



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Developing a Deep Mixed-Methods Research Design for the Critical Evaluation of UK Pre-sessional Programmes

MODULE CODE: EDCE7020

ASSESSMENT COMPONENT: 2

STUDENT NAME: Tao PENG

STUDENT NUMBER:2411134

Doctorate in Education (EdD)

1. Introduction

Pre-sessional programme (PSP) serves as a preparatory pathway for international students requiring linguistic improvement before commencing degree-level studies in UK higher education institutions. Recent demographic data reveals significant regional disparities in international student distribution, with English universities hosting 82% of this cohort compared to Scotland's 12% and a combined 6% in Northern Ireland and Wales (Universities UK, 2022). As evidenced by multiple studies (Pearson, 2020; Chong and Reinders, 2024), these intensive language programmes, primarily address linguistic competency gaps for applicants failing to meet direct entry language requirements.

The design of PSP highlights achievement of institutionally mandated English proficiency benchmarks, with success directly tied to students' capacity for academic engagement in English-medium degree programmes (Pearson, 2020). This outcomes-focused approach necessitates strict assessment protocols, whereby unsuccessful candidates face exclusion from their intended academic pathways based on discipline-specific language requirements. The programmes' structural emphasis on linguistic acquisition reflects institutional concerns regarding students' ability to navigate complex academic demands in a second language environment.

2. Research Methodology

2.1 Philosophical Foundations

This study is grounded in a pragmatic epistemology and a critical realist ontology, utilising a mixed-methods strategy to examine the effectiveness of PSPs. This philosophical foundation enables a comprehensive understanding of both students' academic progress and their lived experiences within the programme (Creswell and Plano Clark, 2018; Bhaskar, 2008). Pragmatism embraces both quantifiable results and contextual experiences, allowing methodological flexibility, whereas critical realism recognises an objective reality that is interpreted through both social structures and individual perspectives.

Vygotsky's (1978) sociocultural theory agrees that language learning and academic development are deeply embedded in a social context. Reflexivity ensures methodological rigour by requiring researchers to critically evaluate how their biases influence data interpretation (Payne and Payne, 2004; Consoli and Ganassin, 2022). In PSP studies, this principle balances objective measurements,

such as the effectiveness of PSP and long-term Impact (Pearson, 2020). This dual focus not only verifies findings but also contextualises them within institutional and cultural dynamics.

2.2 Methodological Integration

My research on PSP will take place in a PSP at a Russell Group university in England. The programme is regulated by the foundation studies department of this university, which constrains the flexibility in adapting pedagogical approaches and related practices. (Liu, 2024). The programme is focusing on students from diverse academic fields, and all international students on the programme are usually categorised as **non-native speakers** and considered to be **less competent** than their native counterparts in terms of their linguistic abilities (Consoli, 2022). After the ethical approval, my data collection will be conducted from a teacher I am familiar with and all the students in one of the teacher's classes (not excluding the possibility that the class will be full of Chinese students). A mixed-methods research (MMR) approach will be used to address the main research question (RQ):

- How can any UK university comprehensively evaluate a PSP's effectiveness for diverse Chinese students while assessing the long-term sustainability of its short-term academic impacts?

Pragmatism informs the flexible selection of methods based on the RQ above and the 3 Sub-questions mentioned in Chapter 3, while critical realism provides a philosophical foundation for exploring underlying mechanisms beyond observable outcomes. This approach enables triangulation, strengthening validity by integrating numerical patterns with lived experience, and reflects the theoretical commitment to both measurable and socially constructed understandings of learning.

2.3 Methods From MMR

2.3.1 Questionnaire

Questionnaire helps to collect data systematically to describe phenomena or characteristics within a specific population, providing valuable insights into participants' experiences and perceptions (Creswell & Creswell, 2023). To ensure accessibility for non-native English speakers, the language used in the instrument should be clear and culturally appropriate. The layout must be simple, with consistent formatting and clear instructions. Operationally, questionnaires can be administered online to maximise response rates and accommodate students' schedules (Dörnyei, 2007). Pre-testing with a small group can help identify and address any ambiguities.

2.3.2 Observation

Observation is a widely used technique for collecting first-hand data on learner behaviour and interaction within educational settings (Bryman, 2016). To ensure consistency and focus, it is advisable to prepare a structured observation framework in advance, targeting aspects such as verbal contributions, collaborative activity, and instances of English language use. In most cases, adopting a non-intrusive, observer-as-outsider stance helps minimise interference with classroom routines. Ethical safeguards must be in place, including informing participants about the purpose of the observation and securing their consent, while guaranteeing confidentiality in any dissemination of findings (Cohen, Manion and Morrison, 2018).

2.3.3 Interview

Semi-structured interviews offer flexibility while ensuring consistency across participants. Interviews should be arranged in a quiet, familiar environment to promote openness and reduce power imbalances, especially important when working with international students (Bryman, 2016). It is essential to consider the timing of interviews, conducting them shortly after the PSP may capture more accurate reflections. Besides, interviews will be recorded (with consent) and later transcribed for thematic analysis, using tools such as NVivo to manage data systematically.

2.4 Evaluation of Research Approach

Recent studies, such as Pearson's (2020) mixed-methods analysis, demonstrate how quantitative metrics align with qualitative evidence of learners' evolving confidence, effectively bridging positivist, and constructionist paradigms. The three methods described above do not exist in isolation, and by evaluating and applying them together (see Table 1), it is possible to gain insights into the subsequent data collection.

Method	Strengths	Limitations	Enlightenment
Questionnaires	1. Standardisation: Efficient collection of quantifiable data (Cohen et al., 2018). 2. Anonymity: Reduces bias for sensitive topics. (Dörnyei, 2007)	1. Superficial responses: Socially acceptable answers may dominate. (Bryman, 2016) 2. Limited depth: Misses different insights. (Bryman, 2016)	1. Use mixed open/closed questions to balance breadth and depth. 2. Pilot-test questions to identify ambiguous phrasing.
Semi-structured Interviews	1. Rich insights: Captures reflective	1. Researcher bias: Framing may steer responses. (Flick, 2018).	1. Train interviewers to use neutral prompts

	experiences. 2, Flexibility: Probes contradictions. (Silverman, 2017).	2. Time-intensive: Requires significant analysis. (Flick, 2018).	(e.g., “Tell me more”). 2. Triangulate with observational data to validate claims.
Classroom Observation	1. Authentic data: Directly documents practices. (Cohen et al., 2018). 2. Contextual understanding: Reveals implicit challenges.	1. Observer effect: Participants may alter behaviour. (Merriam & Tisdell, 2016) 2. Subjectivity: Interpretation depends on the researcher's judgment. (Cohen et al., 2018).	1. Conduct covert observations where ethical. 2. Use predefined coding frameworks to reduce bias.

Table 1: Strengths Limitations and Enlightenment of Researching Approach

Note: Any uncited views presented reflect the author's own perspective.

Each method offers distinct advantages regarding data richness, authenticity, or efficiency, yet presents challenges such as researcher bias, limited depth, or the observer effect (Bryman, 2016; Cohen et al., 2018). A deep understanding of these trade-offs enables researchers to align methods with research aims and contexts, thus enhancing rigour. However, scholars caution that superficial data amalgamation risks undermining analytical depth (Bryman, 2016). Contemporary frameworks address this by advocating interactions between datasets—for instance, integrating questionnaires on language proficiency scores with thematic analysis of reflective interviews—to reveal links between linguistic development and academic socialisation. This integrative approach strengthens the interpretive validity of findings and supports more holistic understandings of learner experience.

The following section explores Sampling Methods and Data Collection Strategies, examining how strategic participant selection and systematic data gathering are used for research.

3. Sampling Methods and Data Collection Strategies

Given that this research might take place both in the UK and China, where standardized ethical review procedures for social science studies are not consistently applied, the study will follow ethical framework based on UK best practices, with careful consideration of the local cultural norms and institutional environments.

To ensure representatives in the quantitative phase, a stratified random sampling approach will be used to recruit at least 100 students enrolled in PSP from various academic disciplines. This probability-based method helps mitigate selection bias (Cohen, Manion & Morrison, 2018), though it

may not fully capture discipline-specific language learning challenges. For the qualitative phase, purposive sampling will be used to select around 20 students, approximately 20% of the total sample, allowing for an in-depth investigation into the language learning experiences of Chinese international students (Creswell & Plano Clark, 2018).

Table 2 refines the research questions into specific sub-questions, enabling more focused inquiry into the pedagogical and developmental impact of PSPs. The data collection design adopts a mixed-methods approach, integrating 3 methods mentioned enhance triangulation and address validity concerns (Creswell, 2014). Sampling is purposive and stratified, encompassing students, graduates, and staff to ensure a comprehensive perspective across time and institutional roles. This allows researchers to investigate both immediate language gains and the long-term transferability of PSP-acquired skills (Wingate, 2012).

Sub-question	Method	Participants	Data Collection
1.To what extent does PSP participation enhance English language proficiency among Chinese international students?	Semi-structured Interviews	1.Students 2.Course Leaders	Participants' self-reported language development and perceptions of progress; reflections from course leaders on observed linguistic improvements
	Questionnaire	1.Student Cohort	Self-assessment of language gains across core skills (reading, writing, listening, speaking); evaluation of perceived usefulness of specific course elements
	Classroom Observation	1.PSP Sessions	Learner engagement in spoken interaction; language usage patterns in collaborative and individual tasks; responsiveness to teacher feedback
2.How is language development achieved through a PSP associated with later academic performance?	Follow-up Interviews	1.Former PSP Students 2.Course Leaders of Degree Modules	Reflections on academic demands in degree-level study; students' views on the transferability of PSP-acquired skills; academic staff insights into preparedness
	Questionnaire	1.PSP Graduates	Use of PSP strategies in academic tasks (e.g., reading journal articles, delivering presentations); self-perceived competence in academic English during degree study
	Observation	Academic Writing Classes	Student ability to apply PSP-taught structures and conventions; engagement with critical reading and writing tasks; support-seeking behaviours
3.What additional variables, beyond language	In-depth Interviews	1.Students 2.Course Leaders	Exploration of non-linguistic factors such as academic confidence, cultural adjustment, motivation, and study habits; identification of perceived challenges

ability, influence academic performance in and beyond the PSP?	Questionnaire	1.Student Cohort	Learning strategies, time management, psychological readiness for academic life; prior educational experiences and expectations
	Observation	Learning Support Sessions & Study Environments	Student independence and initiative in non-instructed settings; use of support services; peer collaboration patterns and resource access behaviour

Table 2: Data Collection Strategies for Research Sub-Questions (Source: Author's own)

However, classroom observations utilise convenience sampling of one teaching staff member with existing professional rapport, prioritising accessibility over generalisability. This pragmatic choice streamlines data collection but limits insights into pedagogical variations across instructors.

In contrast to the mid-PSP research, the post-PSP study will adopt a stratified random sampling method to guarantee adequate representation across key variables:

Institutional stratification: Participants will be drawn from students who participated in the mid-way PSP research at this Russell Group university's pre-session programme and progressed to their degree courses.

Disciplinary stratification: Sampling will account for the broad disciplinary spectrum of degree programmes.

Linguistic background stratification: Participants will be categorised by medium of instruction (English or other languages).

The post-PSP research will primarily focus on qualitative research, selecting a purposive sample of participants who previously engaged in interviews to reflect the diversity of the larger and wider cohort (Field, 2018). Additionally, snowball sampling will be utilised to ensure adequate disciplinary stratification within the sample.

Triangulating these methods addresses individual limitations by combining broad quantitative trends with rich qualitative narratives (Dörnyei, 2007). However, reliance on a single institution's cohort restricts external validity, and stratified sampling assumes homogeneity within disciplinary groups. Ethical protocols ensure participant diversity and institutional compliance, though the focus on Chinese students may constrain cross-cultural

applicability. These trade-offs reflect the inherent tension between methodological idealism and operational constraints in longitudinal educational research.

4. Ethic

Ethical issues form a fundamental aspect of trustworthy research (British Educational Research Association [BERA], 2021). This research follows the guidelines set out in the University of Wales Trinity Saint David's ethical code (University of Wales Trinity Saint David [UWTSD], 2023).

Formal ethical clearance will be obtained from the university's ethics panel before commencing fieldwork. All participants will receive plain-language documentation explaining the study's aims, methods, and possible effects. Consent forms will confirm individuals' rights to withdraw freely at any stage, emphasising voluntary involvement (Thomas, 2022; BERA, 2021). Where needed, additional approvals will be secured from PSP leaders or PSP staff.

When comparing the nature of this project to the definition of internal research provided by Coghlan and Bramnick (2005), the PSP examined in my study is conducted within the same geographical region where I am based. It is important that I was and will be not involved in this course in any capacity, as I was not part of the programme, nor was I a member of the PSP team.

From a personal standpoint, as an international student, researching the experiences of other international students has required careful reflexivity. Drawing on Payne and Payne's (2004, p. 191) conceptualization of reflexivity, I have actively engaged with how my own identity and positionality shape this research. By explicitly addressing these influences, I am not only going to challenge my assumptions but also to provide readers with the necessary context to critically evaluate this study. Given international students' potential vulnerability during cultural transition, strict confidentiality measures will apply. All records will use pseudonyms, with personal details removed from final reports. Digital files will be password-

protected following UK data laws (Information Commissioner’s Office, 2023). These steps aim to maintain trust while respecting participants’ dignity throughout the research process (UWTSD, 2023; Hammersley, 2020) Personal identifiers will be removed or anonymised in the reporting of findings, and all digital records will be securely stored in accordance with GDPR requirements. These measures are taken to promote trust and transparency, and to uphold the dignity and rights of all individuals involved (UWTSD, 2023; BERA, 2021).

5. Empirical Tools and Techniques of Analysis

This empirical study involves two questionnaire surveys administered at Mid-PSP and Post-PSP stages for **PSP students**. Classroom interactions will be audio- (or) and partially video-recorded. Semi-structured interviews with Chinese international students and PSP staffs conduct at several points to examine curriculum relevance, teaching effectiveness, and the alignment between PSP outcomes and subsequent academic performance, following a contextual analysis approach (Reeves et al., 2013).

5.1 Questionnaire

This study used Dooley's (2010) 5-point Likert scale questionnaire to quantify PSP participants' self-perceived linguistic and academic progress. The 30-item 5-point scale balances the granularity of the responses with the cognitive load on the participant, capturing the different attitudinal shifts while reducing the risk of ambiguous responses. Its ordinal structure allows for parametric analyses of longitudinal trends, which are essential for evaluating instructional interventions. Strict inter-translation protocols ensure conceptual equivalence for the PSP international students, thus reducing cultural bias in self-assessment (Harkness et al., 2010). Short-answer and open-ended questions will be used to answer basic information and provide extra feedback, as Table 3 demonstrates.

Section	Purpose	Question Type	Example Questions(English/Mandarin)
A: Background	Demographic & linguistic background	Short-answer	1. Pseudonym: _____ 2. IELTS/TOEFL score: _____ 3. PSP duration: _____
B: Language	English skill	Likert scale (1-	1. Rate your confidence in academic writing

Section	Purpose	Question Type	Example Questions(English/Mandarin)
Proficiency	development	5)	(1=low, 5=high). 请给您在学术写作上的信心值打分。 2. Rate the difficulties in language barriers faced in lectures. (1=low, 5=high). 按照讲座中面对语言障碍的困难度打分。
C: Academic Adaptation	Preparedness for degree studies	Likert scale (1-5)	1. Rate relevance of PSP workshops to your discipline? (1=low, 5=high) 请评价 PSP 与您专业领域的相关程度。
D: Extra Feedback	Curriculum improvement suggestions, etc.	Open-ended	1. Propose one change to better support language/academic needs (in English): _____

Table 3: Design for Student Questionnaire in Post-PSP (Source: Author's own)

To achieve the validity and reliability of bilingual questionnaires, both English and Mandarin version will be designed using back-translation to ensure accuracy. Example questions will be analysed by SPSS to calculate average language gains and identify hidden patterns, such as links between grammar improvement and higher essay scores. However, small participant numbers (e.g., up to 100 students) may limit broader applicability, and fixed-choice questions cannot fully explain why some students struggle with listening tasks despite test score improvements.

5.2 Classroom Observation with the Participants' Knowledge

Table 4 illustrates a structured framework for conducting classroom observation as a non-participant within a PSP context. Five focus areas—ranging from language skill development to policy adherence—are examined using mixed methods, including checklists, tallies, and resource analysis. This triangulated design (Creswell, 2014) strengthens ecological validity and ensures that the observations reflect authentic classroom dynamics. Notably, emphasis is placed on the visibility of language-focused instruction and the exclusion of discipline-specific content. This aligns with PSP's academic integrity policies and language-only remit (Tomlinson and Masuhara, 2017).

Focus Area	Observation Points	Recording Methods	Notes
Language Skill Development	1.Are lessons strictly focused on academic English? 2.Do tasks link to academic language application ?	Checklist + descriptive notes	Avoid disciplinary content; note if subject-specific examples are used.
Academic Conventions	1. Is systematic teaching of norms provided? 2. Does feedback prioritise language/expression over content depth?	Checklist	Track alignment with institutional academic integrity policies.
Student Engagement	1. Frequency of academic English use in discussions. 2. Strategies for supporting learners who are struggling.	Interaction tally + field notes	Note passive learners and language-related hesitations.
Programme-Degree Linkage	1.Are students explicitly taught how PSP skills apply to future studies? 2. Is PSP's role as a language bridge clearly communicated?	Quotes from teacher explanations	Highlight mismatches between PSP training and disciplinary requirements.
Policy Adherence	1. Are resources purely language-focused?	Incident log + resource analysis	Flag deviations from PSP's language-only mandate.

Table 4: Design for Classroom Observation (Source: Author's own)

The study will analyze classroom interactions by applying Spada and Fröhlich's (1995) Communicative Orientation of Language Teaching (COLT) framework. A total of 40 sessions (20 hours) will be coded to identify interaction patterns, supplemented by thematic analysis of audio-recorded observations. Metrics such as teacher-student dialogue ratios and task types will be recorded, supplemented by contextual notes to interpret quantitative patterns. To minimise observer influence, sessions will be conducted discreetly, with a subset reviewed by a second researcher to ensure coding consistency. Challenges may arise in

distinguishing scaffolded guidance from directive instruction, necessitating clear operational definitions. The method prioritises ecological validity but remains constrained by the transient nature of classroom dynamics.

5.3 Semi-structured Interview

Once the questionnaire and observational data have been analyzed, semi-structured interviews will be conducted to explore emerging themes in greater depth, using open-ended questions to capture participants' perspectives. These interviews also standardise core prompts across participants (Bryman, 2016; Cohen et al., 2018; Jimarkon & Dikilitaş, 2025).

To address these sub-issues, I will choose 20 of the 100 questionnaire participants (20% of the student body) and conduct bilingual, reciprocally interpreted interviews with them (as shown in Table 6), and English-language interviews with 3-5 faculty members involved in the direction and administration of this project (see Table 5 for outline templates). Audio-recorded interviews of approximately 60 minutes each (mid-PSP and post-PSP) will follow an interview protocol to allow for flexibility in dealing with emerging themes (Bryman, 2016). This approach allows for a nuanced exploration of participants' lived experiences while maintaining comparability through standardised prompts (Cohen et al., 2018). Teacher interviews will focus on pedagogical decision-making, complementing student perceptions of learning outcomes (as described in Table 5).

Section	Purpose	Question Type	Indicative Questions
Part A: Background Information	To collect demographic and teaching background	Open-ended	1.Name / Pseudonym 2.Years of teaching English 3 Teaching contexts 4. Education
Part B: Reflections on Teaching and Student Performance	To evaluate teaching strategies and academic progress	Semi-structured	1.Effective approaches for academic English 2.Student progress observed 3.Common student challenges 4.Assessing readiness

Table 5: Design for Interview of PSP staff (Source: Author's own)

Section	Purpose	Question Type	Indicative Questions
Part A: Background Information	To understand student's language learning background	Open-ended	Name / Pseudonym What is your experience learning English, and what are any test results (e.g. IELTS)?
Part B: Teaching & Its Impact on Language and Academic Skills including Part B1: language proficiency Part B2: academic performance Part B3: Teaching and Learning Support Part B4: Self-Reflection	To explore how teaching supports students' language and academic development	Semi-structured	1.在语言课中，哪些教学方法帮助你提升英语能力？ Which teaching methods were most effective for improving your English? 2. 老师是否帮助你理解并使用学术语言？请举例。 Did the teacher help you understand and use academic language? Can you give example(s)? 3.你是否学会了如何进行批判性思考？是谁引导你理解这个技能的？ Have you learned how to apply critical thinking? Who or what supported your understanding? 4.哪些学习活动（如小组讨论、写作反馈）最有助于你准备正式专业学习？ What learning activities (e.g., group work, writing feedback) helped you prepare for academic study?

Table 6: Outline Design for Bilingual Interview of Midway-PSP Students (Source: Author's own)

Responses in the interview will be thematically coded using NVivo to identify patterns, such as shifts in learning strategies or discrepancies between self-reported confidence and observed performance. While early interviews typically reveal core themes, later reflections may introduce retrospective rationalisation, requiring triangulation with observational data. Staff interviews will further explore alignment between teaching objectives and student interpretations. Potential limitations include response bias due to language barriers or participants' desire to present favourably.

Moreover, the initial design drafts as examples outlined above still require further refinement to maximise their effectiveness. Additionally, the three research methodologies are not independent; instead, they interact synergistically, producing results that exceed the mere combination of their separate contributions.

Conclusion

This research examines how PSPs enhance academic performance and language proficiency through an MMR design. Drawing on pragmatism, the study combines quantitative

measurements with qualitative insights from stakeholders' feedback. This dual focus addresses the complexity of PSP outcomes, balancing institutional demands for measurable success with the need to understand students academically (Creswell and Plano Clark, 2011). MMR will be useful to explore how PSPs bridge linguistic gaps and support academic adaptation in intensive learning contexts. The findings offer a deeper understanding of programme effectiveness and provide practical insights to inform the design of more inclusive, relevant, and sustainable support for future international cohorts.

(3712 words)

References:

- Atherton, M. (2006) Pre-sessional EAP programmes: A mixed methods evaluation, *Journal of English for Academic Purposes*, 5(3), pp. 207-223.
- Arkoudis, S. and Doughney, L. (2014) *English language proficiency*. Australia: OLT.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology, *Qualitative Research in Psychology*, 3(2), pp. 77-101. Accessed at: <https://doi.org/10.1191/1478088706qp063oa>
- British Educational Research Association (2021) *Ethical guidelines for educational research*. 4th edn. London: BERA. Accessed at: <https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-fifth-edition-2024>.
- Bhaskar, R. (2008) *A Realist Theory of Science*. London: Routledge.
- Bryman, A. (2006) Integrating quantitative and qualitative research: how is it done?, *Qualitative Research*, 6(1), pp. 97-113.
- Chong, S.W. and Reinders, H. (2024) *Innovation in Language Learning and Teaching, New language learning and teaching environments*. Palgrave Macmillan. Accessed at: <https://doi.org/10.1007/978-3-031-66241-6>.
- Cockburn, A. (2013) Researching Less Successful Educators: Challenges and strategies, *Journal of Educational Research*, 65(2), pp. 123-135.

Coghlan, D., & Brannick, T. (2005) *Doing action research in your own organization* .2nd edn. SAGE.

Cohen, L., Manion, L. and Morrison, K. (2018) *Research Methods in Education*. 8th edn. London: Routledge.

Consoli, S. (2022) Practitioner Research in a UK pre-sessional: the Synergy between Exploratory Practice and Student Motivation, *Journal of English for Academic Purposes*, 57. Accessed at :<https://doi.org/10.1016/j.jeap.2022.101108>.

Consoli, S. and Ganassin, S. (2022) *Reflexivity in Applied Linguistics*. Accessed at: <https://doi.org/10.4324/9781003149408>.

Creswell, J.W. and Plano Clark, V.L. (2018) *Designing and conducting mixed methods research*. 3rd edn. London: Sage.

Dörnyei, Z. (2007) *Research methods in applied linguistics*. Oxford: Oxford University Press.

Field, A. (2017) *Discovering Statistics Using IBM SPSS Statistics*. 5th edn. SAGE.

Flick, U. (2014) *An Introduction to Qualitative Research*. London: SAGE.

Gray, D.E. (2018) *Doing Real World Research*, London: SAGE.

Gray, D.E. (2022) *How to Do Your Research Project: A Guide for Students*, 4th edn. London: SAGE.

Greene, J. C. (2007) *Mixed methods in social inquiry*. San Francisco: Jossey-Bass.

Harkness, J.A., Braun, M., Edwards, B., Johnson, T.P., Lyberg, L.E., Mohler, P.P., Pennell, B.-E. and Smith, T.W. (2010) Survey methods in multinational, multiregional, and multicultural contexts. Hoboken, NJ: Wiley.

Hammersley, M. (2020) *Reflections on the Methodological Approach of Systematic Reviews*, Springer.

Ivankova, N. V. and Creswell, J. W. (2009) Mixed methods, in *Qualitative research*, 4(3), pp. 97–114.

Johnson, R. B. and Onwuegbuzie, A. J. (2004) Mixed methods research: a research paradigm whose time has come, *Educational Researcher*, 33(7), pp. 14–26.

Liu, L. (2024) Exploring the Feasibility of Incorporating ELFA Awareness into the Development of EAP Pedagogy in a UK pre-sessional Course, *Journal of English as a Lingua Franca*, 13(2), pp. 233–260. Accessed at: <https://doi.org/10.1515/jelf-2025-2001>.

Mazgutova, D. (2015) *The Development of Academic Writing Skills in EAP Programs: A Mixed-Methods Study*. PhD thesis. University of Birmingham.

Merriam, S.B. & Tisdell, E.J. (2016) *Qualitative research: A guide to design and implementation*. 4th edn. San Francisco: Jossey-Bass.

Morgan, D. L. (2007) Paradigms lost and pragmatism regained: methodological implications of combining qualitative and quantitative methods, *Journal of Mixed Methods Research*, 1(1), pp. 48–76.

Pattamawan Jimarkon and Kenan Dikilitaş (2025) *Critical Intercultural and English Language Issues in the Internationalisation of Higher Education*, Routledge eBooks. Informa. Accessed at: <https://doi.org/10.4324/9781003368793>.

Payne, G. and Payne, J. (2004) *Key concepts in social research*. London: SAGE. Accessed at: doi.org/10.4135/9781849209397

Pearson, W.S. (2020) 'Mapping English language proficiency cut-off scores', *Journal of English for Academic Purposes*, 39, pp. 100–111. Accessed at: <https://doi.org/10.1016/j.jeap.2020.100866>.

Pearson, W.S. (2020) 'The Effectiveness of Pre-sessional EAP Programmes in UK Higher Education: a Review of the Evidence', *Review of Education*, 8(2). Accessed at: <https://doi.org/10.1002/rev3.3191>.

Punch, K.F. (2009) *Introduction to Research Methods in Education*. London: SAGE.

Spada, N. and Fröhlich, M. (1995) *Communicative orientation of language teaching observation scheme: Coding conventions and applications*. Sydney: National Centre for English Language Teaching and Research.

UWTSD (2023) *Research Ethics / University of Wales Trinity Saint David*. Accessed at:

<https://www.uwtsd.ac.uk/research/research-ethics/>

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

Wingate, U. (2015) *Academic Literacy and Student Diversity*. Bristol: Multilingual Matters.

Yin, R.K. (2014) *Case Study Research: Design and Methods*. Fifth edition. Los Angeles: SAGE.

AI Acknowledgement

I acknowledge the use of ChatGPT (<https://chatgpt.com/>) in April 2025 to check my work using the prompt(s):

1. Please provide me with the methods of data analysis on quantitative research for Pre-Sessional Programme.

I acknowledge the use of ChatGPT (<https://chatgpt.com/>) on 25. April 2025 to check my work after I FINISH ALL the writing using the prompt(s):

1. Please help me to organize all the references in the form of Harvard 12.

I acknowledge the use of ChatGPT (<https://chatgpt.com/>) and Grammarly (<https://www.grammarly.com/>) on 25. April 2025 to Check my work after I FINISH ALL the writing using the prompt(s):

1. Please check the readability, grammar, and syntax in writing.

I confirm that I have copies of my drafts, notes, and other resources I used before and after the use of AI tools, which I may be asked to provide as evidence.