AJELS can be found on EBSCOhost databases
https://doi.org/10.59960/13.2.a2

Active learning in EMI and CLIL: Faculty perceptions and barriers in Japan

Darlene Yamauchi

Received: September 30, 2025
Reviewed: October 13, 2025
Revised: November 22, 2025
Accepted: December 12, 2025

Corresponding author
Darlene Yamauchi
Gunma University, Maebashi Gunma, Japan
dyamauchi@gunma-u.ac.jp

Additional information is available at the end of the article.

Abstract

Active Learning (AL) has been widely promoted in Japanese higher education since the 2012 Central Council for Education report, with relevance for English-Medium Instruction (EMI) and Content and Language Integrated Learning (CLIL) courses, where interaction is crucial for language development. Despite strong policy support, challenges remain in translating AL into classroom practice. While earlier studies have examined instructors' beliefs and practices toward AL in lecture classes, limited attention has been given to how institutional and disciplinary contexts shape faculty perceptions of AL, particularly within professional development initiatives. This study draws on qualitative data from two faculty development (FD) seminars conducted at a health and welfare university (n = 43) and a comprehensive university (n = 25) in Japan. Reflective surveys, group discussions, and facilitator field notes were analyzed thematically. Findings highlight both shared barriers, such as large class sizes and rigid assessment systems, as well as misconceptions about AL, and context-specific concerns, including exam preparation in the health sciences and perceived incompatibility with technical content in engineering. The study contributes to ongoing discussions of EMI teacher development by emphasizing the need for discipline-sensitive FD programs and institutional support to bridge the persistent gap between AL policy and classroom practice in EMI/CLIL settings.

Keywords: Active Learning (AL), English-Medium Instruction (EMI), Content and Language Integrated Learning (CLIL) Faculty Development (FD), Japan

1 Introduction

Active Learning (AL) has become a central focus of higher education reform globally. The seminal studies of Bonwell and Eison (1991) and Prince (2004) emphasize the potential of AL to promote engagement, collaboration, and higher-order thinking, drawing on constructivist and socio-constructivist theories that position learners as active participants in meaning-making (Piaget, 1972; Vygotsky, 1978). Although AL is widely viewed as pedagogically beneficial, scholars consistently note that its implementation is shaped by contextual factors such as disciplinary epistemologies, class size, assessment structures, and broader institutional cultures.

In Japan, AL gained national prominence following the 2012 recommendation by the Central Council for Education (CCE) to integrate AL across higher education curricula (MEXT, 2012). The policy framed AL as a means of developing generic competencies, including collaboration, problem-solving, and communicative skills; however, it lacked definitional clarity and concrete pedagogical guidance (Ito & Kawazoe, 2015 ; Matsushita, 2018). As a result, AL has often been interpreted narrowly as group work or project tasks rather than as a deeper pedagogical shift toward student-centered learning (Nishikawa, 2015). Empirical studies highlight a persistent gap between policy and practice. For example, Yamauchi (2021) reported that while instructors acknowledged the value of AL across the health sciences, engineering, and EFL, large classes, rigid assessment systems, and entrenched expectations of lecture-based teaching limited its sustained adoption. These challenges continue to characterize Japanese higher education broadly.

The pedagogical landscape becomes more nuanced when AL is situated within English-Medium Instruction (EMI) and Content and Language Integrated Learning (CLIL) contexts. While EMI and CLIL share an emphasis on content learning through English, they represent overlapping rather than identical pedagogical spaces. In these environments, AL is viewed as essential for fostering interaction, supporting language development, and counteracting classroom passivity (Huang, 2020; Adamson & Ng, 2023). Consequently, instructors frequently express concerns about cognitive load, uneven student proficiency, and discipline-specific demands that constrain AL in EMI/CLIL settings (Aizawa & McKinley, 2020).

International research suggests that faculty development (FD) can play a meaningful role in addressing these challenges. Studies increasingly highlight the importance of pedagogical preparedness beyond language proficiency for effective EMI delivery (Wang et al., 2025). FD programs incorporating AL-oriented approaches, CLIL-informed strategies, or project-based learning have been shown to enhance student engagement and communicative confidence (Chu, 2024; Li et al., 2025). However, evidence also indicates that short-term workshops may not lead to sustained instructional change, especially when institutional cultures or disciplinary traditions exert strong influence.

1.1 Literature Review

1.1.1 Active Learning: Definitions and Theoretical Foundations

Active Learning (AL) is often conceptualized as both a pedagogical approach and an educational principle, positioned as a response to the perceived limitations of lecture-centered instruction, which can privilege memorization over critical engagement. Building on this critique, Bonwell and Eison (1991) described AL as encompassing both cognitive and participatory dimensions, setting it apart from passive modes of learning. Subsequent reviews, such as Prince (2004), reinforced its potential to cultivate higher-order thinking skills, including analysis and evaluation. While these benefits may be widely acknowledged, scholars have cautioned that AL's effectiveness remains highly context-dependent, shaped by factors such as discipline, class size, and institutional culture.

AL is often linked to the constructivist theory of Piaget (1972), which views learners as active agents in building knowledge, and to socio-constructivist perspectives of Vygotsky (1978), which emphasize the role of social interaction and scaffolding. These perspectives underpin AL's emphasis on student-centeredness, collaboration, and reflection. While the theoretical benefits of AL are well established, its practical application has proven more complex. Studies have shown that large class sizes (Stains et al., 2018), exam-oriented assessment structures (Ozaki, 2010), and institutional cultures that prioritize content coverage over pedagogy (Aizawa & McKinley, 2020; Matsushita, 2018) can significantly influence whether AL is implemented meaningfully or reduced to surface-level activities.

Despite these practical constraints, earlier scholarships emphasized the importance of clarifying the pedagogical foundations of AL. Barnes (1989) articulated seven principles—purposive, reflective, negotiated, critical, complex, situation-driven, and engaged—that capture the multifaceted nature of active learning participation. Collectively, these principles may be understood as positioning AL as a pedagogical orientation that is not reducible to any single technique (e.g., group work or presentations), but rather as an approach in which students assume active roles in the meaning-making process. While these principles illustrate the conceptual breadth of AL, the extent to which they have been realized in practice varies considerably across national and institutional contexts.

1.1.2 Active Learning in the Japanese Higher Education Context

While international research provides robust evidence for the benefits of AL, its adoption in Japan has been relatively inconsistent. The 2012 Central Council for Education (CCE) report mandated the integration of AL into university curricula, framing it as essential for cultivating generic skills (MEXT, 2012). However, scholars such as Matsushita (2018) and Ito and Kawazoe (2015) have argued that the policy lacked clarity, particularly regarding definitions of AL and concrete models for implementation. As a result, Japanese universities have often adopted AL in a fragmented manner, equating it with cooperative learning (CL) or project-based learning (PBL), while neglecting its broader pedagogical underpinnings

(Ito, 2017, 2022). This partial and sometimes surface-level uptake appears to have been reinforced by the persistence of traditional lecture-centered practices (Nishikawa, 2015), along with systemic constraints such as large class sizes (Stains et al., 2018), exam-driven assessment cultures (Ozaki, 2010), and institutional priorities tied to internationalization policies (Aizawa, 2019; Aizawa & McKinley, 2020; Qiu, 2023). Considered collectively, these factors illustrate how the policy–practice gap continues to shape the trajectory of AL implementation in Japanese higher education.

Related to these broader patterns, one of the most persistent challenges for AL in Japan lies in the enduring dominance of lecture-based traditions. As Nishikawa (2015) notes, many instructors continue to treat AL as a set of classroom techniques rather than as a pedagogical framework that integrates goals, content, and assessment. This reductionist understanding limits its transformative potential. Taniguchi (2013) further observes that ambiguity in the Japanese translation of "active learning" has reinforced misconceptions, with some educators equating it with physical rather than cognitive engagement.

In addition to these cultural and conceptual challenges, empirical studies have highlighted structural barriers to implementation. Large class sizes, rigid assessment systems, and heavy content loads make it difficult to sustain interactive methods (Prince, 2004). Instructors also report insufficient training and uncertainty about disciplinary fit as key obstacles. Earlier research (Yamauchi, 2021) explored these dynamics in lecture-based courses across health sciences, engineering, and EFL, finding that while instructors often recognized AL's value, they struggled to align it meaningfully with disciplinary expectations. Building on this foundation, the present study extends the inquiry to faculty development seminars, examining how institutional and disciplinary contexts shape faculty perceptions of AL implementation. Building on these insights, it is important to situate the challenges identified by Japanese instructors within the broader literature on barriers to AL. Prior studies have classified these obstacles into structural, cultural, and institutional categories, which continue to shape how AL is understood and implemented across diverse contexts.

1.1.3 Barriers to Active Learning: Structural, Cultural, and Institutional

The literature identifies three categories of barriers that shape the feasibility of AL in higher education, specifically: structural, cultural, and institutional.

Structural barriers include large class sizes, inflexible timetables, and physical spaces designed primarily for lectures rather than interaction (Stains et al., 2018). Summative assessment cultures—particularly prominent in Japanese universities—reinforce passive study habits, especially in exam-driven disciplines such as health and welfare fields (Ozaki, 2010). These structural constraints frequently set the parameters within which faculty judge what is pedagogically possible.

Cultural barriers further shape these perceptions. Long-standing beliefs about "serious" teaching often privilege lecture-based delivery (Beauchamp, 2014), and skepticism about whether AL aligns with disciplinary norms remains common (Faust & Paulson, 1998; Ito, 2021). Student expectations also contribute, as many perceive interactive activities

as distractions from exam preparation, resulting in hesitation or resistance in AL-oriented classrooms (Kember, 2009; Zhou et al., 2019). These cultural norms interact with structural conditions, reinforcing a preference for teacher-centered instruction.

Institutional barriers create conditions that further constrain pedagogical change. While policies such as the Top Global University initiative promote AL and EMI rhetorically, their impact on day-to-day classroom practice remains uneven (Aizawa & McKinley, 2020). Many universities lack sustained professional development, incentives for pedagogical change, and workload adjustments—conditions necessary for the adoption of meaningful AL (Ito, 2022; Nishikawa, 2015). As a result, institutional structures often work against sustained pedagogical innovation.

Collectively, the evidence suggests that AL implementation is shaped by broader structural, cultural, and institutional conditions rather than individual instructor choices alone

1.1.4 EMI and CLIL in Japanese Higher Education

The challenges surrounding AL adoption in Japan are often considered further complicated in courses taught through English, particularly within EMI and CLIL programs. English-Medium Instruction (EMI) has expanded in Japan as part of broader internationalization efforts, with CLIL gaining traction in selected programs alongside it. Policy analyses note that EMI growth has been driven by national initiatives and institutional branding goals, though implementation varies considerably by institution and discipline (Bradford, 2016; Yonezawa & Shimmi, 2015).

Within EMI/CLIL contexts, interaction-oriented pedagogy is widely discussed as a way to support both content learning and academic English development. However, classroom practice often remains lecture-centered and constrained by existing norms and resources. Empirical work on EMI in Japan highlights that course success is closely tied to students' language proficiency and academic skills, while also underscoring the need for pedagogical support for instructors (Aizawa et al., 2020; Rose et al., 2021).

Research further indicates that interactive approaches, such as translanguaging and structured tasks, can help balance content and language aims in CLIL/EMI courses, provided teachers are supported in scaffolding these practices. For example, Adamson and Ng (2023) document the implementation of CLIL at a Japanese prefectural university, which leverages interactive activities to mediate content–language integration.

At the same time, studies have identified persistent needs for faculty development in EMI contexts (Aizawa & McKinley, 2020; Galloway et al., 2022). Research on lecturer support further highlights a demand for training in EMI pedagogy, including pedagogical skills, materials design, and assessment literacy (Uehara & Kojima, 2021). National initiatives have promoted EMI and innovative pedagogy; however, their effects at the classroom level remain uneven, with instructors still reporting heavy workloads and limited opportunities for sustained training (Aizawa & McKinley, 2020; Galloway et al., 2022).

1.1.5 Faculty Development and Teacher Training for AL and EMI/CLIL

Recent scholarship emphasizes the role of faculty development (FD) in bridging the gap between AL theory and classroom practice. Wang et al. (2025) argue in a critical review of EMI teacher development that effective programs must address not only linguistic competence but also pedagogical readiness for interactive teaching. They describe EMI teacher development as hybrid, contested, and transformative, reflecting the diverse ways instructors navigate linguistic, cultural, and disciplinary challenges.

In the Japanese context, studies suggest that FD initiatives have achieved mixed outcomes. For example, Uehara and Kojima (2021) used a best–worst scaling approach with EMI instructors in Japan. They found that while teachers valued support for pedagogical skills and communication strategies, many also reported feeling underrecognized and constrained by institutional barriers such as limited time for course redesign, lack of administrative backing, and minimal incentives for innovation. Similarly, a case study on "Global FD" programs in Japan indicated that although faculty found the training useful, it was often critiqued for lacking clear goals and for not being tailored to the specific teaching contexts of participants (Stewart & Miyahara, 2019). These findings suggest that FD is not uniformly effective and its impact depends heavily on alignment with disciplinary and institutional needs.

At the same time, there are examples of more targeted initiatives. Nagoya University's faculty perspectives study, for instance, revealed ongoing tensions between linguistic preparedness and pedagogical training for EMI instructors, underscoring the need for comprehensive support frameworks (Rose, 2022). Such evidence proves the importance of designing FD not as generic workshops, but as sustained, discipline-sensitive programs that address both the pedagogical and linguistic dimensions of EMI/CLIL teaching.

Within Japan, FD seminars remain a common tool for exposing instructors to new pedagogies. Short-term workshops may raise awareness, yet without ongoing support, many faculty revert to lecture-based practices. The literature underscores the importance of sustained and contextually grounded FD programs tailored to disciplinary needs and supported institutionally, as these may be more conducive to fostering sustainable pedagogical change (Matsushita, 2018).

While the literature suggests that Active Learning (AL) is widely recognized for its pedagogical value, its implementation in Japan appears constrained by structural, cultural, and institutional factors. These tensions are particularly evident in EMI and CLIL settings, where AL plays a central role in fostering interaction and language development. Although Faculty development (FD) programs have been identified as a potential means of bridging this gap, evidence of their effectiveness remains uneven. Limited attention has been paid to how institutional and disciplinary contexts influence faculty perspectives on AL within FD initiatives, a gap this study seeks to address.

Despite the expanding global discussion on EMI/CLIL pedagogy, limited research has examined how faculty in Japan negotiate AL during FD activities, particularly across contrasting institutional contexts. This study addresses this gap by analyzing two FD seminars

conducted at a private health and welfare university and a national comprehensive university in northern Japan. By comparing shared and context-specific perspectives, the study examined how disciplinary norms and institutional structures influence faculty perceptions of AL within EMI/CLIL-oriented courses.

This article makes three contributions. First, it extends the previous work of Yamauchi (2021) by shifting the lens from individual classroom practices to collaborative reflections generated within structured FD environments. Second, it demonstrates how disciplinary cultures, such as assessment-driven health sciences or technically oriented engineering fields, influence the perceived feasibility of AL. Third, it situates these insights within broader debates on EMI and CLIL pedagogy, illustrating how institutional and disciplinary conditions mediate opportunities for interaction, meaning-making, and language development in multilingual classrooms.

The study was guided by two research questions:

1. What barriers do faculty identify in adopting Active Learning within EMI/CLIL-oriented courses in Japan?
2. How do institutional and disciplinary contexts shape these barriers, as revealed through faculty development seminars?

By addressing these questions, the study contributes to international discussions on bridging the persistent gap between AL policy and classroom realities in higher education. The present study is informed by socio-constructivist perspectives (Piaget, 1972; Vygotsky, 1978), which view learning as socially mediated and collaboratively constructed and can therefore be seen as broadly aligning with the principles of AL. The analysis also draws on teacher cognition research (Borg, 2003), which may help explain how instructors interpret pedagogical concepts within their disciplinary contexts, and on the notion of institutional habitus (Bourdieu, 1990; Reay, 1998), which offers a lens for considering how structural and cultural conditions may shape faculty perceptions. Together, these theoretical lenses guided the interpretation of faculty reflections generated through the two faculty development seminars.

2 Method

2.1 Research Design

A qualitative case-study design was used to examine how faculty members in two Japanese universities interpreted the possibilities and constraints of AL within EMI/CLIL-related contexts. This approach was considered appropriate because the study sought to explore instructors' reflections, experiences, and sense-making processes within their institutional environments, rather than to measure predetermined variables (Stake, 1995). The FD seminars

provided an authentic setting for observing how disciplinary norms, institutional structures, and collegial interactions shaped participants' discussions of AL, aligning with the view that case studies are well suited to investigating context-dependent educational practices (Yin, 2014). The design is also broadly consistent with the study's socio-constructivist orientation, which emphasizes the socially mediated nature of meaning-making in professional learning.

2.2 Participants

In the first seminar, held at a smaller private health and welfare university in northern Japan, 43 professors participated, representing the disciplines of physical therapy, occupational therapy, nutrition, and nursing. Class sizes in their courses typically ranged from 35 to 210 students, and instruction was predominantly lecture-based, reflecting the emphasis on preparing students for national licensure examinations. Most participants had between five and 15 years of teaching experience, with several near 20 years. The faculty members at this institution are required to accumulate a set number of FD points annually. As this was the final seminar of the academic cycle, some attendance may have been motivated by the need to fulfill these requirements.

The second seminar, held at a larger public national comprehensive university in the same prefecture, was attended by 25 professors from engineering, liberal arts, and related fields. Their teaching responsibilities spanned medium-sized classes of 40–60 students as well as large lectures of over 150 students. Most participants had at least five years of teaching experience, with several having close to 20 years. Instructional formats were more diverse than in the private university, combining lecture- and seminar-style approaches in line with the institution's broader curricular offerings. Participation was voluntary; however, faculty members received FD points that contributed positively to their promotion, which may have encouraged their involvement.

In both institutions, participants were full-time faculty members responsible for undergraduate lecture courses. Gender representation was broadly balanced, and participation was distributed evenly across departments rather than concentrated within a single field.

2.3 Seminar Design and Implementation

The faculty development (FD) seminars were designed to introduce participants to the theoretical and practical dimensions of Active Learning (AL), while also creating opportunities for reflection and collegial exchange. Each seminar lasted approximately three hours and followed a structured format that sought to balance conceptual input, practical application, and discussion.

The seminars began with a brief lecture from the facilitator, outlining the core principles of AL, its theoretical foundations, and examples of its implementation within the Japanese tertiary context. This was followed by self-reflective tasks in which participants considered their own teaching practices and identified areas of alignment or tension with AL methodologies.

Participants then moved into small-group discussions where they shared experiences and challenges of incorporating AL into lecture-based courses. These exchanges encouraged cross-disciplinary perspectives, given the diversity of participants' fields (e.g., health sciences, engineering, liberal arts). In the subsequent plenary session, groups reported back to the wider seminar, surfacing both common barriers—such as large class sizes, student resistance, and limited training—and emergent strategies for addressing them. Each seminar concluded with a short-written reflection in which participants recorded their key takeaways and identified possible next steps for integrating AL into their courses.

The researcher acted as a facilitator for both seminars, documenting the sessions through field notes, brief reflective surveys, and summaries of group discussions. Together, these materials were triangulated to form the primary corpus for qualitative analysis. While both seminars followed the same structure, institutional contexts shaped the focus of discussions: at the private health and welfare university, participants often emphasized preparation for national licensure examinations, whereas at the national comprehensive university, concerns centered more on balancing AL with curricular diversity and faculty development incentives.

2.4 Data Gathering Procedure

Three complementary sources of qualitative data were used to capture both individual and collective perspectives: (1) reflective surveys, (2) group discussion records, and (3) facilitator field notes. Using multiple sources enabled triangulation and enhanced the trustworthiness of the analysis (Creswell & Plano Clark, 2018).

2.4.1 Reflective Surveys

Pre- and post-seminar surveys included open-ended items that invited participants to articulate their prior experiences with AL, perceived challenges in implementation, and reflections on how the seminar content related to their teaching contexts (see Appendices A and B for the full instruments). The post-seminar survey additionally asked participants to identify concrete takeaways and potential next steps for practice. Responses ranged from single-sentence comments to multi-paragraph reflections. Out of 68 total participants, 64 completed the surveys, yielding a high response rate of 94%.

2.4.2 Group Discussion Records

During the small-group activities, one participant in each group was assigned as a note-taker, using structured templates provided by the facilitator. These templates prompted groups to document barriers, strategies, and points of consensus, ensuring comparability across groups. In total, 18 group summaries were collected across the two seminars (see Appendix C for the full group discussion worksheet). These records captured shared perspectives and disciplinary contrasts, complementing the more individual focus of the surveys.

2.4.3 Facilitator Field Notes

The researcher systematically documented each seminar through detailed field notes, focusing on patterns of engagement, recurring themes, and illustrative comments voiced during plenary sessions. Notes were expanded immediately after each seminar to ensure accuracy and included attention to both verbal and non-verbal indicators (e.g., degree of participation, expressions of resistance or enthusiasm).

All data were anonymized prior to analysis. Surveys were collected electronically and stored securely, while group discussion records were scanned and digitized for secure storage. Field notes were typed and integrated into the dataset. No personal identifiers were included in transcripts, and pseudonyms were assigned when quoting faculty comments. This three-pronged approach ensured that data reflected both the breadth of participant perspectives and the depth of interactional dynamics within the seminars.

2.5 Data Analysis

Data were analyzed using inductive thematic analysis (Braun & Clarke, 2006). The process involved several stages: familiarization with the dataset through repeated readings, generation of initial codes, iterative theme development, cross-case comparison, and refinement of themes. Manual coding was employed to remain close to the data and to capture subtle patterns across different institutional contexts. Emerging themes (e.g., large class sizes, exam-driven assessment, disciplinary constraints, misconceptions about AL) were identified within each seminar and then compared across cases to highlight both shared and context-specific perspectives. To enhance trustworthiness, triangulation across surveys, group records, and field notes were employed, and themes were checked against the raw data to ensure consistency with the research questions.

2.6 Ethical Considerations

Ethical approval for the study was obtained from the researcher's home institution prior to data collection. Participation in both faculty development (FD) seminars was voluntary, and all participants were informed in advance that seminar outputs could be used for research purposes. Written consent was obtained through the reflective surveys, which included a statement explaining the purpose of the study, procedures for data handling, and participants' rights to withdraw at any time without penalty.

All data were anonymized during transcription and analysis. Pseudonyms were assigned when quoting individual comments, and institutional identifiers were removed to protect confidentiality. Digital files (survey responses, group records, and field notes) were stored securely on password-protected devices, with access restricted to the researcher. The use of triangulated qualitative data sources ensured that findings reflected collective perspectives while safeguarding individual identities.

2.7 Trustworthiness

Trustworthiness (Lincoln & Guba, 1985) was addressed in several ways. Credibility was enhanced through triangulation of data sources (surveys, discussion records, field notes) and peer debriefing with experienced colleagues. Transferability was supported by providing a detailed description of the institutional context and participant characteristics, enabling readers to assess the relevance of the findings to comparable settings. Dependability and confirmability were strengthened by maintaining an audit trail that documented coding decisions and theme development throughout the analysis stages. Reflexivity was also an integral part of the process: the researcher engaged in memo writing during and after the seminars, revisited codes iteratively, and critically reflected on her dual role as facilitator and analyst to minimize potential bias in interpreting the data (Berger, 2015; Braun & Clarke, 2019).

3 Findings and Discussion

Analysis of the FD seminar data revealed both shared challenges and context-specific barriers to adopting AL within EMI/CLIL contexts in Japanese higher education. The dataset included 64 reflective surveys (out of 68 participants), 18 group discussion summaries, and facilitator field notes. Guided by the research questions, the findings are presented in a thematic manner. The analysis draws on socio-constructivist perspectives (Vygotsky, 1978; Piaget, 1972), teacher cognition research (Borg, 2003), and institutional habitus (Reay, 1998; Bourdieu, 1990) to interpret how faculty make sense of AL in their institutional and disciplinary contexts.

3.1 Common Barriers Across Both Institutions

3.1.1 Large Class Sizes and Physical Constraints

The faculty members at both universities emphasized that large lecture sizes and fixed seating arrangements limited the feasibility of AL. One participant commented, “The classroom itself is not built for that kind of activity.” These concerns illustrate how structural constraints mediate teacher agency, a pattern consistent with research showing that institutional environments strongly shape pedagogical practice (Becher & Trowler, 2001). From an institutional habitus perspective (Reay, 1998), faculty also appeared to internalize lecture halls as spaces designed for one-way delivery, thereby reinforcing traditional norms.

Across data sources, classroom design and scale emerged as key inhibitors. Engineering faculty members noted the difficulty of circulating among groups, echoing how disciplinary epistemologies (Becher & Trowler, 2001) may tend to privilege efficiency and procedural clarity.

3.1.2 Exam-Oriented Assessment Systems

Between the universities, faculty members consistently described exam-oriented assessment structures as a major obstacle to implementing AL. In disciplines such as health sciences, preparing students for national licensure examinations was a central goal, instructors expressed concern that interactive activities would detract from essential content coverage. One participant explained in a reflective survey, "Everything comes down to the exam. If I spend too much time on group work, I worry students will say I didn't prepare them properly." Similarly, engineering faculty at the comprehensive university noted that their courses were tightly bound to standardized testing, making AL appear tangential to course objectives. A group discussion record summarized this tension as follows: "Exams determine everything, so teaching is focused on efficiency, not activities."

The faculty also reported that students themselves sometimes resisted AL, not because they found the activities unappealing, but because they regarded them as less effective for exam readiness. Several participants noted that students described AL tasks as "fun" or "enjoyable," yet questioned their perceived usefulness in preparing for high-stakes assessments. At the health and welfare university in particular, instructors highlighted this tension, describing how students equated time spent on AL with a reduction in exam-oriented instruction. By contrast, at the comprehensive university, such resistance was described as less pronounced, though time pressure and coverage demand still limited experimentation.

These concerns were reinforced in facilitator field notes, where several instructors explicitly linked exam preparation with resistance to AL. The strong association between assessment and instructional choices appeared to limit willingness to experiment with interactive methods, echoing earlier findings on the misalignment between AL and exam-driven systems in Japan (Ozaki, 2010). This theme was evident across surveys, group discussion records, and field observations, underscoring how assessment structures—and the way students interpret them—shape faculty perceptions of AL's feasibility. While assessment pressures shaped how faculty prioritized their teaching, a related issue concerned uncertainty about what "counts" as Active Learning. At the same time, faculty recognized the potential benefits of AL but emphasized that the dominance of exams left little space to integrate such approaches in practice.

3.1.3 Misconceptions about AL

Participants frequently expressed uncertainty about what constitutes Active Learning. In reflective surveys, several faculty equated AL with surface-level activities such as asking students to "move around" or "talk briefly in pairs," rather than with deeper forms of cognitive engagement. One participant candidly admitted, "I thought AL just meant group work or students doing something active instead of listening." Another asked in a group discussion, "If I ask a few questions during lecture, does that already count as AL?"

Interestingly, this ambiguity sometimes led participants to overlook practices they were already using. Faculty who regularly incorporated questioning, case-based examples, or

short problem-solving tasks often dismissed these as insufficient, failing to recognize them as legitimate forms of AL. At the health and welfare university, group notes recorded comments such as, "We probably already do some AL without realizing, but we don't call it that." At the comprehensive university, participants echoed similar doubts, with one remarking, "Maybe my seminars already count, but I always thought AL meant something totally different." The facilitator's field notes also captured how these misconceptions shaped the tone of the discussion. When presented with national policy definitions of AL, some participants responded with surprise, and one noted, "I was surprised I didn't realize what I already do in class could be considered AL." Others remained doubtful, commenting that "real AL is only possible in smaller seminar settings, not the huge classes I teach." Such reactions suggest that skepticism often stemmed less from opposition to AL itself than from uncertainty about its definition and applicability. These patterns align with research on teacher cognition, which emphasizes that instructors' beliefs and prior experiences strongly shape how new pedagogical concepts are interpreted or resisted (Borg, 2003). Many faculty members did not recognize that practices they already used fall within AL principles, highlighting the need for FD programs that develop conceptual clarity alongside procedural skills (Matsushita, 2018). This theme also echoes findings documenting persistent misconceptions about AL in Japan (Taniguchi, 2013; Nishikawa, 2015).

3.1.4 Time Pressure and Workload

Faculty repeatedly emphasized the heavy time demands associated with planning and facilitating AL, a concern that echoed the structural and cultural barriers noted earlier but added a distinct dimension. Importantly, participants did not reject the idea of AL in principle; rather, they highlighted that the reality of their workload made implementation difficult. Preparing interactive activities was viewed as disproportionately burdensome compared to lecture-based delivery, particularly given existing pressures to cover extensive syllabi and meet research or administrative obligations. One professor reflected in a post-seminar survey, "If I design AL activities, I lose time for essential content, and my research time is also reduced." Another commented during a group discussion, "Group work sounds good, but realistically, it sometimes doubles the preparation compared to slides. I usually use" This theme reflects how institutional workload structures and organizational learning constraints (Argyris & Schön, 1978) influence pedagogical choice.

Facilitator field notes similarly recorded concerns that introducing AL required both new materials and additional in-class monitoring, which faculty felt was difficult to sustain within their existing workload. Furthermore, several faculty members commented that pedagogical innovation was not rewarded in promotion systems, illustrating how **institutional habitus** (Reay, 1998) often discourages sustained experimentation. Collectively, these perspectives suggest that while faculty members were receptive to AL in theory, time pressure and workload constraints significantly influenced their assessment of its practical feasibility. From an institutional habitus perspective, these workload pressures and organizational routines contribute to the cultural reproduction of established teaching

norms, making AL difficult to adopt even when faculty express interest in it (Bourdieu, 1990; Reay, 1998).

3.2 Health and Welfare University

While the previous section outlined barriers shared across both sites, additional dynamics emerged at the health and welfare university that appeared specific to its disciplinary context. Consistent with research on professional programs tied to external accreditation, health and welfare fields often cultivate disciplinary cultures that emphasize accuracy, standardization, and coverage due to high-stakes licensure examinations (Becher & Trowler, 2001; Neumann, 2001). Within such contexts, pedagogical innovation is frequently interpreted through the lens of exam preparedness, shaping instructors' perceptions of what is feasible or legitimate. These broader structural and cultural expectations formed the backdrop against which faculty evaluated the role of Active Learning (AL), giving rise to three interconnected themes, namely: alignment with professional standards, reliance on standardized lecture materials, and perceived student resistance.

3.2.1 Alignment with Professional Standards

The faculty consistently emphasized the need to prepare students for national licensure examinations in physical therapy, nursing, and related fields. Within this context, AL was often viewed as difficult to reconcile with the volume and precision of required content. As one participant noted, "Everything we do has to prepare them for the exam. If I spend too much time on discussion, I worry we won't finish the coverage."

This emphasis on coverage positioned systematic, lecture-based instruction as the most reliable means of ensuring accuracy and fairness. Group discussion records reflected this tension, with several instructors expressing concern that deviating from structured delivery could jeopardize exam preparation: "There is so much essential material that deviating from the slides feels risky." These perspectives align with prior research, which has shown that high-stakes examination regimes often narrow pedagogical choices, making interactive approaches appear risky or inefficient (Henard & Leprince-Ringuet, 2008). In this study, accreditation expectations similarly shaped faculty judgments, framing AL as desirable but difficult to operationalize within the constraints of professional training.

3.2.2 Reliance on Lecture Slides

Another recurring theme was the reliance on systematic, slide-based delivery, viewed as efficient and standardized in preparing large cohorts for exams. Participants described slides as providing clarity and consistency across classes, while also serving as a resource for exam review. However, several acknowledged that this reliance limited opportunities for flexibility and interaction. One group discussion note captured the sentiment: "Slides are necessary for fairness and consistency, but it is hard to do group work when everything is already

structured." These accounts suggest that lecture slides were not merely a teaching preference, but rather a mechanism for standardization in a high-stakes assessment culture.

3.2.3 Perceived Student Resistance

Faculty also anticipated student reluctance toward interactive methods. Instructors described students as preferring predictability and lecture delivery, with some framing AL activities as misaligned with cultural expectations of attentiveness and deference. As recorded in facilitator field notes, one professor explained, "Students are polite and listen, but if I suddenly ask them to move or discuss, they hesitate and look uncomfortable." While some instructors believed resistance would decrease with gradual exposure, others expressed doubts about whether students valued AL in relation to exam preparation. This perception may further reinforce the view that structural and cultural factors, when combined, often constrain the feasibility of AL.

3.3 Comprehensive University

At the comprehensive university, a different set of institution-specific patterns emerged, shaped less by accreditation pressures and more by disciplinary conventions, curricular breadth, and the linguistic demands of EMI instruction. These dynamics reflected the diversity of academic fields represented in the seminar, resulting in varied perceptions of AL across disciplines.

3.3.1 Engineering Faculty Skepticism

Engineering faculty frequently emphasized that their courses required a consistent step-by-step explanation of technical material, which many participants perceived as leaving little room for student-led exploration. As one engineering faculty member remarked in a reflective survey, "If I don't walk them through each calculation, they get lost. Group discussion doesn't really work in this kind of class." Group discussion notes reinforced this concern, recording the comment: "Engineering is sequential; if we pause too much, students lose the thread." At the same time, several acknowledged that imagination and creativity are central to engineering and that AL could, in principle, support these qualities. As one professor noted, "Engineering of course needs creativity, but it is hard to bring that out when students are focused only on procedures." Despite this recognition, faculty expressed doubts about how to reconcile such aims with the sequential logic and efficiency demands of large technical lectures. These views align with earlier findings that technical fields often prioritize the direct transmission of knowledge over exploratory methods (Prince, 2004).

3.3.2 Relative Openness Among Liberal Arts Faculty

In contrast to their colleagues in engineering, faculty members in the liberal arts expressed comparatively greater openness to integrating AL, noting that their courses already incorporated discussion and debate. One participant reflected, *"In my classes, students expect more interaction, so AL feels natural."* Group discussion records also captured comments such as, *"It works well when students are motivated, but we still struggle with time pressure and covering all the readings."* While supportive of AL's potential, instructors emphasized the tension between encouraging discussion and meeting coverage demands. This cautious receptivity suggests that liberal arts faculty often view AL as pedagogically appropriate, but remain constrained by institutional expectations of efficiency and curricular breadth.

These perspectives align with disciplinary research showing that humanities and liberal arts fields traditionally privilege dialogic, interpretive, and discussion-oriented modes of teaching, which makes AL a more natural pedagogical fit (Becher & Trowler, 2001; Neumann, 2001). At the same time, curricular theory suggests that liberal arts programs often strike a balance between open-ended inquiry and the pressures of breadth and coverage, thereby constraining the extent to which extended interactive activities can be incorporated (Lattuca & Stark, 2009). This may be viewed as explaining why liberal arts faculty in the present study expressed openness toward AL in principle, yet reported practical limitations linked to time, workload, and curricular scope.

3.3.3 Concerns About Student Proficiency in EMI Contexts

A major barrier identified by faculty at the comprehensive university was students limited English proficiency, which they felt often constrained participation in AL activities. In reflective surveys, several instructors worried that EMI settings led to silence or superficial contributions, with one noting, "Even when I ask them to discuss, many students just look down because they don't know how to say their ideas in English." Group discussion records echoed this concern, with comments such as, "They may have the knowledge, but they cannot express it, so group work becomes very uneven."

This concern was compounded by the faculty's own backgrounds: none of the participants were native English speakers, and their academic specializations were content-based (e.g., engineering, liberal arts, English literature), rather than in English language pedagogy. As a result, many expressed uncertainties about how to best scaffold interactions for students with varying proficiency levels. Facilitator field notes captured this tension, with instructors describing how students often relied on formulaic responses or deferred to more proficient peers, which undermined the interactive potential of AL tasks.

At the same time, a few participants suggested that carefully scaffolded AL strategies could mitigate these challenges, such as structured prompts, pre-discussion preparation, or allowing strategic use of Japanese for clarification. This perspective aligns with findings by Adamson and Ng (2023), who argue that translanguaging and explicit scaffolding can help balance content and language demands in EMI/CLIL contexts. Overall, concerns about

English proficiency were among the most frequently cited barriers, reinforcing how linguistic constraints intersect with institutional and disciplinary factors to shape the feasibility of AL in EMI classrooms.

Faculty members in both universities expressed interest in Active Learning (AL) but questioned its feasibility in EMI/CLIL contexts. Common barriers included large class sizes, exam pressures, misconceptions about AL, and workload demands. Institutional contrasts also emerged: the health and welfare university emphasized licensure exam preparation, reliance on lecture slides, and perceived student resistance, whereas the comprehensive university revealed disciplinary divides, with engineering faculty being more skeptical and liberal arts faculty more receptive yet still constrained by time and coverage. Concerns about student English proficiency further shaped perceptions. Overall, AL was viewed as desirable in principle but constrained by structural, cultural, and disciplinary factors.

3.4 Discussion

This study examined faculty perspectives on barriers to adopting Active Learning (AL) in EMI/CLIL-oriented contexts in Japan. In both universities, instructors reported structural constraints, exam-oriented assessment cultures, conceptual uncertainty about what constitutes AL, and workload pressures as significant obstacles to pedagogical change. Institution-specific dynamics, such as the demands of national licensure examinations in health and welfare programs, or concerns about students' English proficiency in EMI courses, further shaped perceptions of feasibility. Together, these findings illustrate how pedagogical innovation is interpreted through the intersecting lenses of institutional habitus (Bourdieu, 1990; Reay, 1998), teacher cognition (Borg, 2003), and socio-constructivist understandings of learning (Vygotsky, 1978).

To address the research questions, this section distinguishes between barriers that were common in both institutions and those that were intensified in EMI/CLIL contexts. This approach highlights how general structural and cultural constraints intersect with language- and discipline-specific pressures shape faculty interpretations of AL's practicality and legitimacy.

3.4.1 Common Barriers in Institutional Contexts

Several themes identified in this study reflect broader patterns in Japanese higher education. Faculty at both institutions frequently described classroom architecture and class size as fundamentally incompatible with AL. Fixed seating, large lecture halls, and limited mobility were repeatedly cited as barriers to peer interaction and group-based activities. From the perspective of institutional habitus (Reay, 1998), these material environments do more than restrict movement; they function as cultural artefacts that reproduce expectations about teaching. When classrooms are "built for one-way delivery," as one participant noted, lecture-based instruction becomes normalized and reinforced through everyday practice. These findings align with prior work, which has shown that physical teaching spaces significantly influence pedagogical choices (Stains et al., 2018).

Another obstacle concerned exam-oriented assessment cultures, which faculty perceived as incompatible with interactive pedagogy. Across disciplines, instructors reported that high-stakes examinations, particularly national licensure exams, necessitated extensive content coverage, thereby narrowing the space for AL. Students were also described as equating "serious learning" with exam preparation, leading some to question the usefulness of AL despite finding activities "fun" or "enjoyable." These dynamics illustrate how assessment systems serve as institutional mechanisms that define what constitutes legitimate teaching. As in earlier studies (Kikuchi, 2016; Ozaki, 2010), coverage and efficiency were positioned as primary responsibilities, making AL appear risky or inefficient. The present study extends this literature by showing how faculty interpret not merely inherit these assessment pressures: instructors framed their decisions around anticipated student expectations and institutional accountability, highlighting a complex interplay between structural demands and teacher cognition.

An additional pervasive barrier involved conceptual ambiguity about AL. Across reflective surveys and group discussions, many faculty equated AL with surface-level activities such as movement or pair work, while others were unsure whether questioning, case-based examples, or short problem-solving tasks should "count" as AL. This pattern aligns with teacher cognition research, which emphasizes that instructors interpret pedagogical reforms through the lens of their prior experiences and existing beliefs (Borg, 2003). Several participants appeared surprised to learn that strategies they already used aligned with national AL definitions, suggesting that limited conceptual clarity not only caused confusion but also diminished confidence. Previous work in the Japanese context has similarly highlighted the need for a more explicit conceptual framing of AL (Nishikawa, 2015; Taniguchi, 2013). The current findings reinforce this point: without clear, discipline-relevant definitions and examples, FD risks promoting a superficial understanding of AL that does not translate into sustained practice.

A widely shared issue concerned workload and time pressure. Participants repeatedly described AL as requiring extensive preparation and in-class monitoring, particularly in comparison to slide-based lectures. These perceptions were compounded by competing professional responsibilities, including research expectations, committee work, and administrative duties. From an institutional habitus perspective, the privileging of research output in promotion systems reinforces the cultural legitimacy of lecture-based instruction, making innovation appear both effortful and unrewarded. Faculty comments such as "Even if I want to try something new, my schedule is already full" or "It doesn't seem to be recognized as part of my professional achievements" illustrate how organizational routines, reward structures, and professional identities intersect to constrain pedagogical experimentation. International research likewise shows that AL adoption is limited when structural supports are absent (Henderson et al., 2011; Amundsen & Wilson, 2012), and the present findings echo this pattern in the Japanese context.

Finally, faculty reflections on FD and institutional support further contextualized these barriers. While participants generally valued FD seminars, many described them as one-off experiences with limited follow-up. This reflects an organizational learning

pattern consistent with Argyris and Schön's (1978) notion of "single-loop learning," where awareness is raised but underlying structures and routines remain unchanged. Several participants expressed that without sustained support, discipline-specific models, or workload adjustments, the impact of FD remained limited. This finding reinforces the need for ongoing, context-sensitive professional learning opportunities that go beyond compliance to support genuine pedagogical change.

Viewed collectively, these barriers indicate that impediments to AL adoption are not merely practical but are deeply embedded in institutional structures, cultural norms, and professional expectations. Across both universities, faculty adapted their practice rationally in response to the reward systems, material environments, and conceptual frameworks available to them.

3.4.2 Barriers Intensified in EMI/CLIL Contexts

In addition to the general constraints described above, several barriers were heightened in EMI/CLIL settings. Concerns about students' English proficiency emerged as a particularly salient theme, especially at the comprehensive university. Faculty described students as hesitant to participate in discussions, relying on scripted or formulaic language, or avoiding interaction because they were unsure how to express their ideas in English. From a socio-constructivist perspective (Vygotsky, 1978), AL relies on meaningful interaction within a shared zone of proximal development. When linguistic demands exceed students' functional ability, interaction becomes constrained, limiting the potential benefits of AL and leaving instructors uncertain about its feasibility. These findings align with recent research, which demonstrates that EMI classrooms often limit opportunities for spontaneous talk despite students' content comprehension (Adamson & Ng, 2023).

Disciplinary epistemologies also played an important role. The engineering faculty emphasized the sequential and cumulative nature of their content, expressing concerns that interruptions for discussion could cause students to "lose the thread." In health and welfare programs, the imperative to prepare students for national licensure examinations intensified the perceived incompatibility between AL and coverage requirements. These disciplinary assumptions became inseparable from the language demands of EMI/CLIL, heightening perceptions of risk associated with interactive methods. Instructors feared that either linguistic or conceptual misunderstanding could jeopardize accuracy, efficiency, or exam preparation. This finding suggests that EMI/CLIL functions as more than a language overlay: it reshapes how faculty interpret feasibility, appropriateness, and pedagogical risk.

Uncertainty about how to scaffold AL in linguistically diverse classrooms further amplified these concerns. Participants, who were content specialists rather than language pedagogy experts, described limited knowledge of strategies such as structured prompts, staged interaction tasks, translanguaging, or pre-discussion preparation. From a teacher cognition perspective, this is unsurprising: without clear models or institutional reinforcement, instructors often default to familiar lecture-based routines. This suggests that FD that merely

encourages the AL conceptually, without providing language-aware and discipline-specific scaffolding, is unlikely to shift practice.

Finally, faculty reflections illustrated how EMI/CLIL-specific challenges interacted with broader institutional patterns. Without sustained support, clear guidance, or recognition, AL in EMI/CLIL contexts remained a desirable but uncertain pedagogical aspiration. Instructors expressed interest in AL but perceived too many intersecting risks, linguistic, disciplinary, structural, and cultural, to incorporate it consistently.

3.4.3 Toward Institutional Change: Implications and Synthesis

The findings illustrate that barriers to AL in EMI/CLIL contexts stem not only from faculty reluctance but also from the interaction of structural constraints, assessment cultures, disciplinary norms, and language demands embedded within the institutional habitus. From this perspective, the meaningful adoption of AL requires institutional alignment across learning spaces, assessment policies, workload structures, and conceptual frameworks, rather than relying solely on individual effort.

A key implication is the need for clearer conceptual grounding. Many faculty interpreted AL through narrow or procedural lenses, suggesting that FD should explicitly connect disciplinary practices with AL principles and highlight how existing teaching strategies already align with interactive pedagogy. Workload and recognition systems also require recalibration; AL will remain peripheral if it continues to be perceived as additional labor without institutional reward. In EMI/CLIL contexts, language-aware scaffolding is essential, including discipline-specific models, structured prompts, and guidance on strategic translanguaging to support equitable participation. Overall, these findings underscore that AL in EMI/CLIL settings is possible and pedagogically desirable, but only when institutional structures and professional expectations are aligned to support sustained rather than episodic innovation.

4 Conclusion

This study sought to examine faculty perceptions of AL in EMI/CLIL contexts in two Japanese universities. The analysis identified common barriers—large class sizes, exam-oriented assessment, misconceptions, and workload pressures—alongside institution-specific concerns linked to licensure preparation, disciplinary epistemologies, and students' English proficiency. The findings provide a more situated understanding of how institutional and disciplinary contexts intersect with broader structural features of Japanese higher education to shape the feasibility of interactive pedagogy.

The study contributes to international debates by highlighting how faculty interpretations of assessment systems, disciplinary traditions, and language collectively shape the boundaries of what is considered pedagogically possible. This study also advances prior research by demonstrating that faculty perceptions of Active Learning are mediated not only by structural constraints but also by disciplinary epistemologies and institutional

constraints, offering a more nuanced explanation for AL's uneven uptake in EMI/CLIL settings. Importantly, the findings suggest that while AL is rhetorically promoted in Japanese higher education, its sustained adoption is constrained by the absence of structural recognition and support.

Addressing these challenges requires moving beyond policy declarations and one-off workshops toward sustained, discipline-sensitive FD initiatives that are tied to recognition, workload allocation, and career advancement. Only through such institutional alignment can AL move from the margins of faculty practice to a central role in EMI/CLIL pedagogy. In practice, discipline-sensitive FD could involve department-level mentoring structures, faculty learning communities organized by disciplinary clusters, and modelling AL strategies that match field-specific epistemologies, such as case-based discussion in health sciences or interpretive dialogue in the liberal arts. Providing protected time for course redesign and recognizing pedagogical innovation in promotion and evaluation criteria would further strengthen institutional alignment. These forms of embedded, ongoing support reflect models that have been successfully used in international contexts and offer a more sustainable pathway for AL adoption within EMI/CLIL programs.

This study has several limitations that should be acknowledged. First, the data were drawn from faculty development seminars at only two universities, which limits the generalizability of the findings. Participation was voluntary, and some faculty members may have attended primarily to earn FD credits rather than out of genuine pedagogical interest, which could create potential selection bias. Second, the study relied largely on self-reported data, which reflect faculty perceptions rather than direct evidence of classroom practice. While triangulation across reflective surveys, group discussion notes, and facilitator observations enhanced trustworthiness, the absence of systematic classroom observation means that the connection between stated attitudes and enacted pedagogy remains uncertain. Finally, the study was cross-sectional in nature; longitudinal data capturing whether and how faculty integrate AL after FD sessions would provide valuable insights into the sustainability of pedagogical change.

Future research could address these limitations by employing multi-site designs that include a broader range of institutions, incorporating classroom observations or video analysis to validate reported practices, and adopting longitudinal approaches to track faculty development over time. Studies comparing Japan with other Asian contexts where EMI/CLIL is expanding may also shed light on how structural and cultural factors shape the adoption of AL in multilingual higher education.

References

Adamson, J., & Ng, P. (2023). Implementing CLIL in a Japanese prefectural university: Reflecting on research-based pedagogy. *Asian EFL Journal, 25* (3), 115–140.

Aizawa, I., & McKinley, J. (2020). EMI challenges in Japan's internationalization of higher education. *Higher Education, 79*(1), 81–97.

Barnes, D. (1989). Active learning. Leeds University TVEI Support Project.

Beauchamp, E. R. (2014). *Education and schooling in Japan since 1945.* Routledge.

Becher, T., & Trowler, P. (2001). *Academic tribes and territories: Intellectual enquiry and the culture of disciplines (2nd ed.)*. Open University Press.

Bonwell, C. C., & Eison, J. A. (1991). Active learning: Creating excitement in the classroom (ASHE-ERIC Higher Education Report No. 1). George Washington University.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Chu, J. (2024). Designing innovative EMI courses in Japan: Integrating COIL, CLIL, and project-based learning. *Journal of International Students in Education, 14*(2), 45–63.

Faust, J. L., & Paulson, D. R. (1998). Active learning in the college classroom. *Journal on Excellence in College Teaching, 9*(2), 3–24.

Huang, H.-I. (2020). Learning scenarios in an EMI classroom: A case study in Taiwan. Asian *Journal of Applied Linguistics, 7*(2), 166–178.

Henard, F., & Leprince-Ringuet, S. (2008). The teaching quality toolkit. OECD Publishing.

Ito, H., & Kawazoe, N. (2015). Active learning for creating innovators: Employability skills beyond industrial needs. *International Journal of Higher Education, 4*(2), 81–91.

Kember, D. (2009). Promoting student-centred forms of learning across an entire university. *Higher Education, 58*(1), 1–13.

Li, X., Zhang, Y., & Chen, L. (2025). Enhancing EMI faculty teaching through technology-mediated professional development. *System*, 123, 102–118.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Sage.

Matsushita, K. (2018). *Deep active learning: Toward greater depth in university education.* Springer.

Neumann, R. (2001). Disciplinary differences and university teaching. *Studies in Higher Education, 26*(2), 135–146.

Nishikawa, J. (2015). *Introduction to active learning.* Meiji Tosho Shuppan.

Ozaki, S. (2010). High-stakes tests and educational language policy in Japan: An analysis of the national center English test. *TESOL Journal, 2*(2), 175–188.

Piaget, J. (1972). The psychology of the child. Basic Books.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education, 93*(3), 223–231.

Reay, D. (1998). Rethinking social class: Qualitative perspectives on class and gender. *Sociology, 32*(2), 259–275.

Stake, R. E. (2006). *Multiple case study analysis.* Guilford Press.

Stains, M., Harshman, J., Barker, M. K., Chasteen, S. V., Cole, R., DeChenne-Peters, S. E., … Young, A. M. (2018). Anatomy of STEM teaching in North American universities. Science, 359(6383), 1468–1470.

Taniguchi, T. (2013). Evaluation of problem-solving type active learning. Journal of *Japanese Society for Engineering Education, 61*(1), 10–13.

Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes.* Harvard University Press.

Wang, H., Kim, S., & García, M. (2025). A critical review of English-medium instruction (EMI) teacher development in higher education: From 2018 to 2022. *Language Teaching Research, 29*(1), 45–62.

Yamauchi, D. (2021). Active learning in the Japanese tertiary context: Instructors' practices and beliefs. *Bunkyo Gakuin University Journal of Foreign Studies,* 21, 51–61.

Yin, R. K. (2014). Case study research: Design and methods (5th ed.). Sage.

Yonezawa, A., & Shimmi, Y. (2015). Transformation of university governance through internationalization: EMI policy in Japan. *Higher Education Policy, 28*(2), 215–233.

Darlene Yamauchi is an Associate Professor in the Faculty of Cooperative Education at Gunma University, Japan. Her research interests include active learning, CLIL/EMI pedagogy, learner interest, and multiple intelligences in tertiary EFL and EMI contexts. She has published on hybrid EMI, faculty development, and classroom-based mixed-methods research, with a focus on student engagement in Japanese higher education.