

Paths to successful transitions into English-medium business master's programmes: a configurational analysis using the ROAD-MAPPING framework

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Abstract

Purpose – This study aims to investigate how students from non-English-medium undergraduate backgrounds successfully transition into English-medium business master's programmes. It addresses a gap in the international business education literature by examining how multiple interrelated factors combine to shape these transitions, moving beyond linear, variable-centred approaches.

Design/methodology/approach – Integrating the ROAD-MAPPING framework with crisp-set Qualitative Comparative Analysis (csQCA), this study analysed data from 35 Chinese business pre-master's students who had completed a pre-session English programme at a Sino-British joint venture university. Six conditions derived from the framework were examined: Roles of English in relation to Other languages, Academic Discipline, (Language) Management, Agents, Practices and Processes, and Internationalisation and Globalisation.

Findings – The analysis identifies Practices and Processes (active pedagogical engagement) as a necessary condition for a successful short-term academic transition. Furthermore, the results reveal three sufficient configurations, reflecting different combinations of academic readiness, language confidence, institutional support and learner agency.

Originality/value – By operationalising ROAD-MAPPING within a configurational method, this study provides a holistic understanding of transition to English-medium business master's programmes as a multidimensional learning process. It illustrates how the framework can be extended from a descriptive heuristic to a diagnostic-analytical approach and offers data-driven insights into learner adaptation in internationalised business education.

Keywords Business education, English-medium instruction, Qualitative comparative analysis, Student transitions, Internationalisation

Paper type Research paper



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1. Introduction

The internationalisation of business education has fundamentally altered degree delivery globally (Studer and Smit, 2021), particularly in Asia, where demand for globally oriented programmes is rising. The Chinese region is projected to become the largest provider of English-medium education (EME) outside Anglophone countries by the late 2020s (StudyPortals, 2024). This growth aligns with China's national policies to internationalise higher education (Ministry of Education of China, Ministry of Finance of China and National Development and Reform Commission of China, 2017). Business education has led this shift, moving from translation-based provision to globally mobile degrees that integrate English-language delivery with international curricular frameworks (Barker and Crichton, 2008; Wächter and Maiworm, 2014).

However, while this expansion increases access to globalised business curricula, it presents significant transitional hurdles for students. Entrants face a dual burden: they are required to adapt to new disciplinary norms and develop academic English proficiency simultaneously (Bolton *et al.*, 2024), while also mastering the integration of content and language specific to business disciplines such as accounting and management (Sampaio *et al.*, 2021). Moreover, students need to adjust to unfamiliar pedagogical styles, including case-based learning, collaborative projects and critical discussion (Kremer and Valcke, 2024). In such contexts, English serves not only as the medium of education but also as a form of professional and economic capital (Ai *et al.*, 2018). Successful transition, therefore, is shaped by how students navigate these dual roles of language within an unfamiliar educational ecosystem.

To understand these challenges, prior research has largely relied on variable-centred designs. Studies typically use regression-based and correlational analyses to assess the effects of individual factors such as language proficiency and motivation (e.g. Thompson *et al.*, 2022; Xie and Curle, 2022). While recent studies use advanced statistical techniques and ecological perspectives, they often isolate specific variables rather than examining how conditions interact. As a result, programme designers often lack evidence-based guidance to create condition-sensitive support strategies rather than generic interventions.

This study addresses this gap by examining the specific combinations of conditions that contribute to successful transitions, defined here as robust short-term readiness for English-medium business master's programmes. Drawing on data from 35 students in a pre-session English (PSE) programme at a Sino-British joint venture university in China, this study takes a case-oriented perspective rather than a variable-oriented one. It applies crisp-set Qualitative Comparative Analysis (csQCA) (Ragin, 1987, 2014) to empirically operationalise the ROAD-MAPPING framework (Dafouz and Smit, 2016, 2020, 2023). This framework conceptualises EME as a dynamic system composed of six interrelated dimensions.

By analysing transition not as a linear trajectory but as an interplay of linguistic, institutional and sociocultural factors, the findings contribute to international business education in three ways: identifying multiple, equifinal transition paths associated with robust short-term academic readiness; demonstrating the analytical potential of the ROAD-MAPPING framework in configurational analysis; and providing data-driven insights for designing differentiated support strategies for diverse learner profiles. Ultimately, this study reframes transition as a multidimensional learning process central to international business education.

2. Literature review

2.1 Successful transition to English-medium business education: a complex adaptive process

The expansion of EME in global business schools, a core strategy for developing internationally competent graduates, has increased the need to understand the factors shaping

the academic adaptation of multilingual learners. Student transitions theory (Tinto, 1993) posits that the academic transition to EME contexts requires integration into the institution's academic and social systems. While originally developed in Anglophone higher education contexts, transition theory has been widely adapted to examine international and multilingual student trajectories, including those in EME settings. This challenge is particularly pronounced in business education, where the learning environment is often characterised by intercultural complexity (Barker and Crichton, 2008) and pedagogical approaches that differ significantly from students' prior educational experiences. Case-based analysis and collaborative learning, common in Western business schools, place distinctive demands on students' communicative and participatory competencies (Bambacas *et al.*, 2008).

Recent comparative work suggests that there is no universal path to a successful transition. Yuksel *et al.* (2023) found that, although general English proficiency had a positive influence on content scores for both Turkish business and engineering students, self-regulation was a significant factor for engineering students, but not business students. These results demonstrate the discipline-sensitive and context-dependent nature of transition processes, reinforcing the value of analytical approaches that accommodate heterogeneity rather than assuming uniform effects. Given this complexity, a systemic framework is required to capture how these varied factors combine to facilitate short-term academic readiness.

2.2 Conceptual framework: configuring the EME ecosystem through ROAD-MAPPING

To capture the ecological complexity of student transitions, this study uses the ROAD-MAPPING framework (Dafouz and Smit, 2016, 2020, 2023) as its conceptual lens. Recent configurational research has successfully used frameworks such as the English-Medium Instruction Academic Success (EMIAS) model (Tang and Curtis, 2025) to identify student-centric attributes that contribute to academic success. However, the transition to business master's education involves navigating not only personal capabilities but also interlocking institutional, disciplinary and sociocultural conditions. The ROAD-MAPPING framework is adopted here as it conceptualises EME as a dynamic system where discourse connects six interrelated dimensions, which can be grouped into three domains: linguistic, institutional and sociocultural. In the present analysis, these dimensions serve as the overarching conceptual domains from which specific, measurable conditions are derived.

Firstly, the linguistic environment in the ROAD-MAPPING framework is defined by the intersection of Roles of English in relation to Other languages (RO) and Academic Disciplines (AD). While RO captures the communicative functions of English in the institution (Dafouz and Smit, 2023, p. 5), in business schools specifically, English often functions as a business lingua franca rather than a normative standard, prioritising communicative effectiveness over native-like accuracy (Komori-Glatz, 2017). This is particularly relevant in multicultural business classrooms, where students are required to negotiate meaning and collaborate across linguistic and cultural boundaries. However, this flexibility is constrained by AD, which defines the subject-specific "ways of knowing" and distinct literacy practices, such as case analysis and business report writing, that students are expected to master (Dafouz and Smit, 2023, p. 5). Consequently, within the conceptual scope of AD, linguistic readiness involves more than general language proficiency, it requires the capacity to navigate these dual demands.

Secondly, the institutional environment is governed by (Language) Management (M) and Internationalisation and Glocalisation (ING). M refers to the explicit and implicit institutional policies that regulate language use and provide structural support systems (Dafouz and Smit, 2023, p. 5). Conceptually, these systems are viewed as essential for

scaffolding students through high-stakes, performance-based assessments such as case competitions, simulation exercises and team presentations. These policies operate within the broader context of ING, which captures the global and local forces influencing how EME is interpreted and implemented (Dafouz and Smit, 2023, p. 5). For example, Vo *et al.* (2022) applied ROAD-MAPPING to examine English-medium economics courses in Vietnam, indicating how imported curricula often neglect local academic contexts, creating a mismatch for students.

Thirdly, the sociocultural environment is enacted by Agents (A) and Practices and Processes (PP). PP encompasses the specific pedagogical methods and assessment formats used in instruction (Dafouz and Smit, 2023, p. 5). In English-medium business programmes, these practices often emphasise active and student-centred pedagogies, such as the flipped classroom, which place a premium on self-directed learning and collaborative engagement. These practices are central to developing the collaborative, critical thinking and decision-making skills valued in global business. However, the extent to which such practices are experienced or enacted by students may vary across programmes and contexts. This variation increases the significance of A, the social actors including students and faculty (Dafouz and Smit, 2023, p. 5), and the degree of agency learners exercise in navigating participatory norms.

While ROAD-MAPPING has served as a widely used conceptual heuristic for qualitative description (Dafouz and Smit, 2023), it has less frequently been applied to the systematic analysis of configurational patterns. This study addresses this gap by integrating ROAD-MAPPING with a configurational approach. It is important to note that this study does not aim to measure the ROAD-MAPPING dimensions in their exhaustive totality. Instead, specific measurable indicators are identified within each dimension to serve as conditions for the Qualitative Comparative Analysis (QCA). The operationalisation of these indicators is detailed in the Methodology section. The inquiry therefore focuses on how these selected conditions combine to enable a successful transition. QCA provides the necessary methodological logic to answer this question by identifying the specific configurations of conditions that allow students to navigate this complex ecosystem.

This integration allows the research to address the following configurational questions:

- Q1. Which conditions derived from the ROAD-MAPPING dimensions function as necessary and/or sufficient conditions associated with the successful transition of Chinese-medium undergraduate students to English-medium business master's programmes at a Sino-British joint venture university?
- Q2. What configurations of these conditions contribute to successful transitions in this EME context?

3. Research methods

3.1 Case selection, study context and participants

This study was conducted at a Sino-British joint venture university in mainland China where all undergraduate, master's and doctoral programmes are delivered through EME. With over 23,000 students and 1,000 academic staff, the university integrates British academic standards with Chinese higher education policies. Its business school offers a range of English-medium business master's programmes. For applicants who meet academic requirements but fall short of English language proficiency thresholds (e.g. International English Language Testing System (IELTS) 5.5 vs 6.5), the business school provides a seven-week onsite PSE programme.

The PSE programme uses a specific pedagogical model: a flipped-classroom approach combined with self-directed learning. Students are expected to complete asynchronous tasks (workbooks, videos and quizzes) before engaging in synchronous seminar instruction. This design aims to approximate the academic environment of the target master's programmes, familiarising students with core academic literacies, collaborative participation practices and performance-based assessment. Assessment comprises essay writing (50%), group discussion (25%) and individual presentation (25%). Final scores are reported on a 0–100 scale. Students who achieve a score of 50 or above proceed to their master's studies.

Ethical approval was obtained from the university's research ethics committee. Following the release of PSE results, 182 business pre-master's students were invited to participate in an online survey via university email. The invitation included an overview of the study, a participant information sheet, a link and a QR code to the questionnaire, where students provided informed consent. In total, 35 students completed the survey.

3.2 *Methodological approach: crisp-set qualitative comparative analysis*

Transitions to English-medium business master's programmes are contingent upon the interaction of conditions rather than isolated variables, an assumption consistent with the systemic perspective of the ROAD-MAPPING framework. To investigate this conjunctural causation, this study uses csQCA, a set-theoretic method aligned with Ragin's configurational and intersectional approach (Ragin and Fiss, 2024). csQCA is well suited to international business education contexts where learning outcomes emerge from the interaction of pedagogy, institutional design and learner agency rather than isolated predictors. This approach prioritises causal complexity over net effects, allowing the analysis to reflect the non-linear reality of student transitions.

Two specific considerations support the use of csQCA. Firstly, methodologically, csQCA provides an established analytical logic for examining configurational diversity within a small sample ($n = 35$) (Marx and Dusa, 2011). With six conditions, this approach allows for the identification of meaningful causal relationships that might otherwise be obscured in variable-centred analyses (Fiss, 2011). Secondly, conceptually, the calibration process aligns with the study's focus on identifying qualitative thresholds rather than linear gradients of support. For instance, the construct Agents (Items 8–10) conceptually focuses on whether a student has crossed a functional threshold of motivation and support needed to navigate the EME environment, not with differentiating between “very” and “extremely” supportive conditions. The binary calibration (presence ≥ 3.5) operationalises this threshold, translating the Likert-scale responses into a set-theoretic logic that privileges categorical distinctions consistent with institutional decision-making contexts (e.g. pass/fail, supported/unsupported).

3.3 *Measures and calibration procedures*

3.3.1 Questionnaire design and operationalisation. A structured, bilingual questionnaire (English and Mandarin Chinese) was developed to capture measurable indicators derived from the six conceptual domains of the ROAD-MAPPING framework (see Appendix 1). The questionnaire was pilot-tested with four Chinese pre-master's students, and minor revisions were made to improve clarity and cultural relevance. Given the breadth of the ROAD-MAPPING dimensions (Dafouz and Smit, 2023, p. 5), this study operationalises them as specific conditions focused on the transitional context.

To capture distinct aspects of the student experience, the conditions were operationalised using two different measurement approaches. Academic Discipline (AD) holds a unique status in this study, as it was operationalised using objective weighted undergraduate average

scores. It is defined here as an indicator of prior academic preparedness within the relevant disciplinary domain, rather than as a direct measure of disciplinary practices. This approach uses a robust, external proxy for prior disciplinary achievement that helps mitigate common method bias and aligns with the assessment-driven context of Chinese higher education (Jin and Yu, 2025).

Conversely, the remaining five conditions (RO, M, A, PP and ING) were measured to capture distinct aspects of student experience, using three items each on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Within this group, Roles of English (RO) was operationalised as perceived linguistic readiness, measuring students' self-reported confidence and preparedness to use English for academic functions. Regarding institutional support, (Language) Management (M) was defined as perceived structural support, assessing the clarity of institutional guidelines and resource management. In parallel, Agents (A) captured relational and motivational support, specifically the influence of student motivation, peer assistance and teacher support. Finally, the pedagogical and curricular context was measured through Practices and Processes (PP), operationalised as active pedagogical engagement, and through Internationalisation and Glocalisation (ING), which assessed perceived curricular integration of global perspectives and international standards.

The three items for PP measured perceived engagement with core active learning demands, namely participation, feedback use and adaptation. While these items capture students' experiential engagement with active pedagogical demands, they were not phrased to specify the flipped-classroom model (e.g. pre-task completion). This approach focuses on the learner's configurational experience but necessarily limits the granularity with which specific instructional designs are captured, a limitation acknowledged in the discussion.

Finally, the outcome, Successful Transition (ST), was measured by the final PSE score, which represents robust short-term academic readiness for English-medium business study rather than long-term programme success.

3.3.2 Calibration. All conditions and the outcome were calibrated into binary values (1 = presence; 0 = absence). For the Likert-scale conditions (RO, M, A, PP, ING), a mean threshold of 3.5 was applied. Scores ≥ 3.5 were coded as present (1), while scores < 3.5 were coded as absent (0). This mean-split approach is commonly used in education and social science studies using csQCA (e.g. Pattyn *et al.*, 2019; Rippa *et al.*, 2023) to ensure internal consistency in small-N contexts. In contrast, AD was calibrated using the sample mean (83.33) to ensure a balanced distribution of cases, thereby reducing the risk of limited diversity, an essential step in small-N QCA to prevent skewed truth tables (Greckhamer *et al.*, 2018). For the outcome, ST was calibrated at a score of ≥ 60 (indicative of "Very Good" or "Exceptional" performance). This higher threshold was chosen over the administrative pass mark (50) to capture robust academic readiness rather than minimal survival. Following calibration, a truth table was constructed to map all empirically observed configurations and their associated outcomes (see Appendix 2). This step transforms the case-based data into the set-theoretic logic required for the subsequent analysis of necessary and sufficient conditions (Schneider and Wagemann, 2012).

3.3.3 Reliability and validity. Although QCA relies primarily on theoretical calibration and set-theoretic consistency rather than covariance-based validity; however, supplementary reliability and convergent validity checks were conducted to assess the internal coherence of the multi-item indices, following recommended practices for hybrid measurement in configurational research (Schneider and Wagemann, 2012). All constructs demonstrated acceptable reliability, with coefficient values ranging from 0.74 to 0.80, exceeding the commonly accepted 0.70 threshold (Hair *et al.*, 2019; Nunnally and Bernstein, 1994). Regarding convergent validity, four of five constructs exceeded the Average Variance

Extracted (AVE) benchmark of 0.50 (Dos Santos and Cirillo, 2023). While the PP condition fell slightly below this threshold (AVE of 0.48), it was retained due to its high internal consistency ($\alpha = 0.74$) and its conceptual relevance for capturing the active learning demands characteristic of business-oriented EME contexts (Cheung and Wang, 2017). This suggests potential construct heterogeneity rather than measurement failure, a limitation acknowledged given the exploratory scope of the study. Item-rest correlations (≥ 0.30) further confirmed internal coherence within each construct.

Content validity was evaluated through expert review (Boateng *et al.*, 2018) by a senior scholar specialising in the ROAD-MAPPING framework, to support the alignment between operationalisation and conceptual definitions. In addition, the use of objective academic transcripts for the AD condition mitigates common method bias associated with self-reported data (Diamantopoulos *et al.*, 2012).

4. Results

4.1 Necessity analysis

Necessary conditions analysis was conducted using the crisp-set procedure implemented in the fs/QCA 4.1 software (Ragin and Davey, 2022). Following the established QCA protocol, a condition is considered necessary if it is always present when the outcome occurs. A consistency threshold of 0.90 was applied to evaluate significance (Rippa *et al.*, 2023). As shown in Table 1, PP emerged as the sole necessary condition for successful transitions (Consistency = 0.91). This finding indicates that active pedagogical engagement is a prerequisite for a successful transition within this context.

4.2 Sufficiency analysis

The sufficiency analysis was conducted using the Quine-McCluskey algorithm in fs/QCA 4.1 (Ragin and Davey, 2022). Consistent with established csQCA practice, a raw consistency threshold of 0.80 was applied to identify sufficient configurations, indicating that at least 80% of cases sharing a configuration exhibit the outcome (Ragin, 2008; Schneider and Wagemann, 2012). This study reports the intermediate solution, which balances parsimony and theoretical meaningfulness (Schneider and Wagemann, 2012, pp. 197–219).

Table 1. Analysis of necessary conditions

Conditions	Abbreviation	Successful transition	
		Consistency	Coverage
Roles of English in relation to other languages	RO	0.86	0.70
	~ RO	0.14	0.38
Academic discipline	AD	0.64	0.82
	~ AD	0.36	0.44
(language) Management	M	0.82	0.64
	~ M	0.18	0.57
Agents	A	0.86	0.68
	~ A	0.14	0.43
Practices and processes	PP	0.91	0.69
	~ PP	0.09	0.33
Internationalisation and glocalisation	ING	0.68	0.68
	~ ING	0.32	0.54

Note(s): The symbol “~” refers to the absence (negation) of a condition

Source(s): Authors’ own work

The analysis identified three distinct configurations sufficient for a successful transition. Table 2 presents these configurations in standard QCA notation (Ragin and Fiss, 2017). The overall solution demonstrates robust set-theoretic efficacy, with a solution consistency of 0.94 (indicating that 94% of cases fitting these patterns successfully transitioned) and a solution coverage of 0.77 (indicating that the configurations account for a substantial proportion of successful cases in this sample, rather than population-level explanatory power).

4.3 Sensitivity analysis

Robustness of the sufficient configurations was assessed by conducting a sensitivity analysis. The consistency threshold was raised from 0.80–1.00 (Oana and Schneider, 2024), a standard procedure to test solution stability. Under the stricter threshold of 1.00, Paths 1 and 2 remained stable. Path 3 became more precise, requiring the addition of ~ING (RO*AD*A*PP*~ING). While this addition increased precision, it reduced coverage. This test supports the stability of the core findings, confirming that multiple distinct paths exist, while illustrating the inherent trade-off in QCA between analytical precision and empirical scope (Schneider and Wagemann, 2012).

5. Discussion

The results indicate that transitioning to English-medium business master’s programmes is neither linear nor determined by a single factor. Instead, it is shaped by a context-specific necessary condition and achieved through multiple, distinct sufficient paths. This configurational logic challenges reductionist models of academic adaptation and provides a nuanced, systems-level understanding of the transition process. The findings directly inform a core tension in designing international business master’s programmes: how to structure curricula and support to assist diverse learners in adapting to pedagogies that differ fundamentally from their prior experiences (Bambacas et al., 2008).

Table 2. Sufficient configurations for successful transitions

Conditions	Configuration 1	Configuration 2	Configuration 3
Label	The linguistically autonomous learner	The academically anchored learner	The systemically integrated learner
RO	●	⊗	●
AD		●	●
M	⊗		
A		⊗	●
PP			●
ING			
Consistency	1	1	0.92
Raw coverage	0.14	0.09	0.55
Unique coverage	0.14	0.09	0.55
Key cases	2, 8, 33	1, 9	3, 5, 6, 11, 14, 18, 20, 22, 23, 25, 27, 34, 35
Solution coverage: 0.77			
Solution consistency: 0.94			
Note(s): ● = presence of a condition; and ⊗ = absence of a condition. Big circles indicate core conditions and small circles indicate marginal conditions. Blank cells indicate the condition is irrelevant for that configuration. Key cases refer to specific student participants in the data set (<i>n</i> = 35)			
Source(s): Authors’ own work			

5.1 *The foundational necessity: engaging with pedagogical practice*

The csQCA results identify Practices and Processes (PP), operationalised as active participation, feedback utilisation and adaptation to interactive teaching, as the sole necessary condition for a successful short-term academic transition within this cohort. This finding suggests that the prevailing narrative in EME research, which often focuses on linguistic proficiency as the primary obstacle (e.g., [Tang and Curtis, 2024](#)), may benefit from a reorientation towards pedagogical engagement.

For the academically mature students in this PSE programme, the primary challenge appears not to have been basic comprehension but adaptation to the high-engagement, flipped-classroom pedagogy ([Chi and Wylie, 2014](#); [Sweller, 2011](#)) designed to mirror their future master's studies. The necessity of PP indicates that in a flipped-classroom business programme, active engagement with preparatory tasks and in-seminar interaction is functionally indispensable. In set-theoretic terms, even high levels of linguistic confidence or institutional support are insufficient for a successful transition if the student fails to engage with these pedagogical norms. Consequently, a successful transition requires students to actively navigate the interactive orientation characteristic of Anglophone business education, such as case discussions and formative feedback loops ([Bond et al., 2020](#); [Panadero and Lipnevich, 2022](#)).

This finding implies that business programme design should intentionally scaffold the specific interactive practices that define the flipped classroom. Pedagogical design, rather than supplementary language support alone, serves as the primary mechanism for facilitating transitions. The sufficiency analysis then reveals the distinct paths through which this engagement is activated.

5.2 *A Typology of successful transitions: three equifinal configurations*

The sufficiency analysis identified three distinct paths, each representing a recurring configurational pattern associated with a successful transition. These configurations form a heuristic framework for programme design.

*Configuration 3 (RO*AD*A*PP): The Systemically Integrated Learner.*

This dominant path accounts for 55% of cases demonstrating robust short-term academic readiness. It represents a comprehensive alignment between the learner and the programme's design. These students possess high English confidence (RO), a strong prior academic record (AD) and perceive their motivation and support from peers and instructors as high (A). Significantly, this is the only configuration where strong relational support (A) combines with active pedagogical engagement (PP). This suggests that for the majority of successful students, participation in interactive learning is sustained by a supportive social environment. This finding aligns with Self-Determination Theory ([Ryan and Deci, 2020](#)), where the fulfilment of autonomy, competence and relatedness promotes deep engagement. For business education, where collaborative learning is paramount, this profile demonstrates the importance of fostering a cohesive learning community. Institutions could strengthen this alignment by offering enrichment opportunities, such as peer-led mentorship schemes ([Cornelius et al., 2016](#)) and leadership opportunities that solidify these learners' roles as collaborative agents.

Configuration 1 (RO~M): The Linguistically Autonomous Learner.*

This path captures students who succeed despite perceived institutional shortcomings, accounting for 14% of the cases. They report high English confidence and readiness (RO) coupled with low satisfaction with institutional management (~M), such as the clarity of objectives and academic guidelines. Their successful transition is characterised by strong personal linguistic capital and autonomous learning strategies, allowing them to navigate the

curriculum effectively even when they find institutional guidance unclear. This resonates with the emphasis on autonomy in Self-Determination Theory (Ryan and Deci, 2020); however, it also points to a structural equity issue. Highly self-directed learners can navigate opaque systems, but those with less confidence or fewer self-regulation skills may be disproportionately disadvantaged. This finding suggests that academic structures need to be made intuitively accessible to all, reducing the risk that a transition is contingent on a student's ability to work around the system.

*Configuration 2 (~RO*AD*~A): The Academically Anchored Learner.*

This profile highlights a compensatory strategy based on prior academic achievement, representing 9% of the cases. These students report low English confidence (~RO), low motivation and a perception that peer and teacher support were not useful (~A), yet they use a high undergraduate academic record (AD) to achieve a successful transition. These students likely rely on familiar, structured academic strategies (e.g. intensive notetaking, memorisation) to manage content. This pattern can be understood through Cognitive Load Theory, which suggests that students with substantial prior academic knowledge can manage cognitive demands more effectively, even in linguistically challenging contexts (Hanham *et al.*, 2023). However, it may also indicate an avoidance coping strategy, where learners disengage from communicative challenges, potentially limiting deeper engagement with disciplinary discourse (Borecka-Biernat, 2022). Encouraging active participation in academic conversations is essential for long-term academic development (Ortmann and Stumme-Berg, 2024). Programmes would benefit from proactively identifying these learners and providing scaffolded, low-threshold opportunities for communicative practice (e.g. structured prep for discussions, recorded presentations) to bridge the gap between content mastery and confident participation.

5.3 Implications for international business education

The configurational findings, while specific to the context of a Sino-British joint venture, offer provisional insights for business schools operating in similar transnational contexts. Firstly, the identification of PP as a necessary condition suggests the potential value of a shift in programme philosophy: from a remedial “English-teaching” model focused on linguistic deficit to a disciplinary enculturation model centred on pedagogical design. Programmes with similar learner profiles might benefit from curricula explicitly designed to scaffold the specific interactive, feedback-driven practices of international business education. This approach recognises that English serves not merely as a medium of instruction but as a key form of “economic capital” for global graduates (Ai *et al.*, 2018), where competence is developed through authentic engagement with disciplinary tasks.

Secondly, the identified profiles illustrate the limitations of one-size-fits-all support approaches, highlighting the diversity of instructional preferences likely to exist within transnational cohorts. Rather than a universal solution, the findings offer a provisional diagnostic lens for learner profiling. Practitioners could use this framework to explore tailored support options: students resembling Linguistically Autonomous Learners may require clearer signposting to resources; Academically Anchored Learners may need low-stakes spaces for communicative practice; and Systemically Integrated Learners might benefit from enrichment opportunities that deepen collaborative skills.

Thirdly, the existence of the Linguistically Autonomous Learner profile highlights a critical equity concern relevant to programme design. If institutional structures are opaque, a transition may become contingent upon a student's pre-existing agency. Consequently, educators should consider intentionally building visible, accessible scaffolding that fosters

learner agency for all students, rather than assuming it exists. This intentionality appears necessary to assist in fostering equitable outcomes across a diverse international cohort.

5.4 Limitations and future research

This study has inherent limitations. Firstly, the small sample size ($n = 35$), while appropriate for the set-theoretic logic of csQCA which prioritises causal complexity over statistical generalisation (Marx and Dusa, 2011), confines the findings to this specific Sino-British PSE context. The configurations should be viewed as robust for this case but provisional and exploratory for the field. Secondly, the operationalisation of a successful transition via PSE scores captures short-term academic adjustment but not longer-term socio-professional integration. Thirdly, while capturing perceived engagement, the PP survey items did not explicitly measure behaviours specific to the flipped-classroom design (e.g. completion of asynchronous tasks). This operationalisation captured the learner's internal configurational experience, underscoring the need for future research to integrate observational or learning analytics data to triangulate how pedagogical practices are objectively enacted.

Future research should therefore consider the following directions:

- (1) Investigate the transferability of these configurations across different institutional and disciplinary contexts (e.g. the accounting context described by Sampaio *et al.*, 2021) to establish their broader applicability.
- (2) Employ integrated qualitative designs (observations and interviews) to examine how the conditions in each configuration interact in real time.
- (3) Explore the trajectories of less successful students to understand the causal asymmetries in the non-occurrence of a successful transition.

6. Conclusion

This study investigated the complex process by which students from Chinese-medium undergraduate backgrounds successfully transition into English-medium business master's programmes, defined here as robust short-term academic readiness. By integrating the configurational logic of csQCA with the ROAD-MAPPING framework, the analysis yields a nuanced, systemic explanation: a successful transition is a non-linear and equifinal process. In this case, it was characterised by the necessary condition of active pedagogical engagement and achieved through one of three distinct paths, each representing a recurring pattern of learner-institution alignment.

Theoretically, the findings advance transition theory by illustrating that a successful transition to English-medium business master's education can emerge from specific combinations of conditions rather than the isolated presence or absence of single factors. This challenges linear, variable-centred models and supports a configurational understanding of business learning environments, where linguistic, pedagogical, social and institutional elements interact dynamically.

Methodologically, the study illustrates the utility of bridging macro-level policy frameworks with micro-level learner diagnostics. By systematically operationalising the ROAD-MAPPING framework, used here as a conceptual lens, within a set-theoretic analysis, the research demonstrates how a broad heuristic can be adapted into a diagnostic approach for identifying paths within localised institutional contexts. This provides a potentially replicable template for conducting small-N, configurational research that captures the realities of international business education.

Practically, the study offers contextually grounded insights for programme leaders and business school administrators. The identified configurational profiles (e.g. the Systemically Integrated Learner) suggest the value of moving from generic language support to targeted diagnostic interventions. By identifying learner profiles early, business schools can allocate resources more efficiently: directing intensive structural guidance to Linguistically Autonomous Learners, offering targeted communicative scaffolding for Academically Anchored Learners, and providing advanced enrichment for the Systemically Integrated Learners. Ultimately, these strategies inform the design of programmes that aim to effectively scaffold students towards strong initial academic engagement, helping to ensure that the international label of the degree translates into genuine professional capability and economic capital for global business careers.

In conclusion, as business schools continue to internationalise their offerings, understanding educational transition as a configurational and context-sensitive process is highly beneficial. This study informs the design of internationalised master's programmes by indicating that a successful transition is not contingent upon uniform language remediation, but on aligning pedagogical design with diverse learner configurations. Consequently, it supports the creation of responsive learning environments for diverse business students.

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Appendix 1

Survey

Roles of English

1. How important do you think English will be for your academic performance in your Master's programme after completing the PSE course?
2. How confident are you in using English to communicate and collaborate in a multilingual academic environment after completing your PSE course?
3. How prepared do you feel to apply the academic English skills developed in the PSE course to your Master's studies in the EME context?

Academic Discipline

4. Your undergraduate grade point average is __, on a __ (4.0/5.0) scale, and your weighted average score is __.

(language) Management

5. How effectively were the learning objectives communicated through lectures, written materials, and discussions during the PSE course?
6. How effective were the academic guidelines in guiding your understanding and practice of academic conventions during the PSE course, such as the academic integrity policy and the referencing system?
7. How well were academic resources, such as library resources, online databases, and course materials, managed to facilitate your learning during the PSE course?

Agents

8. How motivated were you to improve your academic English language skills required in an English-medium context through the PSE course?
9. How useful was the peer support in building your confidence and skills for the transition to an English-medium Master's programme?
10. How supportive were your teachers in meeting your learning needs and preparing you for an English-medium Master's programme?

Practices and Processes

11. How actively do you participate in learning activities, such as group discussions and presentations, during the PSE course?
12. How constructive was feedback from teachers in guiding your academic improvement and understanding during the PSE course?
13. How well have you adapted to the interactive teaching styles and independent learning expectations in the EME context?

Internationalisation and Globalisation

14. How effective was the social programme (e.g., lunchtime social corner) in supporting your adaptation and integration into the EME environment?
15. How well does the curriculum of your PSE course integrate global perspectives and diverse cultural contexts into its content?
16. How well did the PSE course integrate international academic standards and best practices into its teaching and assignments?

Successful Transition

17. What are your scores in the following assessments in the PSE course?

Subject Disciplinary Essay: ____

Subject Disciplinary Presentation: ____

Subject Disciplinary Seminar: ____

Table A1. Truth table

Case	RO	AD	Condition variable		PP	ING	Outcome variable ST
			M	A			
1	0	1	0	0	0	0	1
2	1	0	0	1	1	1	1
3	1	1	1	1	1	0	1
4	1	0	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	0	1	1	1	1	1
8	1	0	0	1	1	0	1
9	0	1	1	0	1	1	1
10	1	1	1	0	0	0	0
11	1	1	1	1	1	1	1
12	0	1	1	1	1	0	0
13	1	0	1	1	1	1	1
14	1	1	1	1	1	0	1
15	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0
17	1	0	1	1	1	0	0
18	1	1	1	1	1	1	1
19	1	0	1	1	1	1	0
20	1	1	1	1	1	0	1
21	1	0	1	1	1	1	0
22	1	1	1	1	1	1	1
23	1	1	1	1	1	1	1
24	1	0	1	1	1	1	0
25	1	1	1	1	1	1	0
26	1	0	1	1	1	1	1
27	1	1	1	1	1	1	1
28	1	0	1	0	1	1	0
29	0	0	1	1	1	1	1
30	0	0	1	1	1	1	0
31	0	0	0	1	0	0	0
32	1	0	1	1	1	1	0
33	1	0	0	0	0	0	1
34	1	1	1	1	1	1	1
35	1	1	1	1	1	0	1

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