RESEARCH ARTICLE

WWW:loJet.org

Equal Competence, Divergent Meanings: Reframing Communication in Team-Based Learning

Shin-Il Han¹, Hyesook Son ^{2*}

^{1,2}Sungkyunkwan University, South Korea

Keywords:

Communication competence, Learning preference, Team-preferred learning, Individual-preferred Learning, team-based learning, Higher education

Author's Email (i): sihan@skku.edu, hvesookson@skku.edu

Author's Orcid (i): 0000-0002-6280-3859, 0009-0000-0742-3848

Received: 15.08.2025 **Revised**: 25.11.2025 **Accepted**: 29.11.2025

ABSTRACT

This study investigates how university students with different learning preferences—team-based versus individual—interpret communication within a collaborative learning environment. Adopting a mixed-methods design, the research integrates quantitative comparison and qualitative content analysis to examine both equivalence and divergence in students' communicative experiences. Thirty undergraduates participated in a semester-long team-based learning course at a research university in Seoul, Korea. Quantitative analysis revealed no significant difference in measured communication competence between the two preference groups. However, qualitative findings uncovered contrasting patterns of meaning and engagement. Team-preferred learners tended to describe communication as a relational and co-constructive process grounded in empathy, openness, and shared understanding, while individual-preferred learners viewed it as a more instrumental and self-regulated activity emphasizing clarity, control, and efficiency. The results suggest that equal competence does not necessarily imply uniform understanding. Rather, identical experiences can produce divergent interpretations of communication and collaboration. This study offers pedagogical implications for higher education practices that balance relational and autonomous modes of learning.

How to cite this article: Han, Shin-Il & Son, Hyesook. (2026). Equal Competence, Divergent Meanings: Reframing Communication in Team-Based Learning. International Online Journal of Education and Teaching, Vol. 13, No. 1, 2026, 32-45

INTRODUCTION

In contemporary higher education, communication competence has emerged as one of the most essential foundations for learning, collaboration, and social participation. Communication is not merely a channel for transmitting information but the process through which learners construct meaning, negotiate relationships, and co-create knowledge in both academic and professional contexts. Global universities increasingly emphasize communication as a core dimension of employability, teamwork, leadership, and critical thinking (Kember, 2009). In South Korea, competency-based higher education likewise institutionalized frameworks have communicative ability as an integrated learning outcome that combines cognitive understanding

Copyright © 2026 by International Online Journal of Education and Teaching (IOJET). ISSN: 2148-225X. Material published and so copyrighted may not be published elsewhere without written permission of IOJET. with socioemotional growth (KEDI, 2021). From this perspective, communication represents more than a technical skill. It serves as a measure of how students engage with others, with ideas, and with the broader learning community.

Despite this institutional recognition, communication competence is often treated as a standardized and quantifiable construct—something measurable through behavioral indicators, self-report scales, or performance assessments. While such approaches provide valuable metrics, they risk detaching communication from its lived and philosophical dimensions. In practice, communication is not a neutral or value-free capacity; it embodies each learner's worldview of knowledge, selfhood, and human interaction. To communicate, therefore, is to express one's philosophy of learning such as relational and co-constructive or individualistic and efficiency-oriented.

Team-based learning (TBL) provides a pedagogical environment in which these philosophical orientations become visible. As an instructional approach, TBL has been widely recognized for fostering engagement, deeper understanding, and shared responsibility (Hmelo-Silver, 2004; Johnson & Johnson, 2009). Although cooperative and problem-based learning frameworks provide theoretical grounding, TBL represents a distinct pedagogical approach with its own well-established instructional design and empirical tradition. TBL, first developed by Michaelsen and colleagues, is characterized by essential features such as permanent teams, structured readiness assurance processes, application-focused team tasks, and explicit accountability mechanism (Michaelsen & Sweet, 2008). Recent higher education research further demonstrates that these design principles enhance engagement, and higher-order communication, reasoning across diverse disciplines (Pamelee et al., 2020; Sibley, 2018; Behling, 2021). By situating the present study within TBL-specific body of literature, we clarify that the communicative experiences examined here emerge within a structured and theoretically grounded TBL environment, thereby strengthening the conceptual alignment of this study with contemporary TBL scholarship.

TBL transforms learning into a dialogic process of collective meaning-making. However, prior studies

have also shown that not all learners thrive within such collaborative contexts. For some, teamwork promotes empathy, motivation, and belonging; for others, it introduces inefficiency, emotional strain, or loss of autonomy (Cohen, 1994; Kirschner, 2017). Thus, the same communicative environment can evoke fundamentally different psychological and philosophical responses. These variations cannot be fully explained by behavioral tendencies alone but rather by underlying learning philosophies, which are students' beliefs about what learning is and how it should occur.

Such philosophical divergence aligns with two broad orientations in educational theory. On one hand, social constructivism conceptualizes knowledge as cocreated through dialogue and intersubjective exchange (Vygotsky, 1978; Schunk & Zimmerman, 2003). On the other hand, self-regulated learning theory views learning as an autonomous process of mastery and reflection (Zimmerman, 2002; Winne & Perry, 2000). These orientations, in turn, shape how students interpret communication itself: either as a relational practice of shared growth or as an instrumental tool for control and precision. Consequently, communication competence also operates as a mirror of epistemological difference, in the sense that it reflects how students understand what counts as valid knowledge and effective interaction. While, for some, communication mirrors a worldview grounded in shared understanding and empathy, for others, it mirrors an orientation toward clarity, control, and precision. Consequently, even when students display comparable levels of communication competence, they may embody distinct communicative intentions, which are different notions of what constitutes good communication. The paradox thus emerges: equal competence, divergent meanings. What appears as similarity in quantitative measures conceals profound qualitative and philosophical variation.

Previous research on cooperative learning has primarily focused on comparing performance outcomes, motivation, or satisfaction between collaborative and individual learners (Deci & Ryan, 2000; Laal & Ghodsi, 2012). However, the interpretive dimension, namely how and why learners construct different meanings from the same communicative

experience, remains underexplored. Few studies have examined how students' learning preferences within a common team-learning environment translate into distinct ways of perceiving, valuing, and enacting communication. This study aims to address that gap by treating communication competence not merely as a behavioral measure but as a philosophical enactment of learning preference and identity.

To accomplish this goal, the present study adopts a mixed-methods design that integrates quantitative assessment with in-depth qualitative analysis. It examines how learning preference shapes students' motivations, perceived roles, and sources of satisfaction within the same TBL context. The purpose is not to determine whether team or individual learning is superior but to explore how learners interpret communication differently through their preferred orientations. By framing these interpretations within a shared learning environment, the study highlights the multiplicity of communicative meanings that coexist in a single educational space.

The term learning preference of this study is used intentionally to avoid the conceptual problems associated with the traditional notion of learning styles. Learning styles theories-such as visual, auditory, kinesthetic typologies - have been widely critiqued as lacking empirical validity and theoretical coherence, and are often regarded as a myth within contemporary educational research (Kirschner, 2017). We, therefore, do not treat learning preference as a fixed, internal trait, or cognitive type. Rather, we conceptualize preference as a context-dependent inclination toward particular learning environments (e.g. team-based vs. individual), shaped by students' motivations, prior experiences, and epistemological beliefs. This distinction positions the present study outside the learning styles tradition and aligns it with critiques emphasizing the dynamics and situational nature of learning. By explaining this distinction, we aim to prevent misinterpretation and strengthen the conceptual rigor of the study. Learning preference in this study refers not to stable psychological categories but to students' self-reported orientations that influence how they interpret communicative and collaborative experiences.

This study adopts an integrative theoretical orientation that combines three complementary

perspectives. A sociocultural perspective frames communication as co-constructed meaning-making within interaction (Vygotsky, 1978). A self-regulated learning perspective interprets communication as an autonomous, efficiency-oriented activity shaped by learners' cognitive control (Zimmerman, 2002). Finally, dialogical and phenomenological views position communication as an existential mode of relating, which is either relational and empathic or instrumental and procedural. These perspectives collectively guide the analysis by clarifying how learners with different preferences enact communication differently within the same TBL structure.

Accordingly, this research addresses the following questions: a) How do team-preferred and individual-preferred learners differ in their motivations and reasons for learning? b) How do these groups differ in their perceived roles, levels of contribution, and communication dynamics within team activities? c) How do their experiences of satisfaction differ in source, structure, and emotional tone under the same team-learning context? d) How do equivalent levels of communication competence reflect fundamentally different communication philosophies between the two preference groups?

These questions position learning preference not as a background variable but as an interpretive key for understanding communicative variation. They guide the inquiry toward how shared pedagogical experiences are internally reconstructed into divergent learning philosophies, revealing how students' communicative practices embody distinct modes of meaning-making and being. Through this lens, communication competence emerges not merely as a shared ability but as a performative philosophy of learning, a medium through which students express their underlying assumptions about collaboration, autonomy, and the purpose of education.

METHODOLOGY

Participants

A total of thirty undergraduate students enrolled in a freshmen seminar at a research university in Seoul, Korea, participated in the study. All students were assigned to TBL activities throughout the semester, including collaborative projects, reflective discussions, and team presentations. Although the students shared the same instructional design, they reported different learning preferences: 17 preferred team-based learning and 13 preferred individual learning. These two preference groups were defined as the comparative units of analysis for both the quantitative and qualitative strands. All data were collected during the course of instruction, and participants provided informed consent in compliance with the university's institutional research ethics guidelines.

Instruments

Communication Competence Scale

Students' communication competence was assessed the Communication Competence developed originally by Choi (2004), which was adapted from Navran's Primary Communication Inventory (Navran, 1967). This scale was designed to measure the degree of communicative effectiveness perceived by individuals in interpersonal and group contexts. It consisted of 25 items covering three dimensions of verbal communication ability, nonverbal communication ability, and communication anxiety. All items were rated on a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The scale has been widely used in Korean communication and educational studies, demonstrating stable reliability and construct validity (Choi, 2004; Bae, 2015). In Choi's (2004) original validation study, the scale demonstrated satisfactory internal consistency (Cronbach's $\alpha = .84$), while Bae's subsequent study reported $\alpha = .76$. In the present study, the scale yielded an overall reliability coefficient of $\alpha = .82$, indicating acceptable internal consistency for the current sample. This measure was selected because it captures both behavioral and affective dimensions of communication aligning with the study's aim to understand communication competence as a performative and philosophical construct rather than a purely technical skill.

Open-Ended Questions

To explore how students interpret and experience communication within TBL, three open-ended items

were designed to complement the quantitative instruments.

Reasons for Learning Preference

Students were first asked to indicate which mode of learning they preferred (team-based or individual) and to describe why they preferred it. These responses were expected to reveal personal, cognitive, and affective factors underlying learning preference. Qualitative analysis aimed to identify recurring themes and to construct a preliminary coding framework for understanding students' motivational orientations.

Role Perception and Contribution in the team activity

At the conclusion of the semester, students were prompted to reflect on their participation in teambased activities through the question, "What was your role and contribution in the team activity?" The intent of this question was to capture students' self-perceptions of their communicative and functional engagement within group processes. Their written accounts were to be analyzed inductively to generate categories reflecting different patterns of agency, collaboration, and communicative function within the team.

Learning Satisfaction

Students were also asked to rate their overall satisfaction and to explain their reasons for the score in response to the item, "Rate your overall satisfaction and explain the reason for your score." The satisfaction item employed a 10-point scale, where students indicated how satisfied they felt with their team-learning experience. The quantitative ratings, however, showed a ceiling effect, with an average score of 9.83 out of 10, indicating that nearly all participants gave a perfect score. Given the lack of meaningful variation, the numeric results were excluded from further interpretation. Instead, only the qualitative explanations were analyzed to capture students' affective and evaluative reflections on the team-learning experience. These openended responses provided rich qualitative data that complemented the other datasets by revealing how students conceptualized satisfaction within relational and instrumental communication frameworks.

Research Design and Analytic Approach

The study employed a comparative mixed-methods design (Creswell & Plano Clark, 2018), integrating quantitative comparison and qualitative meaning analysis. This design was intended to examine how differences in learning preference might influence both the perceived effectiveness and the interpretive meanings of communication competence within a shared TBL environment.

Quantitative Analyses

Quantitative analyses were planned to determine whether the two preference groups (team-preferred and individual-preferred) differ significantly in communication competence, teamwork attitude, and overall learning satisfaction. Because the sample size was relatively small (N = 30), the statistical power to detect subtle between-group effects was limited. Accordingly, the null results are interpreted as indicative rather than definitive and used primarily to motivate the subsequent qualitative inquiry. Independent-samples t tests were conducted using SPSS Version 29. The results were served as a baseline for interpreting whether any observed qualitative differences reflect underlying attitudinal distinctions rather than measurable performance gaps.

Qualitative Data Analysis

The qualitative component of the study was designed to examine the interpretive dimension of students' experiences through inductive content analysis (Elo & Kyngäs, 2008). Three datasets (responses regarding learning-preference reasons, role and contribution, and satisfaction explanations) were analyzed to identify recurring meanings and philosophical

orientations toward communication. To construct the coding framework systematically from participants' responses, a four-stage procedure was planned and implemented.

Stage1: Open Coding.

Individual sentences or phrases expressing distinct meanings were to be identified as meaning units. Preliminary examples of open coding were anticipated to resemble those shown in Table 1, which presents illustrative excerpts across three domains.

Stage 2: Axial Coding and Category Formation.

Related codes were grouped into broader conceptual categories to form code frames for each domain, which are learning preference, role and contribution, and learning satisfaction. The expected format of these code frames is exemplified in Tables 2-4, serving as analytic templates rather than fixed outcomes.

Stage 3: Verification and Reliability.

Two researchers independently coded all qualitative responses. After the initial coding, the researchers compared their coding decisions and discussed any discrepancies until full consensus was reached. Intercoder reliability was strengthened through iterative refinement of the coding scheme, and agreement was confirmed before finalizing the thematic categories. Approximately 85% agreement was achieved across the sampled responses, reflecting satisfactory coding consistency. Following established qualitative standards (Miles & Huberman, 1994; Campbell et al., 2013), consensus-based validation was employed to ensure interpretive rigor in category formation.

Table 1: Examples of initial open coding across three domains

Domains	Example Responses	Initial Open Code (Category)
Learning Professors	I understand more when discussing with others.	Cooperation
Learning Preference	I can focus better when I work alone.	Autonomy
Role & Contribution	I took the leader role and managed our meeting times.	Leader
	I mostly followed what others decided.	Passive Participant
Satisfaction	The team atmosphere was friendly and encouraging.	Emotional Climate
	Tasks were distributed fairly and done quickly.	Efficiency

Table 2: The domain of learning preference code frame (7 categories)

Category	Subcodes	Example Responses	Orientation
Cooperation	idea sharing, mutual understanding	I understand more when discussing with others.	Relational-Constructive
Shared Growth	learning through peers, mutual progress	We grow together through feedback.	Relational-Constructive
Enjoyment	interest, pleasure in interaction	It was fun to share opinions with peers.	Relational-Constructive
Social Connection	belonging, team bond	I felt closer to my teammates.	Relational-Constructive
Efficiency	time saving, task division	We can finish work faster by dividing roles.	Instrumental-Regulative
Autonomy	independent study, self- control	I can focus better when I work alone.	Instrumental-Regulative
Conflict Avoidance	stress reduction, comfort seeking	Group conflicts are tiring, so I prefer working alone.	Instrumental-Regulative

Table 3: The domain of role and contribution code frame (6 categories)

Category	Subcodes	Example Responses	Orientation
Leader	organizing, facilitating, guiding	I took the leader role and managed our meeting times.	Relational-Constructive
Coordinator	scheduling, monitoring tasks	I kept track of deadlines and task progress.	Instrumental-Regulative
Idea Contributor	brainstorming, creative input	I led brainstorming and shared creative suggestions.	Relational-Constructive
Researcher	information search, summa- rizing	I searched references and summarized key points.	Instrumental-Regulative
Designer	visualizing, presenting	I made the PowerPoint slides and presented efficiently.	Instrumental-Regulative
Passive Participant	minimal involvement	I mostly followed what others decided.	Instrumental-Regulative

Stage 4: Cross-Group Comparison.

After the code frames were established, the frequency and contextual use of each category were compared between the two learning-preference groups. This step was designed to identify potential contrasts in how students with different preferences conceptualize communication, teamwork, and satisfaction.

RESULTS AND DISCUSSION

Before proceeding to broader conceptual interpretations, it is important to clarify how the main findings emerged from the analytic process.

The qualitative patterns reported in Table 6-8 were derived through open coding, category formation, and cross-group comparison. Across the datasets, two coherent orientations consistently appeared: a relational-constructive pattern for team-preferred learners and an instrumental-regulative pattern for individual-preferred learners. These empirical contrasts form the evidentiary foundation for the interpretive claims that follow. The subsequent discussion therefore builds directly on these patterns to explain not only what the groups reported but why these differences take distinct communicative and philosophical forms within a shared TBL context.

Category	Subcodes	Example Responses	Orientation
Course Design	organization, clarity	The course was well- structured and clear.	Neutral
Instructor Feedback	guidance, responsiveness	The instructor's feedback helped me improve.	Relational-Constructive
Emotional Climate	comfort, trust, openness	The team atmosphere was friendly and encouraging.	Relational-Constructive
Team Atmosphere	belonging, mutual support	We supported each other like friends.	Relational-Constructive
Enjoyment	fun, interest, engagement	I enjoyed exchanging opinions with peers.	Relational-Constructive
Autonomy	freedom to express ideas	I liked that I could freely express my opinions.	Instrumental-Regulative
Efficiency	time management, productivity	Tasks were distributed fairly and done quickly.	Instrumental-Regulative
Fairness	equal contribution and evaluation	Everyone contributed equally to the work.	Neutral

Table 4: The domain of learning satisfaction code frame (8 categories)

The findings directly address the study's four questions. Team-preferred research learners described communication as cooperation, shared understanding, and relational engagement, whereas individual-preferred learners emphasized autonomy, clarity, and efficiency. In role enactment, relational learners tended toward collaborative or facilitative roles, while individual learners concentrated on research, design, and procedural roles. Satisfaction patterns diverged similarly, with relational learners valuing emotional climate and mutual support, and instrumental learners emphasizing fairness, structure, and efficiency. These consistent patterns across domains provide a clear, data-grounded basis for interpreting why equal communication competence conceals divergent communicative orientations.

The conceptual framework of this study organizes core constructs such as communication competence, meaning-making, relational presence, and learner agency into two overarching orientations: relational-

constructive and instrumental-regulative. The relational orientation links communication with empathy, shared understanding, and collaborative agency, while the instrumental orientation connects communication with clarity, control, and task efficiency. This framework structures the qualitative analysis, showing how equal communication competence manifests as contrasting philosophical approaches to interaction in TBL.

Statistical Analysis as a Foundation for Qualitative Inquiry into Communication

Independent-samples t-tests revealed no statistically significant differences between the team-preferred and individual-preferred groups in their mean communication competence scores (p > .05).

Both groups exhibited comparable levels of self-reported communicative ability, indicating that measured competence alone does not sufficiently capture the diversity of how communication is

Table 5. Independent samples t-test results for communication competence by learning preference

	Team-preferred (n=17)	Individual-preferred (n=13)	t-value	р
	Mean(SD)	Mean(SD)		
communication-	3.78(.49)	3.63(.43)	.88	.39
competence				

^{*}p<0.05

perceived or enacted. Rather than treating this nonsignificant difference as an analytic limitation, it served as a conceptual starting point for deeper inquiry. The absence of statistical distinction was interpreted not as a failure to differentiate, but as evidence that quantitative parity can mask qualitative diversity. In this study, "no difference" at the statistical level became an invitation to examine what such equality conceals, namely, the divergent philosophical and emotional orientations underlying students' communicative behavior. Within a mixedmethods framework, numerical similarity often provides the precondition for interpretive depth. Thus, statistical similarity served as an empirical gateway for exploring interpretive diversity. Here, the quantitative equilibrium justified exploring why learners who appear equally competent in measurable terms articulate, perform, and value communication in strikingly different ways. Accordingly, the subsequent qualitative analysis was designed to uncover the underlying orientations, assumptions, and affective textures that structure students' communicative experiences within a shared team-learning environment.

Qualitative Findings

These findings align with recent studies showing that students' internal orientations of motivation, epistemic beliefs, and communicative stance shape their engagement and meaning-making in team-based environments beyond measurable competence scores (Parmelee et al., 2020; Behling, 2021). The present study extends this literature by demonstrating how relational-constructive and instrumental-regulative orientations emerge inside the same TBL environment and by showing that equal communication competence does not guarantee uniform communicative philosophy or engagement.

Learning-Preference Categories

As display ed in Table 6, learning preference revealed two sharply contrasting patterns. Team-preferred learners predominantly expressed relational motivations: cooperation (82%), shared growth (59%), enjoyment (53%), and social connection (47%). Individual-preferred learners, conversely, empha-

sized instrumental orientations: autonomy (85%), efficiency (62%), and conflict avoidance (69%).

The occurrence frequency of each category was calculated for both groups using the following formula: Frequency (%) = Number of participants who mentioned the category /Total number of participants in the group×100. For instance, if 14 of 17 team-preferred learners mentioned "cooperation," the occurrence frequency was calculated as 14÷17×100=82%. This metric quantified how often each concept appeared, transforming qualitative patterns into interpretable numerical indicators of philosophical emphasis.

These proportions illustrate not simply behavioral tendencies but distinct ways of situating the self within the learning process. For team-preferred learners, statements such as "I understand more when discussing with others" or "We grow together through feedback" depicted communication as a dialogic act that constructs knowledge through shared interpretation. Their learning motivations stemmed from empathy, mutual understanding, and collective meaning-making, which are what Dewey (1916) describes as the social continuity of experience.

For individual-preferred learners, in contrast, expressions like "I can focus better when I work alone" and "Group conflicts are tiring" framed learning as an autonomous pursuit. Their communication was characterized by control, clarity, and the avoidance of unnecessary negotiation, consistent with the self-regulatory logic described by Zimmerman (2002).

These results indicate that learning preference functions as a philosophical stance rather than a stylistic one. Team-preferred learners appear to embody a relational-constructive philosophy, viewing communication as co-presence and co-creation of meaning. Individual-preferred learners enact an instrumental-regulative philosophy, valuing communication as an instrument for achieving clarity, task completion, and cognitive efficiency.

Moreover, cultural factors may underlie these distinctions. In Korean university contexts, where group harmony is socially valued yet academic evaluation remains individually competitive, students often oscillate between collectivist ideals

Category Team-Preferred (n=17) Individual-Preferred (n=13) Orientation Cooperation 14 (82%) 2 (15%) Relational-Constructive Shared Growth 10 (59%) 3 (23%) Relational-Constructive Enjoyment Relational-Constructive 9 (53%) 2 (15%) Social Connection 8 (47%) Relational-Constructive 1 (8%) Efficiency 6 (35%) 8 (62%) Instrumental-Regulative 3 (18%) 11 (85%) Instrumental-Regulative Autonomy Conflict Avoidance 2 (12%) 9 (69%) Instrumental-Regulative

Table 6: Learning preference categories by group

and individual performance pressures. The contrast between cooperation and autonomy in this analysis likely reflects that broader cultural tension. Thus, the learning-preference differences observed here may embody not only personal learning styles but also culturally mediated negotiations of identity and responsibility.

Role Distribution

Role analysis (Table 7) further clarified how these philosophical orientations were enacted behaviorally within team settings. Team-preferred learners were more likely to assume leader (53%) or idea contributor (71%) positions. These roles entail social coordination, motivational communication, and interpretive dialogue, all of which align with relational-constructive values. Students frequently described themselves as those who "kept everyone motivated," "helped mediate opinions," or "made sure everyone was heard." Such discourse reveals an affective investment in maintaining the communicative climate, not merely accomplishing the task.

Individual-preferred learners, on the other hand, concentrated in roles such as researcher (62%), designer (62%), or passive participant (38%). These positions privilege independent effort, technical

precision, and the minimization of social friction. Students in these categories often articulated satisfaction in "managing tasks efficiently" or "finishing work quietly," reflecting a disciplined, task-driven ethos. Even the coordinator role, shared across both groups, bore different meanings because team-preferred coordinators emphasized group scheduling and emotional balance, while individual-preferred coordinators focused on deadlines, logistics, and accountability.

These findings illuminate how similar task labels can mask divergent communicative orientations. Leadership, for example, can emerge as either relational guidance or procedural control, and contribution can mean either shared dialogue or discrete production. Thus, "role" is not a fixed structural variable but a communicative performance shaped by one's underlying philosophy of learning. This underscores the study's central premise which implies communication competence is not the same as communicative meaning.

Satisfaction Patterns

The analysis of satisfaction (Table 8) extended the interpretive contrast into the affective dimension of learning. Team-preferred learners derived satisfaction primarily from

Table 7. Role distribution by group

, ,			
Category	Team-Preferred (n=17)	Individual-Preferred (n=13)	Orientation
Leader	9 (53%)	2 (15%)	Relational-Constructive
Coordinator	6 (35%)	5 (38%)	Instrumental-Regulative
Idea Contributor	12 (71%)	4 (31%)	Relational-Constructive
Researcher	8 (47%)	8 (62%)	Instrumental-Regulative
Designer	7 (41%)	8 (62%)	Instrumental-Regulative
Passive Participant	2 (12%)	5 (38%)	Instrumental-Regulative

relational qualities-emotional climate (76%),team atmosphere (59%), enjoyment (53%), instructor feedback (53%), and course design (41%). Their responses frequently contained words such as comfortable, friendly, open, and encouraging, describing communication as a medium of belonging and mutual growth. They regarded emotional resonance as an indicator of meaningful learning: "When the team was positive, I learned more," or "It was meaningful to support each other." For these students, satisfaction was inseparable from human connection, which means communication held intrinsic value because it sustained empathy, trust, and the experience of shared presence.

contrast, individual-preferred learners articulated satisfaction in instrumental procedural terms such as autonomy (69%), efficiency (77%), and fairness (62%). Their sense of fulfillment arose from clear task division, balanced grading, and predictable processes: "I liked when everyone finished their part on time," or "Fairness was most important." For them, communication functioned as a tool for coordination and error reduction rather than as an affective exchange. Emotional tone was restrained, with relational warmth mattering only insofar as it supported order, clarity, and equity. This pattern reflects what Goffman (1959) called the interactional management of self-presentation, implying communication as the regulation of boundaries rather than their opening.

Together, these orientations reveal two legitimate yet contrasting affective logics of satisfaction. Team-preferred learners equate satisfaction with shared emotional vitality, whereas individualpreferred learners equate it with structural balance and cognitive efficiency. The same communicative discussion-was event-team thus interpreted either as a site of relational fulfillment or as a test of procedural rationality, reaffirming the dualorientation framework of Relational-Constructive versus Instrumental-Regulative communication.

Integrated Orientation of Communication

Across the three domains, the synthesis in Table 9 captures the coherence of these orientations. Team-preferred learners' discourse clustered around dialogue, empathy, and shared meaning, revealing a relational-constructive worldview. Individualpreferred learners' discourse centered on control, clarity, and efficiency, forming an instrumentalregulative worldview. The difference is not merely attitudinal but ontological: it reflects contrasting understandings of what communication is. For the former, communication is an event of becomingwith-others; for the latter, it is an act of managing interactions toward goal completion.

Importantly, these orientations did not operate as dichotomies but as overlapping continua. Several students exhibited hybrid tendenciesvaluing teamwork while still seeking autonomy, or prioritizing efficiency yet enjoying dialogue. Such hybridity suggests that communicative orientation is fluid, context-dependent, and responsive to situational pressures. This fluidity corresponds with Mead's (1934) conception of the self as a socially emergent process. In his theory, the self consists of two complementary aspects: the "I," representing spontaneous and creative expression, and the

lable 8: Satisfaction categories by group			
	Team-Preferred (n = 17)	Individual-Preferred (n = 13)	Orientation
Emotional Climate	13 (76%)	3 (23%)	Relational-Constructive
Team Atmosphere	10 (59%)	2 (15%)	Relational-Constructive
Enjoyment	9 (53%)	2 (15%)	Relational-Constructive
Instructor Feedback	9 (53%)	6 (46%)	Relational-Constructive
Course Design	7 (41%)	5 (38%)	Relational-Constructive
Autonomy	4 (24%)	9 (69%)	Instrumental-Regulative
Efficiency	3 (18%)	10 (77%)	Instrumental-Regulative
Fairness	4 (24%)	8 (62%)	Instrumental-Regulative

"Me," embodying the internalized social norms and expectations of others. The continuous dialogue between these two dimensions enables individuals to negotiate between autonomy and social conformity, forming the basis of human agency and social adjustment. Subsequent scholars have elaborated on this view by showing that Mead's conception of the emergent self provides a multilevel framework for understanding social and psychological development (Chang, 2004), that selfhood arises through joint intentionality and shared meaning-making (Cahoone, 2019), and that communicative consciousness itself is shaped by language-mediated interaction (Benson, 2019). In the present context, the relationalconstructive and instrumental-regulative orientations can thus be understood not as opposing types but as dialogical poles within the communicative self, which means coexisting and dynamically reshaping one another through interaction and reflection. Thus, the distinction between relational and instrumental orientations may be better understood as complementary poles of the communicative self, not as mutually exclusive identities.

To ground this interpretation more firmly in the empirical data, it is helpful to note that several student responses exhibited features of both orientations. For example, one student wrote, "working together made me feel responsible for my teammates, but at the same time I kept thinking about weather our final answer would be accurate enough." This statement reflects a mixture of relational attentiveness and instrumental focus. Another student commented "I tried to understand my team members' ideas, yet I also believed that dividing tasks efficiently was the best way to succeed," which illustrates a hybrid position situated between relational openness and result-oriented pragmatism. Such responses highlight

that communicative orientations often manifested not as pure types but rather as fluid tendencies shaped by situational demands. These hybrid cases reinforce the need for a nuanced interpretation and help clarify how Buber's dialogical stance or Dewey's transactional view can illustrate the interplay between relational meaning-making and instructional decision-making within TBL interactions.

From this perspective, communication competence should be understood not merely as a behavioral capacity but as a performative and relational philosophy of learning. Team-preferred learners, through their discourse of empathy, dialogue, and shared meaning, exemplify what Buber (1958) described as the I-Thou relation—a mode of authentic presence that recognizes others as cosubjects in mutual encounter. By contrast, individualpreferred learners, emphasizing regulation, precision, and efficiency, approximate the I-It relation, where communication functions as a means to achieve instrumental goals. Both relational and instrumental modes are integral to academic life, yet they embody contrasting ethical and epistemological orientations toward others, with one grounded in mutuality and the other in accountability and control.

This duality illustrates the dialectical nature of educational experience that Dewey (1938) termed transactional. Learning, in this sense, arises through the ongoing tension between personal agency and social interdependence. Communication competence therefore develops not through unilateral mastery but through a dynamic equilibrium between openness and structure—between empathic dialogue and organized coordination.

In practical terms, this synthesis suggests that developing communication competence requires nurturing both modes: the I-Thou capacity for

Table 9: Integrated orientations of communication by learning preference

Analytical Dimension	Team-Preferred Learners	Individual-Preferred Learners
View of Communication	Dialogue, empathy, shared meaning	Control, clarity, precision
Learning Orientation	Mutual growth, collective inquiry	Self-regulation, efficiency
Role Identity	Collaborative participant	Independent executor
Affective Tone	Belonging, enjoyment, openness	Focus, distance, control
Source of Satisfaction	Emotional connection, team climate	Procedural efficiency & fairness
Philosophical Type	Relational-Constructive	Instrumental-Regulative

genuine empathy and the I-It capacity for structure and clarity. Education becomes most transformative when learners can move fluidly between these orientations—engaging others as persons while coordinating meaning through shared structure. Such balance represents not contradiction but the pedagogical realization of communication as a living, ethical practice of being-with-others.

Finally, the dual communicative orientation observed in this study reflects the broader cultural tension within Korean higher education, where collectivist traditions coexist with competitive individualism. Team-preferred students' emphasis on harmony resonates with the Korean concept of jeong, a culturally embedded ethos of affective connectedness and mutual care, while individualpreferred students' focus on fairness, precision, and efficiency aligns with the meritocratic standards of contemporary academic life. This dualism should not be regarded as contradiction but as a manifestation of cultural hybridity, expressing how modern Korean students negotiate between communal solidarity and personal accountability. **Understanding** communication through this lens allows educators and researchers to appreciate difference as culturally meaningful rather than as pedagogically problematic, illuminating communication competence as a living intersection of philosophy, pedagogy, and culture.

These findings extend the literature on TBL by demonstrating that, even within a highly structured TBL environment grounded in readiness assurance, accountability, and team application exercises, students interpret and experience communication in markedly different ways. Whereas prior TBL research has primarily emphasized performance, engagement, and instructional effectiveness, far fewer studies have explored how learners' philosophical orientations shape their communicative experiences within TBL activities. By showing that equivalent levels of communication competence can coexist with divergent relational and instrumental orientations, this study expands the scope of TBL research beyond outcomes-based perspectives and highlights the interpretive and affective dimensions of student experience in structured team-learning contexts.

CONCLUSION

This study explored how students with different learning preferences interpret and communication within a shared TBL environment. Although quantitative results indicated no significant difference in communication competence, the qualitative analysis revealed sharply divergent orientations, that is, team-preferred learners described communication as relational and meaningmaking, while individual-preferred learners regarded it as autonomous, structured, and efficiencydriven. These findings illustrate the equal levels of competence can conceal distinct ways of understanding and engaging in communication.

By reframing communication competence as an interpretive and philosophical stance rather than a technical skill, this study contributes to a broader understanding of why learners respond differently within identical instructional conditions. Communication becomes a site where learners express their assumptions about collaboration, autonomy, and the purpose of interaction. Recognizing this diversity is crucial for designing learning environments that are responsive to different orientations rather than presuming uniformity.

The pedagogical implications are straightforward. Relationally oriented learners benefit from opportunities for dialogue, interpersonal safety, and shared reflection, whereas instrumentally oriented learners require structured tasks, clear expectations, and transparent evaluation. Hybrid TBL designs that intentionally integrate both relational and procedural elements can support meaningful participation across diverse learner profiles and help students cultivate flexibility in their communicative practices.

This study is limited by its small sample size and its reliance on written self-reports, which privilege conscious interpretation over spontaneous interaction. Future research should include observational or discourse-analytic methods, expand across institutional and cultural contexts, and examine how communicative orientations develop longitudinally.

Despite these limitations, this study contributes to TBL and communication research by revealing that learners do not inhabit a single communicative world even when they share the same institutional design. Understanding how different orientations coexist within one environment allows educators to move beyond standardized views of competence and toward communication pedagogy that fosters awareness, adaptability, and ethical engagement. When students learn not only how to communicate but also why they communicate as they do, communication becomes a transformative dimension of the learning experiences.

Acknowledgement

The data used in this study received IRB (Institutional Review Board) approval from the Sungkyunkwan University, Seoul, Korea, the researchers' affiliated institution. IRB reviews the ethical and scientific aspects of all research involving humans to ensure the rights, safety, and welfare of research subjects participating in clinical research, and determines the research plan. The approval number of IRB is 'SKKU 2025-02-072.'

REFERENCES

- Bae, S. W. (2015). The relations between communicative competence and interpersonal competence of university students - the mediating roles of empathy ability. Master thesis, Myungji Univ., Korea.
- 2. Behling, K. (2021). Team-based learning in higher education: A systematic review of recent empirical research. *Journal of Effective Teaching in Higher Education*, *4*(1), 1-21.
- 3. Benson, P. (2019). Ways of seeing: The individual and the social in applied linguistics research methodologies. *Language Teaching*, 52(1), 114-124.
- 4. Buber, M. (1958). *I and Thou* (R. G. Smith, Trans.). Charles Scribner's Sons. (Original work published 1923)
- 5. Cahoone, L. (2019). Mead and the Emergence of the Joint Intentional Self. European Journal of Pragmatism and American Philosophy, 11(2), 196-214.
- Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability. Sociological Methods & Research, 42(3), 294-320. https://doi.org/10.1177/0049124113500475
- 7. Chang, J. H. (2004). Mead's Theory of Emergence as a Framework for Multilevel Sociological Inquiry. *Symbolic Interaction*, 27(3), pp.405-427.

- 8. Choi, E. Y., (2004). The effects of a communication skills group on high school students' Self-concept and communication. Master thesis, Kosin Univ., Korea.
- 9. Cohen, E. G. (1994). *Designing groupwork: Strategies* for the heterogeneous classroom (2nd ed.). Teachers College Press.
- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.).
 SAGE.
- 11. Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11(4),* 227-268. https://doi.org/10.1207/S15327965PLI1104_01
- 12. Dewey, J. (1916). Democracy and education. Macmillan.
- 13. Dewey, J. (1938). *Experience and education*. Kappa Delta Pi
- 14. Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. https://doi.org/10.1111/j.1365-2648.2007.04569.x
- 15. Goffman, E. (1959). *The presentation of self in every-day life*. Anchor Books.
- 16. Hmelo-Silver, C. E. (2004). Problem-based learning: What and how do students learn? *Educational Psychology Review*, 16(3), 235-266.
- 17. Johnson, D. W., & Johnson, F. P. (2009). *Joining together:* Group theory and group skills (10th ed.). Pearson.
- Kember, D. (2009). Promoting student-centered forms of learning across an entire university. *Higher Education*, 58(1), 1-13. https://doi.org/10.1007/s10734-008-9177-6
- 19. Korean Educational Development Institute (KEDI). (2021). *KEDI brochure* (Eng. ed.). KEDI.
- 20. Kirschner, P. A. (2017). Stop propagating the learning styles myth. *Computers & Education*, *106*, 166-171.
- 21. Laal, M., & Ghodsi, S. M. (2012). Benefits of collaborative learning. *Procedia Social and Behavioral Sciences*, 31, 486-490. https://doi.org/10.1016/j.sb-spro.2011.12.091
- 22. Mead, G. H. (1934). *Mind, self, and society.* University of Chicago Press.
- 23. Merleau-Ponty, M. (1962). *Phenomenology of perception (C. Smith, Trans.*). Routledge & Kegan Paul.
- 24. Michaelsen, L. K., & Sweet, M. (2008). The essential elements of team-based learning. In L. K. Michaelsen, M. Sweet, & D. X. Parmelee (Eds.), *Team-based learning:* Small-group learning's next big step (pp. 7-27). Stylus.
- 25. Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook (2nd ed.)*. SAGE.
- 26. Navran, L. (1967). Communication and adjustment in marriage. *Family Process*, 6(2), 173-184.

- 27. Parmelee, D., Michaelsen, L. K., Cook, S., & Hudes, P. (2020). Team-based learning: A practical guide: AMEE Guide No. 65. *Medical Teacher*, 42(2), 120-131.
- 28. Schunk, D. H., & Zimmerman, B. J. (2003). Self-regulation and learning. In W. M. Reynolds & G. E. Miller (Eds.), *Handbook of psychology: Vol. 7. Educational psychology* (pp. 59-78). Wiley.
- 29. Sibley, J. (2018). *Getting started with team-based learning*. Stylus.
- 30. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
- 31. Winne, P. H., & Perry, N. E. (2000). Measuring self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 531-566). Academic Press.
- 32. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70. https://doi.org/10.1207/s15430421tip4102_2