy, and relatedness, enhancing their understanding, promoting independent learning, and fostering teamwork and international awareness. However, challenges related to language barriers and course complexity were also noted, indicating areas for potential improvement.

Students expressed that the course helped them gain a deeper understanding of complex international issues, as seen in comments like "戦争についてあまり知識がなかったがこの講座を通して、その国際問題についてよくしることができた" (I didn't know much about war, but through this course, I was able to understand international issues better). This enhancement of understanding directly relates to their sense of competency in grasping the subject matter.

Students felt that the course structure and activities, particularly group work, promoted *self-directed learning and autonomy*. Statements like "コースでのグループワークは、グループ内で自主的に行動しようとするのに役立った" (Group work in the course helped us to act autonomously within the group) illustrate this.

Many responses highlight the importance of *teamwork and building relationships* within the group. Comments like "チームの協力" (team cooperation) and "グループワ

ークが多かったため、発言する場、意見を聞く場が設けられていた" (There were many group works, which provided opportunities to speak and listen to opinions) show that students valued the collaborative aspect of the course.

The course content and activities seem to have *broadened* students' *perspectives* on international issues and cultures. This is evident in responses like "自分の国際的な視野について広げられた" (I was able to broaden my international perspective).

The course encouraged students to research and analyze topics, *enhancing their skills* in these areas. This is reflected in responses like "現在のイスラエルの問題についても知ることができ、自発的に調べるようになった" (I was able to learn about current issues in Israel and started to research proactively). Several students also mentioned that the course contributed to their *personal growth and confidence* in discussing international issues, as in "満たしました。なぜなら、意見を述べたり、今までにない学びを得ることができたから" (It met [my needs] because I could express my opinions and learn things I had never learned before).

While many students felt that their needs were met, some expressed that there were aspects of the course that did not fully meet their expectations or needs. This is evident in varied responses ranging from satisfaction to a *need for more comprehensive reviews or support*. Some students mentioned difficulties in understanding due to *language barriers* or the *complexity of the content*, as seen in "英語でのコミュニケーションは難しいか" (Communication in English is difficult).

4.5 Quantitative Data (International Relations)

Item	Mean	SD
The individual RATs made me feel confident in my understanding of the weekly topics. / 個人RATは、週次のトピックに対する理解の自信を感じさせました。	4.7	1.0
The team RATs enhanced my sense of collaboration and team learning. / チームRATは、協力とチーム学習の感覚を高めました。	4.78	1.1
The team applications like policy briefs and case study presentations were effective learning tools. / 政策ブリーフやケーススタディプレゼンテーションなどのチーム適用は、効果的な学習ツールでした。	4.88	0.8
These activities helped me feel more autonomous in applying the course concepts. / これらの活動は、コースの概念を適用する際の自主性を高めるのに役立ちました。	5.04	0.8
This course enhanced my sense of competency in international relations. / このコースは、国際関係における私の能力感を高めました。	5.02	0.8
The course structure and activities supported my need for autonomy. / コースの構造と活動は、自主性のニーズをサポートしました。	4.98	0.9

I felt a sense of relatedness and connection with my peers through team-based activities. / チームベースの活動を通じて、仲間との関連性やつながりを感じました	5.0	0.9
The peer evaluation process was clear and fair. / ピア評価プロセスは明確で公平でした。	4.84	0.9
Peer evaluations contributed to my understanding of my role and contributions in the team. / ピア評価は、チーム内での自分の役割と貢献を理解する上で役立ちました。	4.78	0.9
The course met my expectations. / コースは私の期待に応えました	4.98	0.8
I would recommend this course to other students. / 他の学生にこのコースをお勧めします。	5.04	0.8

Overall, these results indicate a highly positive response from students, with particularly strong perceptions of autonomy, relatedness, competency, and perceived effectiveness across various aspects of the course.

#### 4.5 Summary

In summary, the most beneficial aspects of the International Relations course, as perceived by the students, included the practical application of knowledge through group work and presentations, the development of English language skills, and a deeper understanding of international issues and perspectives. These elements not only enhanced their academic knowledge but also contributed to the development of critical thinking, communication, and cooperation skills.

While many students were satisfied with the course, there were clear areas for improvement identified. These include managing group sizes for more effective team dynamics, balancing English and Japanese in course content for better comprehension, and refining the peer evaluation process. Additionally, there's an interest in more diverse interactions within the class and a continuation of helpful elements like iRATs. These insights can be crucial for course development to enhance the learning experience.

#### 5 Discussion

Findings from this action-research study at a medium-sized university in Japan offer several significant insights into how TBL aligns with the conceptual frameworks of Self-Determination Theory (SDT) and student engagement. The data reveals a strong correlation between the TBL approach and the fulfillment of basic psychological needs of competence, autonomy, and relatedness, as well as the promotion of behavioral, emotional, cognitive, and agentic dimensions of student engagement.

Competence: Students' responses indicate that TBL, particularly through RATs and application activities, significantly enhanced their sense of competence. This aligns with the SDT perspective, which emphasizes the need for feeling competent in one's environment (Ryan & Deci, 2000). The TBL's structure, with its focus on application exercises and immediate feedback, resonates with Michaelsen & Sweet's (2008) emphasis on active learning, contributing to a deeper understanding and skill development in international relations.

Autonomy: The study's findings suggest that TBL supported students' need for autonomy. The freedom to engage in self-directed learning and make decisions within

their teams likely contributed to this sense of autonomy, consistent with Reeve's (2012) emphasis on autonomy-supportive teaching styles. This is particularly noteworthy given the traditional preference for hierarchical structures in Japanese educational contexts.

Relatedness: TBL's focus on teamwork and collaborative learning fostered a strong sense of relatedness among students. This finding is in line with SDT, which posits that feeling connected with others is a basic psychological need (Deci & Ryan, 2000). The emphasis on peer evaluation and teamwork reflects the importance of social interactions in learning, as underlined by Vygotsky's (1978) social constructivism theory.

Student Engagement: The engagement dimensions were clearly evident in the TBL setting. Behavioral engagement was observed in students' participation and involvement in RATs and team applications. Emotional engagement was reflected in students' interest and enjoyment in learning activities. Cognitive engagement was demonstrated through the deep processing of content, as students applied theories to real-world contexts. Lastly, agentic engagement, as proposed by Reeve (2012), was evident in students taking an active role in enhancing their learning experiences.

The observed benefits of TBL in this study resonate with the existing literature. As discussed by Michaelsen, Bauman Knight, & Fink (2002), TBL's structured group activities and emphasis on individual accountability and group cohesiveness effectively address common issues in traditional group work, which is consistent with the positive outcomes reported by the students in this study.

In terms of pedagogical implications, there seem to be a clear need to (a) recognize and adjust for cultural Context with TBL, (b) enhance language support, (c) refine peer evaluation, and (d) focus on team dynamics.

Given the traditional Japanese educational preferences, it is crucial to adapt TBL in a way that respects cultural nuances while promoting active learning. For instance, integrating hierarchical elements within TBL might help in easing the transition for students more accustomed to traditional learning environments.

Considering the language challenges, providing additional support for English language comprehension could enhance the efficacy of TBL in this context.

To address concerns about fairness and subjectivity in peer evaluations, educators could develop more structured and transparent criteria, possibly incorporating self-assessment components.

Effective team formation and management are essential. This includes ensuring balanced team sizes and diverse skill sets to foster a more inclusive and effective learning environment.

### 6 Conclusion

In conclusion, the alignment of the course with contemporary educational theories, particularly regarding student engagement and active learning, suggests the effectiveness of team-based learning. The divergences, meanwhile, offer valuable insights into customizing teaching approaches based on course content and objectives. These findings contribute to the broader discourse on effective teaching strategies in higher education, particularly in using TBL to promote student engagement, autonomy, and competence.

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#### **Appendix 1 - Questionnaire**

Current Year of Study / 学年 Gender / 性別 Study Abroad Experience

If answering yes, where and for how long did you study abroad? 「はい」とお答えの場合、どこで、どのくらいの期間留学しましたか?

The individual RATs made me feel confident in my understanding of the weekly topics. / 個人RATは、週次のトピックに対する理解の自信を感じさせました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う The team RATs enhanced my sense of collaboration and team learning. / チームRATは、協力とチーム 学習の感覚を高めました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う How did the RATs (individual or team) contribute to your sense of competency in the course material? / RAT (個人またはチーム) は、コース内容に対する能力の感覚にどのように貢献しましたか? The team applications like policy briefs and case study presentations were effective learning tools. / 醸造プロセスのビデオ、ポスタープレゼンテーション、地域のビデオなどのチーム適用は、効果的な学習ツールでした。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う These activities helped me feel more autonomous in applying the course concepts. / これらの活動は、コースの概念を適用する際の自主性を高めるのに役立ちました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う Describe how a specific team application activity helped you in understanding a complex aspect of the course. / 特定のチーム適用活動が、コースの複雑な側面を理解するのにどのように役立ったか説明してください。

This course enhanced my sense of competency in international relations. / このコースは、国際関係における私の能力感を高めました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う The course structure and activities supported my need for autonomy. / コースの構造と活動は、自主性のニーズをサポートしました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う I felt a sense of relatedness and connection with my peers through team-based activities. / チームベース の活動を通じて、仲間との関連性やつながりを感じました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う Can you provide an example of how the course met or did not meet your needs for competency, autonomy, or relatedness? / コースが、能力、自主性、または関連性のニーズを満たしたか満たしていないかの例を挙げてください。

The peer evaluation process was clear and fair. / ピア評価プロセスは明確で公平でした。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う Peer evaluations contributed to my understanding of my role and contributions in the team. / ピア評価は、チーム内での自分の役割と貢献を理解する上で役立ちました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う How did the peer-evaluation process impact your learning experience in the course? / ピア評価プロセスが、コースでの学習経験にどのように影響しましたか?

Can you share any insights or challenges you experienced during the peer evaluation? / ピア評価中に経験した洞察や課題を共有できますか?

The course met my expectations. / コースは私の期待に応えました。

Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う I would recommend this course to other students. / 他の学生にこのコースをお勧めします。 Strongly Disagree / 非常にそう思わない 1 2 3 4 5 6 Strongly Agree / 非常にそう思う。 What aspect of the course did you find most beneficial? / コースの中で最も有益だった部分は何でしたか?

What improvements would you suggest for the course? / コースの改善点について提案はありますか? Any other comments or suggestions? / その他のコメントや提案はありますか?