TESOL
in Context

Teaching English to Speakers of Other Languages

Acknowledgement of Country

In the spirit of reconciliation the Australian Council of TESOL Associations (ACTA) acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today. We acknowledge that the arrival of the English language to this continent impacted the traditional languages and cultures of Aboriginal and Torres Strait Islander people, and celebrate the work to reclaim or maintain these languages. ACTA members teach English in addition to supporting the maintenance and development of First Languages, and encourage the acquisition and use of other languages – including First Nations Languages.

About**TESOL** *in* Context

Journal of ACTA, Australian Council of TESOL Associations

EDITORIAL

TESOL in Context: Bridging theory and practice for inclusive education

Shashi Nallaya   University of South Australia, Australia

Sue Ollerhead   Macquarie University, Australia

Julie Choi   University of Melbourne, Australia

As the global landscape of education continues to evolve, so too does our understanding of what it means to teach English to speakers of other languages (TESOL). The diverse array of five research articles and two book reviews presented in this edition of *TESOL in Context*, sheds light on the multifaceted nature of language education, offering fresh perspectives and innovative approaches that are essential for fostering inclusive and effective learning environments.

"Inspired to be a teacher seriously": An autoethnography of student engagement in a Vietnamese TESOL training programme

This paper offers a compelling autoethnographic exploration of student teachers' in-class engagement following a 120-hour TESOL training programme at an institution in Vietnam. By delving into personal narratives and experiences of a TESOL teacher trainer, the study highlights crucial insights into student teachers' engagement with teaching methods that synthesise both theoretical and practical components. Moreover, the research enriches the academic discourse, underscoring the potential of using the cognitive, emotional, and behavioural engagement triad as a diagnostic tool to understand students' learning experiences in TESOL training programmes. The insights provided emphasise the importance of fostering a supportive and inspiring educational environment that nurtures the aspirations of future educators.

Expanding teacher understanding of scaffolding for multilingual learners using a language-based approach to content instruction

In this study, the authors delve into the critical role of scaffolding, in supporting multilingual learners, learning English and subject area content. By employing a language-based approach to content instruction, the research underscores the necessity for teachers to deepen their understanding of scaffolding techniques. This paper explores how teachers approach, expand, and apply their understanding of scaffolding practices, offering insights and implications for teacher educators to enhance the scaffolding presented in coursework for multilingual learners.

AMEP and the burden of compliance

The Adult Migrant English Program (AMEP) serves as a lifeline for many migrants seeking to improve their English proficiency. This paper brings to light the challenges posed by compliance demands within the program focusing on the relationship between provider and teachers of the AMEP, arguing that changes in levels and types of trust account for many of the tensions within the AMEP. The author describes how compliance was raised as an issue and introduce key concepts. He then tracks changes in approaches to compliance as manifested in three AMEP curriculum documents over 75 years. The discussion progresses to three policy trends that contributed to compliance becoming the burden currently experienced by providers and teachers. The article concludes that there are signs that trust between stakeholders may be changing, with a potential reduction in the burden of compliance.

Inclusion in the learning game: Applying considerations from cognitive neuroscience, educational psychology, and SLA to language learning activity and materials design

This innovative paper bridges the gap between cognitive neuroscience, educational psychology, and second language acquisition (SLA) to propose a comprehensive framework for language learning activity and materials design. By integrating these fields, the authors advocate for the creation of inclusive, engaging, and effective learning experiences. The paper draws from relevant research pertaining to these domains to establish a framework for designing and implementing activities and learning materials capable of facilitating enhanced language learning outcomes within an inclusive classroom. The authors advocate ten key considerations that provide teachers with necessary knowledge for designing language learning activities and materials in an engaging and efficient manner.

The critical challenge for ELT in Indonesia: Overcoming barriers in fostering critical thinking in testing-oriented countries

The authors of this paper refer to the Indonesian Government's recent introduction of critical thinking in education through its alignment in national exams and the curriculum. The authors highlight the challenges this new policy creates for English Language Teaching (ELT) due to the traditional testing culture. They argue that teachers need a deep understanding of critical thinking and recommend the incorporation of this skill into daily teaching activities and collaborative action research, to enhance teachers' abilities in this domain.

Conclusion

The articles featured in this edition of *TESOL in Context* – 2024 Volume 33 Number 01 General Issue – underscore the dynamic and interconnected nature of language education. From the personal journeys of aspiring teachers to the systemic challenges within established programs, these papers collectively highlight the importance of adopting holistic, inclusive, and research-informed approaches. As we continue to navigate the complexities of TESOL, it is imperative that we remain committed to bridging theory and practice, ensuring that every learner has the opportunity to thrive.

Dr Shashi Nallaya is the Associate Director for the Teaching Innovation Unit of University of South Australia. She has many years of experience teaching academic literacies, English language, and second language acquisition. She has been extensively involved in the design, implementation and evaluation of English language and teacher training programs at primary, secondary and tertiary levels, in various linguistic and cultural settings. She is currently working as an Academic Developer at UniSA. In this role, she is responsible for helping academics implement an innovative curriculum through mentoring, staff development sessions and resources. Shashi Nallaya studied for her PhD at the School of Education, The University of Adelaide. Her doctoral study investigated how technology, student characteristics and learning needs impact the acquisition of English language proficiency. Prior to taking up her current role, she was working as a Learning Adviser at the Faculty of Professions, University of Adelaide. She was an academic at the Faculty of Languages, Sultan Idris Education University, Malaysia where she originates from. She was involved in the training of pre-service teachers.

Dr Sue Ollerhead is a Senior Lecturer in Languages and Literacy Education and the Director of Secondary Teacher Education at Macquarie University. She grew up in multilingual South Africa, a country with twelve official languages, where she learned English, Afrikaans, isiZulu, isiXhosa, and French at school and university. She began her teaching career at a Xhosa-medium primary school and then went on to teach Zulu-speaking factory workers in South Africa's adult migrant literacy program. She has also spent a large part of her working life teaching English and working in educational publishing in South Africa, Namibia, Egypt, and the United Kingdom. Throughout her academic career, Sue has used her international experiences to train numerous undergraduate and postgraduate students to become knowledgeable, reflective, and responsive teachers of culturally and linguistically diverse learners.

Dr Julie Choi is Associate Professor in Education (Additional Languages) in the Faculty of Education at the University of Melbourne. She is co-editor of the books *Language and Culture: Reflective Narratives and the Emergence of Identity* (2010), *Plurilingualism in Teaching and Learning: Complexities across Contexts* (2018), and author of *Creating a Multivocal Self: Autoethnography as Method* (2017).

"Inspired to be a teacher seriously": An autoethnography of student engagement in a Vietnamese TESOL training programme

Huy-Hoang Huynh[1]

[1]PhD Scholar, Monash University, Australia

Lynette Pretorius[2]

[2]Lecturer, Monash University, Australia

Abstract

TESOL (Teaching English to Speakers of Other Languages) training programmes in Vietnam often emphasise the significant alignment of academic knowledge with practical classroom methods. However, an intricate yet underexplored topic is understanding the dynamic engagement of student teachers in those programmes to investigate the complexities of such alignment. Therefore, this research examines factors influencing student teachers' in-class engagement following a 120-hour TESOL training programme at an institution in Vietnam. This autoethnographic study analysed a TESOL teacher trainer's reflections on student teachers' engagement in the programme, using artefacts in the form of anonymous and open-ended short-text feedback from 30 students across approximately eight months. The reflection and feedback responses were analysed thematically, anchored in a framework emphasising the three facets of in-class engagement, i.e., cognitive, emotional, and behavioural dimensions. Through the analysis, three themes were constructed: (1) theoretical-practical synthesis: how TESOL-related concepts are blended with concrete teaching examples; (2) pedagogical climate: the teacher educator's critical role in creating a receptive and engaging learning environment; and (3) professional pathway clarity: the student teachers' understanding of their future roles and trajectories in the TESOL arena. The research's findings provide TESOL educators with crucial insights into student teachers' engagement with teaching methods that synthesise both theoretical and practical components. Moreover, the research enriches the academic discourse, underscoring the potential of using the cognitive, emotional, and behavioural engagement triad as a diagnostic tool to understand students' learning experiences in TESOL training programmes.

Keywords: *TESOL; TESOL education; engagement; teacher education; autoethnography.*

Introduction

In Vietnam, the rapid proliferation of Teaching English to Speakers of Other Languages (TESOL) training programmes has sparked a vibrant debate about their efficacy and alignment with the practical demands of teaching (see Andrew, 2020; Chowdhury & Phan, 2008; Nguyen & Ngo, 2017; Ping, 2015). This debate strikes at the heart of what it means to prepare student teachers in TESOL-related courses with essential skills and a foundation of subject matter knowledge, as well as equip them for the real-world challenges they will face. However, there remains a palpable gap in our understanding of how student teachers engage with these programmes and the extent to which this engagement influences their views on effective teaching practices for an English teacher.

TESOL programmes are designed to prepare student teachers with the crucial skills, foundational knowledge, and pivotal strategies to effectively teach English to non-native speakers (see Barnawi & Ahmed, 2020; Brown & Ruiz, 2017; Choi & Poudel, 2022). Student teachers in this study refer to individuals who have enrolled in TESOL training programmes and are at various stages of their professional development, from novice teachers seeking to enter the field of English language teaching (ELT) to more experienced teachers looking to refine their teaching practices and expand their expertise in TESOL methodologies. These training programmes, which vary widely in their structure, content, and delivery methods, serve as a crucial bridge between theoretical linguistics and practical teaching methodologies (Darling-Hammond et al., 2017; Ellis et al., 2020; Nguyen, 2019; Nguyen & Tran, 2022).

Literature in the field of language education consistently highlights several key elements crucial to the success of TESOL programmes (Kumaravadivelu, 2012; Nguyen & Tran, 2022; Richards & Rodgers, 2014; Swan, 2018). Notably, the research underscores the importance of a robust curriculum that integrates linguistic theories with teaching practices, the development of a supportive and inclusive learning environment, and clear guidance on career pathways for aspiring TESOL professionals (Freeman & Johnson, 1998; Nguyen & Tran, 2022; Richards, 2017). These foundational elements are critical for equipping future English language teachers with the tools to navigate the complexities of language instruction in diverse educational settings.

Driven by a blend of professional curiosity and personal investment, the first author of this paper (Hoang) embarked on this study to unpack the layers of student teacher engagement in Vietnamese TESOL programmes. This exploration was a journey to the core of what makes the TESOL training programme meaningful and effective, both for Hoang as a teacher in the training and the engaged student teachers in the course. Hoang approached one of his PhD supervisors (Lynette, the second author of this paper) to act as a critical friend in this study, providing insights and probing questions. It is important to note that, throughout the rest of this paper, when the first person pronouns *I, me,* or *my* are used, it reflects Hoang's insights and personal experiences. This was purposely chosen, as this paper is the story of Hoang's journey to uncover the elusive factors that influence student teacher engagement. When the pronouns

we, us, or *our* are used, this is done to reflect a more general description of the study design or theory, as this was a collaborative effort between Hoang and Lynette.

My journey into the heart of TESOL is deeply personal, driven by a quest to understand how we, as teachers, can bridge the divides of language and culture to fully unlock our students' potential. My attention was initially captured by the global surge in the demand for English proficiency, a testament to the critical role TESOL training programmes hold in our interconnected society. Over the past two years, my role as a TESOL teacher educator has been to equip student teachers with the essential skills and knowledge for effective teaching. Yet, my focus has equally been on fostering cultural sensitivity and adaptability, which are critical requirements in a TESOL training course (Brown & Ruiz, 2017; Gay, 2018; Tomlinson, 2016). These factors reflect the aspirations of many student teachers engaging in TESOL-related fields worldwide (Bordia et al., 2006; Nguyen & Tran, 2022; Yoko & Elke, 2022), underscoring the vital influence teacher educators have on their course success and their future views on ELT.

My focus has sharpened on Vietnam, my homeland, where the thirst for English education has surged, driven by the winds of globalisation and economic integration (Le, 2020). Here, the landscape of TESOL programmes has blossomed to meet this demand, each initiative a beacon of hope for bridging language divides (Le & Le, 2022). Yet, as these programmes multiplied over the past years, so did my concerns about the depth and quality of engagement they fostered among student teachers. This concern is not only academic but also personal. I have seen first-hand the difference a deeply engaged teacher can make, and I have witnessed the transformative power of passionate and participatory education. Working with student teachers across classes in those programmes, listening to their stories of why they want to become English teachers, and observing how they progressed throughout the instructed course, I have gained many insights. This experience echoes the findings of Chen and Gao (2020), who highlight the significance of such immersive learning experiences in the journey of language teacher education. Significantly, I am deeply invested in ensuring that these TESOL programmes not only meet the growing demand for English language teaching but also truly empower student teachers to foster learning environments where engagement is deep, meaningful, and transformative for every future student whose lives they touch.

In the Vietnamese context, as the demand for qualified English language teachers continues to grow, understanding the core components that contribute to effective TESOL training has become increasingly important (Ilieva & Ravindran, 2018; Morgan, 2019; Nguyen & Tran, 2022). Engagement, as I have come to understand it in the realm of TESOL, is a multifaceted concept encompassing cognitive, emotional, and behavioural dimensions of student teacher learning (Fredricks et al., 2004). In TESOL training, engagement reflects the intellectual rigour student teachers bring to their studies, the emotional connections they forge with their training and their active participation in shaping their learning journeys (Ellis et al., 2020; Hawkey, 2006). High levels of student teacher engagement in those programmes are the lifeblood of effective teaching, nurturing a profound understanding of teaching methodologies and honing classroom management skills that could positively contribute to student teachers' learning outcomes (Fredricks et al., 2004; Nguyen & Ngo, 2017; Nguyen & Tran, 2022). Research

indicates that understanding how teachers can engage students effectively within the training context can shape student teachers' views on implementing these approaches in their future classrooms (Kumaravadivelu, 2006; Nguyen, 2019). Therefore, understanding how student teachers engage within such programmes requires trainers to reflect on and adapt their instructional strategies and classroom dynamics.

My experiences as a TESOL educator have led me to pursue a PhD exploring the influence of student engagement on language teacher identity. In this way, I can agree with Pretorius (2019), who notes that "it is the research topic that chooses the researcher" (p. 3). Through my experiences in the PhD, I have reflected on my role as a teacher educator, and it is through this lens that I approach the present study. I hope to contribute to the scholarly discourse by answering the following research questions:

RQ1: Reflecting on my role as a teacher educator, what key factors within the TESOL training programme do I perceive as significantly influencing student teacher engagement?

RQ2: Based on my experiences and observations, how do I believe these factors influence the overall effectiveness of teacher preparation in the TESOL training programme in Vietnam?

Conceptual framework

My study is anchored in the multi-dimensional engagement framework delineated by Fredricks et al. (2004). My analysis particularly emphasises three critical dimensions of engagement (cognitive, emotional, and behavioural) as they pertain to how I perceive student teachers' engagement throughout the TESOL training programmes. In this framework, behavioural engagement is characterised by various factors, including participation, effort, attention, persistence, adherence to positive conduct, and the avoidance of disruptive behaviours (Fredricks et al., 2016). Emotional engagement is understood through the lens of student teachers' positive and negative feelings towards their educators, peers, academic subjects, or the course itself, alongside their sense of belonging and identification within the learning environment (Fredricks et al., 2016). Finally, cognitive engagement involves the application of self-regulated learning strategies, deep learning approaches, and the exertion of effort required to grasp complex concepts (Fredricks et al., 2016).

Analysing any of the emotional, behavioural, or cognitive components in isolation fails to capture the complexity of human psychological processes (Dao et al., 2021; Huynh & Adams, 2022; Ngo, 2022). Consequently, I also adopted Vygotsky's cultural-historical theory of learning and development (1994, 1998) in this study. Vygotsky's (1994) theory supports Friedricks' (2004) engagement framework by seeing the dimensions of engagement as interdependent components of a holistic educational experience. Vygotsky's (1994) theory also emphasises the dynamic interplay between an individual and their environment, highlighting how this interaction is central to learning and personal development. Individuals contribute their unique experiences to this interplay, thereby influencing the nature of their interactions within various contexts (Ngo, 2022; Vygotsky, 1994). Concurrently, the environment, along with its participants, moulds the individual's development (Vygotsky, 1994). This perspective

underscores the symbiotic relationship between a person and their surroundings, suggesting that the essence of learning and development is found in the fluid exchange between internal processes and external influences (Vygotsky, 1994). Figure 1 demonstrates the conceptual framework for this study. This diagram highlights the interrelatedness of cognitive, emotional, and behavioural engagement and their cumulative effect within the classroom setting.
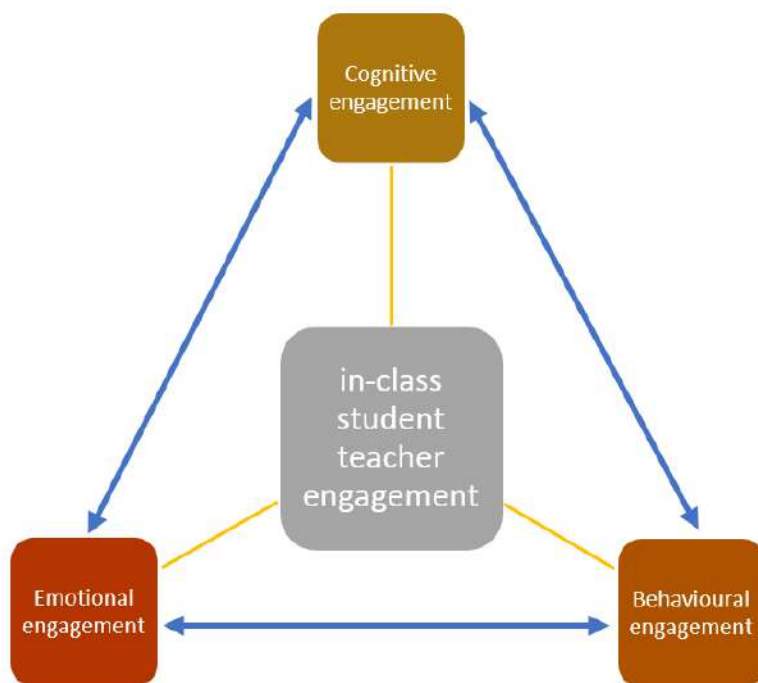
Figure 1. The interrelatedness of cognitive, emotional, and behavioural engagement.

Recent research suggests that the dynamics of student engagement are significantly influenced by the classroom environment and individual learner characteristics (Dao et al., 2021; Huynh & Adams, 2022). Of particular significance in the context of student teachers undergoing TESOL training programmes is the intricate interconnection among cognitive, emotional, and behavioural engagement dimensions. In this paper, cognitive, emotional, and behavioural are defined based on their specific roles and impacts on student learning. Firstly, the fusion of cognitive engagement (interpreting tasks, planning lessons, and understanding language theories) with emotional engagement (building rapport with peers and establishing awareness of the target language's culture) is crucial. This combination empowers student teachers to foster an inclusive mindset and effective learning environments tailored to diverse linguistic and cultural backgrounds of their students.

In addition, the symbiosis of emotional engagement (such as feeling motivated to learn or being emotionally connected to the lectures) with behavioural engagement (including active participation and maintaining professionalism in class) reinforces interactions between teacher educators and student teachers and fosters a conducive atmosphere for TESOL training. Thirdly, the integration of behavioural engagement (classroom management and adaptability) with cognitive engagement (applying critical thinking in lesson delivery) equips student

teachers with the necessary skills to effectively translate theoretical knowledge into practical teaching strategies.

Methodology

Ethics

This project was approved by Monash University's Human Research Ethics Committee (project number 40905). Both authors of this paper voluntarily took part in this study and agreed to share their experiences. The second author of this paper (Lynette) is one of my PhD supervisors, connoting an inherent power imbalance. It is important to note that I approached Lynette to act as a critical friend for this study, as she is an expert on the research methodology applied in this study. To avoid potential issues arising during the research process as a result of the inherent power imbalance, my other PhD supervisor did not take part in the study but instead acted as an independent observer.

Research paradigm

In this study, we adopted the constructivist paradigm, as we understand reality as subjective, constructed in the minds of individual people (Lincoln & Guba, 2016). In this study, my understanding of the world is, by necessity, different from that of Lynette's because of our different life experiences within social, cultural, and historical contexts. Arising from research demonstrating that PhD students' voices can be marginalised in academia (see Pretorius & Macaulay, 2021), we wanted to ensure that my understanding of reality was privileged throughout this study. Importantly, though, constructivism also emphasises the co-construction of knowledge (Lincoln & Guba, 2016). This was crucial in this study, as my knowledge construction involved a process of individual interpretation and collaborative construction between the two authors.

Autoethnography as research methodology

In this study, we used autoethnography as a methodology. Autoethnography is a qualitative research methodology which privileges insider knowledge by allowing researchers to purposely explore personal experiences to illuminate cultural phenomena (Adams et al., 2022; Ellis et al., 2011; Pretorius & Cutri, 2019; Pretorius, 2022). The educational context of TESOL programmes in Vietnam can be considered as a cultural phenomenon, reflecting the perceived need of the Vietnamese people to engage with the wider world through a particular language. At the same time, the Vietnamese education system is complex, shaped by a variety of political and cultural influences, as well as a variety of linguistic and educational systems (see, e.g., Hoang, 2018). Consequently, we chose autoethnography as our methodology because it values my insider knowledge of the Vietnamese educational and cultural systems, helping us to better understand the complex dynamics of student teacher engagement within the TESOL programme.

To apply autoethnography in this study, we employed the following process. Firstly, I recorded my reflections on my journey as a TESOL educator. These reflections were recorded in the form of reflective diary entries and through self-interviews using Zoom. Written reflections were chosen because they could help me explicitly recognise knowledge that may have been implicit in my actions (see, e.g., Pretorius & Ford, 2016). I used the reflective prompt strategy as described by Pretorius and Cutri (2019). The prompts for reflection included:

> "What happened?"
>
> "How did this experience make me feel?"
>
> "What went well and what could I have done better?"
>
> "What did I learn from this experience?"
>
> "How have I used this experience to inform my TESOL teaching practices?"

I also utilised Pretorius' (2024) method of interviewing oneself through Zoom to reflect on important experiences identified within my written reflections. This was done to encourage me to delve deeper into the more emotional aspects of my experiences, using the following prompts:

> "Why did this experience make me feel this way?"
>
> "How would this experience make me feel now?" and
>
> "Why would I react differently now?

I recorded the interview using Zoom, transcribed the recording using Otter AI, and corrected the transcript as needed before it was used for further data analysis.

Secondly, I consulted artefacts from my past teaching in the TESOL programme. This took the form of 30 anonymous feedback comments provided to me by student teachers over a period of approximately eight months across 12 different TESOL workshops. These feedback comments were used to prompt further reflection, helping me to focus on the elements of engagement reflected in the student teachers' comments and how these comments influenced my teaching practices.

Thirdly, I engaged in a process of writing as reflection. This allowed me to further explore my thoughts and feelings during the experiences I was describing. This exploration was supplemented by prompting questions from Lynette, which reminded me of other experiences that further shaped my understanding of my experiences. Lynette's prompting questions also encouraged me to discuss aspects of my experiences that may be hidden or assumed contextual knowledge. It is important to highlight that this process of writing and rewriting my story allowed me to engage deeply with my experiences, encouraging me to highlight the more

emotive or vulnerable parts of my story. In this way, the writing and rewriting process can be considered an important additional aspect of data collection.

Fourthly, I applied my analytic lens by re-examining my reflections by overlaying the aspects of the conceptual framework. Lynette asked me prompting questions to encourage me to add additional details highlighting the cognitive, emotional, and behavioural dimensions of the experiences I was describing. This also helped me highlight what I thought others could learn from my own experiences.

Finally, reflexive thematic analysis (Braun & Clarke, 2006, 2019, 2022) was applied iteratively throughout the writing as a reflection process as well as after applying the analytical lens. This is because we acknowledge that data collection is not linear, with additional insights gained throughout the data analysis process prompting the need for further data collection. This reflexive method of analysis also links with our constructivist paradigm, as we note that knowledge is constructed and reconstructed through experience and social interaction.

Trustworthiness

In this study, trustworthiness was embedded throughout the data collection and analysis approach. Firstly, I employed data triangulation by collecting and analysing multiple data types (reflections, self-interview, and artefacts). Secondly, researcher reflexivity was embedded throughout the research process. As noted by Stahl and King (2020), researchers should be aware of how their values influence the interpretation of their findings. It is important to note that this is considered a strength in qualitative research, particularly autoethnographic research, because insider knowledge and subjectivity are valued (Adams et al., 2022; Ellis et al., 2011; Pretorius, 2022; Pretorius & Cutri, 2019). By incorporating reflexivity throughout, I have been able to create vivid and detailed descriptions of my personal experiences. Thirdly, the artefacts contribute to the trustworthiness of the research as they represent my prolonged engagement in the context. As highlighted by Stahl and King (2020), regular, persistent, and natural data collection practices combined with the researcher's reflexive self-analysis are important in ensuring the credibility of qualitative research. Finally, Lynette acted as a critical friend for me, which further contributed to my research reflexivity during the data analyses.

Findings and discussion

Being a TESOL teacher trainer

When I first started working as a TESOL trainer in 2022, I reflected on a path that was more than just a series of academic degrees. This complex route started with a four-year bachelor's degree in ELT in Vietnam and continued with two years of master's studies in Australia. Indeed, my academic journey significantly influenced my decision to become a TESOL trainer and shaped my teaching philosophy in various ways. My undergraduate years gave me a solid grasp of ELT education and a profound respect for the intricacies of teaching English as a

foreign language. It was here that I first learned about the complex nature of language learning and instruction, which piqued my interest in practical application rather than academic theories. This experience provided the groundwork for my desire to be a TESOL trainer, as I became more conscious of the transforming potential of excellent language teaching.

My teaching perspective was further strengthened throughout my master's studies in Australia. Immersed in an international and research-intensive setting, I was exposed to a wide range of pedagogical techniques and teaching strategies, allowing me to understand language instruction as more than just information transfer, but as a dynamic, participatory process that could be tailored to the various learners' needs. My Australian education's focus on cultural sensitivity, learner-centred techniques, and critical thinking struck a deep chord with me, greatly transforming my approach to TESOL training.

Being a TESOL teacher trainer was a profound voyage of self-growth, introspection, and transforming discovery, which had a significant impact on my perspectives and practices in TESOL training. Specifically, it has provided me with empathy, understanding, and practical knowledge - all of which are required for teacher trainers to contemplate successful involvement in programmes (Brown & Ruiz, 2017; Choi & Poudel, 2022). Such an approach is consistent with approaches that highlight the need for comprehensive educational experiences that combine emotional and experiential learning with academic rigour (Fredericks et al., 2004; Larsen-Freeman & Anderson, 2013; Nguyen, 2019).

These in-class TESOL training experiences changed my knowledge of TESOL and helped me establish a more sophisticated approach to student teacher participation in this environment. By reflecting on my teaching and the feedback from my student teachers' on their learning as they finished their training TESOL sessions, I have constructed three key themes: 1) theoretical-practical synthesis, 2) pedagogical climate and student teachers' learning, and 3) professional pathway clarity for student teachers. This construction process was thorough and careful, involving systematic analysis and reflection to ensure the themes accurately represent the core aspects of the training experience.

Theme 1: Theoretical-practical synthesis.

The first important dynamic I found was the indispensable relationship between theory and practical applications during the training. This synthesis extends beyond theoretical comprehension of the course material to include the implementation of these ideas in different and practical teaching contexts. Through my students' experiences and reflections, I also learned that such integration of theoretical knowledge with practical application is critical to their engagement. One student noted, "*Everyone was engaged in the lessons, and had a chance to express ideas. A lot of activities were carried out to enable us to practise using some of the methodologies.*" Echoing the perspectives of scholars like Freeman and Johnson (1998), I resonated deeply with one student who commented, "*The way you organise the class sets examples of different ways that we can use to apply in our own class*". Here, I understood that it could be cognitively demanding for student teachers to really absorb a large amount of

theoretical knowledge regarding learning theories and motivations within a short amount of time. Therefore, I utilised practical demonstrations and interactive methodologies to help them internalise these concepts. This approach not only made the learning more tangible but also allowed the students to envision themselves applying these theories in real-life teaching scenarios.

I learned that by actively involving students in the learning process and demonstrating the real-world applicability of theories, I could cultivate a more engaging and effective learning environment. As one student noted, "*The content has some real-life situations, which makes the lesson more well-organised, approachable, and memorisable*". This insight aligns with O'Neill's (2015) emphasis on the practical application of theoretical knowledge, underscoring the vital role of experiential learning in teacher education. Indeed, the real-world application of these concepts enables TESOL teacher trainers to refine their approach, adapting to the evolving needs of student teachers (Fredricks et al., 2004; Fredricks et al., 2016; Johnson, 2009; Larsen-Freeman & Anderson, 2013). By bridging the gap between theory and practice, I strived to empower my student teachers with both the knowledge and the confidence to apply these concepts in their future classrooms, fostering a deeper understanding and a more profound engagement with the material.

The transformative impact resulting from the synthesis of theory and practice is evident in my students' satisfaction and growth. This is manifested in their reflections, aligning with Ellis' (2003) perspective on the importance of practical curriculum design. Statements like "*After module 1, I think I have established a kind of foundation for teaching in general*" signify the foundational influence of my teaching approach. My emphasis on clear, practical delivery, highlighted by a student's comment on my technique of "*Pointing and emphasising keywords...with lots of examples*", showcases my commitment to making complex theoretical content accessible and engaging. This integrated teaching strategy, blending real-world contexts with academic theories, personalised the learning experience, as echoed in the students' feedback. Remarks such as "*I have learnt a lot...from the way you manage the class*" and expressions of gratitude underscore the depth and effectiveness of this approach.

Reflecting on the multi-dimensional effects of my teaching approach on student teacher learning, I deeply appreciate the profound impact of balancing theoretical and practical elements. Firstly, the cognitive dimension is addressed as student teachers actively process and internalise complex theoretical concepts, applying them in practical scenarios. Some student teachers did express their excitement when they could successfully apply these to their current classes. This intellectual involvement is crucial for deep understanding and long-term retention (Fredricks et al., 2004; Fredricks et al., 2016). Secondly, the emotional dimension is nurtured as student teachers develop a personal connection to the material. This emotional engagement arose when my student teachers observed the relevance and applicability of what they had been learning, enhancing their motivation and commitment to the course. Finally, the behavioural dimension is exemplified through active participation in classroom activities, discussions, and the whole course. This hands-on involvement is essential for developing practical skills and building confidence in their future roles as ELT teachers (Ellis, 2003; Fredricks et al., 2004;

Fredricks et al., 2016). Together, these three elements of student teacher participation provide a comprehensive learning experience that not only motivates me as a trainer, but also prepares student teachers for the many opportunities and challenges of teaching English in their future courses.

However, I also experienced first-hand the challenges of combining theoretical knowledge with practical application in the curriculum. I must confess that one of the most significant challenges I faced in blending theory with practice stemmed from the constraints of limited time. I recall moments where the urgent needs of a hectic academic schedule hampered the richness and depth of the curriculum I wanted to disseminate. A clear illustration of this was an ambitious lesson plan I created to connect academic topics with hands-on activities. I imagined a class in which students might not only study teaching approaches but also practise using them in real-world situations. Due to the programme's strict time constraints, these detailed, participatory sessions had to be greatly reduced, if not completely eliminated. A student teacher's feedback emphasises this point:

> *I wish Module 2 were longer, with more details on teaching grammar, reading, listening, etc. Module 1 was too long, and its content isn't as applicable to our future teaching careers. Two days for Module 1 would be sufficient. The remaining three days of Module 1 should be allocated to Module 2 instead.*

The impact of the time limitation was twofold. On the one hand, it caused me to feel a genuine feeling of irritation, as I felt that the full potential of my teaching - and hence my student teachers' learning experiences - was not being realised. On the other hand, it restricted student teachers' ability to fully interact with the content in a more immersive, experiential manner. This hampered their capacity to internalise theoretical notions while also limiting their opportunities to build practical abilities via exploration and experience.

This ongoing struggle against the clock has served as a sobering reminder of the intricacies and constraints inherent in educational institutions. It emphasises the need for a more adaptable, time-efficient curriculum design that can fit both the breadth and depth of learning necessary in TESOL instruction. Reflecting on my own teaching experiences, I recognise the constraints highlighted by Nguyen and Ngo (2017) that these inflexible structures can stifle the essential dynamic interplay between theory and practice. From my experiences with student teachers' feedback, there is a need for a more balanced approach in the training curriculum. Language components and skills teaching should be given greater emphasis, while the allocation for learning theories is optimised for relevance and applicability in real-world teaching scenarios.

Student feedback emphasises the crucial necessity of an adaptable and reactive teaching method, particularly for individuals with varied educational backgrounds. One student teacher expressed, "*The content is quite abstract. For the first class, the teacher didn't speak Vietnamese, so it's hard for the others to understand. But day by day, when we suggested, the instructor spoke bilingual, everything seemed better [sic].*" This reflects the importance of adaptability in teaching methods and the use of both languages to bridge language barriers,

enhancing comprehension and engagement. I have utilised bilingual instruction as a deliberate approach to improve understanding and include emotional and cultural aspects of learning, resulting in heightened involvement and improved memory retention. I noticed that the use of Vietnamese acknowledged the mental effort required to digest novel theories and concepts, particularly when it is delivered in a language that is not the native tongue. This student-centric approach facilitates the utilisation of practical demonstrations that connect with the students' cultural backgrounds, in line with wider educational goals to cater to different learning preferences and language abilities. The purpose of this programme is to provide student teachers with the required abilities to effectively traverse the intricacies of real-world teaching contexts. My training focusing on adaptation is crucial for presenting knowledge and creating educational experiences that are accessible and meaningful to students from various backgrounds. In general, the input from student teachers emphasises the significance of modifying teaching techniques to effectively connect theoretical knowledge with practical applications, thereby facilitating a smoother transition into more intricate areas (DelliCarpini, 2008; Ellis et al., 2020; Hawkey, 2006).

Theme 2: Pedagogical climate and student teachers' learning.

The second important dynamic I have come to understand deeply is how the pedagogical climate within training programmes critically shaped the learning experiences and outcomes of student teachers. Here, pedagogical climate is viewed as the overall atmosphere and dynamics of the teaching and learning interactions. In my journey, it is critical to consider the value of building a learning environment that is not only supportive and collaborative, but also aligns with each student teacher's personal and professional development. Jensen (2019) emphasises this need for an engaging environment, which I observed as pivotal in enhancing student motivation and fostering a sense of community.

In my actual practices, I focused on cultivating an atmosphere that encouraged enquiry, nurtured curiosity, and acknowledged each student's unique journey to energise the classroom. The implementation of active learning strategies, where student teachers engage in discussions, group activities, and practical exercises, has been central to this approach. For instance, when a student teacher noted, "*The group discussions were really helpful for understanding different viewpoints*", it underscored the importance of collaborative learning in enhancing critical thinking and peer learning. I also had students create mind maps to explore and illustrate their understanding of theories, significantly contributing to the dynamic pedagogical climate of my TESOL classes. This exercise allowed student teachers to visually and conceptually organise their thoughts, fostering a deeper and more personalised comprehension of complex theories. Following this, I motivated them to display these mind maps on the classroom walls as part of an exhibition that transformed the learning space into an interactive gallery of ideas. All students moved around the classroom, observing and taking notes on the mind maps created by their peers. After this exploration, they gathered in groups to discuss their observations and insights, sharing what they had learned from each other's interpretations and perspectives. This interactive exercise fostered a deeper understanding and collaborative learning environment. One student captured the essence of this experience by saying, "*Seeing our mind maps on the*

wall made the theories we learned feel alive and relevant.” Additionally, the exhibition format facilitated a sense of ownership and pride among students over their learning process, further engaging them emotionally and cognitively (Fredricks et al., 2016).

Such strategies highlight the multifaceted nature of engagement illustrated in the Figure 1 framework, where cognitive understanding is complemented by creative expression and collaborative exploration, creating a rich and stimulating learning environment that is both informative and inspirational (Fredericks, 2004; Fredricks et al., 2016). The positive feedback from my students, such as “*The instructor is interactive with the class and didn't make me disappointed in selecting to study TESOL! Very much inspiring!” and “Mr. Hoang is an enthusiastic teacher,*” reflects the essence of my teaching philosophy, which aligns with research highlighting the teacher's crucial role in energising the classroom (Nguyen & Tran, 2022; Richards, 2017). Students have expressed their appreciation for the learning environment I cultivated, noting, “*I feel I have learned a lot about teaching from you, including how to inspire and interact with students*” and emphasising the importance of a relaxed atmosphere when tackling challenging material. This aligns with Swan's (2018) emphasis on the significance of a supportive, collaborative, and empathetic environment that fosters a sense of belonging and community, which is essential for academic success.

My teaching style is also profoundly anchored in building healthy, respectful teacher-student relationships, as expressed by a student who commended my “*conscientious guidance*.” As I systematically reviewed the feedback, several recurring phrases drew my attention – words like “*enthusiastic*,” “*inspiring*,” and “*supportive,” and “understanding*” frequently recurred, pointing to the effectiveness of my approach. These descriptors not only reaffirmed my methods but also mirrored the importance of fostering a learning environment that is both engaging and empathetic. The relationship between me and my student teachers, as Swan (2018) articulates, provides a safe space for students to express vulnerabilities, explore new ideas, and take risks. The impact of such a nurturing environment is evident when a student remarks on how they were inspired to have a new view on teaching, emphasising the significance of mutual respect and understanding in our interactions during the training.

The feedback from my students, highlighting their desire for deeper connections, underscores a critical dimension of the pedagogical climate – the student-teacher relationship. The act of remembering a student's name, while seemingly simple, is an engaging gesture that can significantly alter the classroom dynamics. It transcends the traditional student teacher-trainer hierarchy, fostering a sense of belonging and mutual respect. By recalling and using their names, I communicated a message of recognition and an understanding of the importance of their individuality, effectively turning our classroom from an impersonal space into a thriving, engaged community. This is consistent with student teachers' expectations shaping the nature of learning exchanges (Kim & Nguyen, 2018).

Theme 3: Professional pathway clarity for student teachers.

The third important dynamic in my exploration was the clarity of professional pathways for student teachers in TESOL education, which involves a deep dive into the interconnection between students' career aspirations and their educational experiences. The pathway clarity referred to here pertains not only to comprehending the available positions that exist in contemporary TESOL scenarios but also to fully knowing the specific skills and competencies that are necessary for each role. It clarifies the teaching profession, converting it from an unclear aspiration into a concrete objective with clear steps and milestones. Upon contemplation of my past educational experiences as a student teacher involved in TESOL programmes, the lucidity of career trajectories served as a guiding light, helping me navigate through the complexities of the area. This component, therefore, was crucial in influencing my methodology for training, as it enabled me to customise my learning towards precise objectives, resulting in a meaningful and focused educational encounter.

As a trainer, this understanding of the significance of professional clarity has profoundly shaped my teaching philosophy. My goal is to not only teach my student teachers' academic knowledge and practical skills, but also to guide them towards the various career opportunities that are open to them. This method seeks to provide them with not just the capacity to teach proficiently but also the insight to navigate their careers in TESOL with assurance and intention. Understanding career trajectories and professional identities is pivotal in motivating student teachers and aligning their personal goals with professional development needs (Barkhuizen, 2021; Zhang & Zhang, 2016). Professional clarity is not only important for personal motivation, but it also serves as a fundamental element in fostering the growth of skilled, thoughtful, and flexible TESOL professionals. It is crucial to not only equip student teachers with the necessary skills for the classroom but also to make them aware of and motivated by the various opportunities that exist beyond. This understanding becomes particularly salient when considering the diverse and rapidly changing landscape of the TESOL field.

The feedback from my students complements these academic insights. One student's revelation, "*I realised that teaching is something that's beyond my mind,*" encapsulates the transformative journey of recognising the depth and breadth of the teaching profession. This student teacher further confirmed "*I have been teaching for 3 months based on my instinct to teach my students. But now, after a 4-day TESOL training, I notice that I lacked many things about teaching. I am so appreciative of Mr. Hoang for giving many lessons that I can acknowledge not only in the teaching method but also in life [sic].*" Based on the learned content, the students also made a commitment to their future practices "*.... the teacher also told us that the key to success in teaching language is understanding the principles and processes of behaviourism, cognitivism, constructivism, communicative language teaching... I'm willing and trying to work hard to make a change*". I understand that encouraging student teachers to have a deep appreciation for the nuanced complexities of the teaching profession is critical. Their realisation that effective teaching extends beyond instinct to encompass a broad array of pedagogical theories and life skills underscores the transformative impact of comprehensive TESOL training. "*After Module 1, I was inspired to be a teacher seriously and to learn post-education like you. Thanks to you, I can see clearly the role and responsibilities of a*

teacher." This aligned with many student teachers valuing that their future practices benefited a lot more from their participation in the course.

This mirrors my own experiences where I actively sought advice and orientation from colleagues and the academic manager, indicating the value of professional mentorship. This student's expression of need and my personal quest for guidance both illustrate a larger context where student teachers are seeking direction and mentorship to understand and navigate the complexities and opportunities of the TESOL field. Faez and Valeo (2012) highlight this necessity, noting the critical role TESOL programmes play in providing comprehensive career guidance and mentorship. I strongly believe such support is pivotal in shaping future teachers, equipping them with not only theoretical knowledge but also practical wisdom and insights into the ever-changing scenario of language teaching and learning.

Considerations and implications

It is important to acknowledge that my findings represent my journey as a single teacher trainer. Readers may, therefore, consider that my work is less statistically generalisable to other contexts. It is important to note, however, that qualitative research does not aim to provide this type of generalisability (see Smith, 2018). Instead, my work aims to highlight findings that are naturalistically generalisable and transferable. Naturalistic generalisability refers to research that resonates with the reader's experiences through evocative storytelling (Smith, 2018). I have also used stories and detailed quotes from my students' feedback as a way to provide an engaging story, which I believe is transferable to other contexts. In this way, I believe my story can be of relevance to new educators entering the field, providing a guide to the importance of the teacher student relationship and the role teachers have in motivating and inspiring their students.

Furthermore, while this study did consider student feedback over an eight-month period, additional longitudinal studies may highlight additional themes that could not be found in our study. That being said, our study does highlight the importance of reflexivity as an educator, which we believe could be a valuable model for future TESOL educators, particularly those new to the field, to help them gain confidence in their own practice.

The dynamic nature of TESOL necessitates an adaptable and forward-looking approach to curriculum design and career guidance (Clarke-Jones, 2021). As a TESOL trainer, I was often tasked with preparing student teachers for the shifting terrains of global demand, technological advancements, and updates on current teaching scenarios. This required an ongoing commitment to update my teaching methodologies and course content to reflect contemporary trends and technologies, thereby ensuring my students are equipped to meet the demands of diverse teaching contexts (Andrew, 2020; Nguyen & Ngo, 2017; Ping, 2015). This is of particular significance in the current environment where generative artificial intelligence is acting as a catalyst and disrupting force within education. That being said, the three themes I

have constructed align with recent research exploring the elements of AI literacy, particularly in addressing the socio-emotional awareness dimension (see Pretorius & Cahusac de Caux, 2024). I believe that my approach to teaching will stand me in good stead as I help nurture my student teachers' understanding and implementation of new technologies such as generative AI into their future work. Moreover, the examination of professional pathways must consider the varied contexts in which TESOL teacher trainers operate. As Morrison (2017) points out, the roles and opportunities for TESOL educators differ significantly across different educational settings and cultures. While English is considered a global lingua franca, the diversities in Global Englishes necessitate an adaptable and contextually knowledgeable workforce (see, e.g., Rose & Galloway, 2019). This diversity calls for a nuanced and comprehensive approach to career planning within TESOL programmes. By fostering an understanding of the global TESOL landscape, we can prepare our students not only for the challenges but also for the myriad opportunities that lie ahead.

Conclusion

This study aimed to explore my role as a teacher educator within a TESOL programme to *identify* the factors that I believe significantly influence student teacher engagement and explore *how* they impact the classroom experience. My autoethnographic exploration identified three key factors—theoretical-practical synthesis, pedagogical climate, and professional pathway clarity. The exploration of how these factors affected the classroom experience highlighted three elements. First, the harmonious integration of theory and practice enriches the learning experience, making the theoretical knowledge not only more digestible but also immediately applicable, thus bridging the gap between abstract concepts and classroom realities. Second, the nurturing pedagogical climate for which I advocate fosters a community of learners who are motivated, engaged, and collectively involved in their educational journey, enhancing both their academic and emotional growth. Finally, the clarity of professional pathways illuminates the route for aspiring TESOL educators, equipping them with not just the skills, but also the vision to navigate their future careers with confidence and purpose. As we draw this paper to a close, it is paramount to reflect on the profound journey embarked upon through this research, exploring the complex yet rewarding world of TESOL training programmes in Vietnam. Our findings not only illuminate the intricate dynamics of student teacher engagement but also offer vital insights for enhancing TESOL education, profoundly impacting both the individuals involved and the broader educational landscape. Here, we acknowledge that the complexities of how student teachers engage in TESOL programmes could add significant cultural layers to their learning experiences. This insight informs TESOL practitioners to embrace culturally responsive pedagogies that are cognizant of the societal norms and values shaping future English teachers' perceptions towards ELT education in Vietnam. In conclusion, as we reflect on the engagement and transformation witnessed through this research, it becomes clear that the path to becoming a TESOL educator is both a personal and professional quest, enriched by deep engagement, rigorous training, and a clear understanding of the career landscape. As educators, our role transcends the boundaries of mere instruction to become mentors and guides in the ever-evolving landscape of language

education. The insights gained from this study not only contribute to the academic discourse but also resonate deeply with those committed to the art of teaching, inspiring current and future educators to approach TESOL with passion, dedication, and a deep commitment to fostering educational excellence.

Acknowledgements

References

Adams, T. E., Holman Jones, S., & Ellis, C. (2022). *Handbook of autoethnography (2nd ed.)*. Routledge.

Andrew, M. (2020). Action research to build TESOL teacher capacity in Vietnamese master-level programmes. *New Zealand Studies in Applied Linguistics*, *26*(1), 1-19. https://doi.org/10.3316/informit.340293972714959

Barnawi, O. Z., & Ahmed, A. (2020). *TESOL teacher education in a transnational world*. Routledge.

Barkhuizen, G. (2021). *Language teacher educator identity*. Cambridge: Cambridge University Press

Bordia, S., Wales, L., Pittam, J., & Gallois, C. (2006). Student expectations of TESOL programs. *Australian Review of Applied Linguistics*, *29*(1), 4.1–4.21. https://doi.org/10.2104/aral0604

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/2159676X.2019.1628806

Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE.

Brown, A., & Ruiz, H. (2017). Equity and enrichment in the TESOL practicum. *ELT Journal*, *71*(71), 284–294. https://doi.org/10.1093/elt/ccw092

Chen, Y., & Gao, X. (2020). Rethinking TESOL in diverse global settings: The language and the teacher in a time of change. *ELT Journal*, *74*(3), 356–358. https://doi.org/10.1093/elt/ccaa021

Choi, T.-H., & Poudel, P. P. (2022). (Re)thinking teacher education curricula: Towards equitable pedagogical practice in TESOL. *Redesigning Pedagogy International*

Conference (RPIC) 2022 [Conference presentation]. Singapore. http://eprints.soton.ac.uk/id/eprint/470852

Chowdhury, R., & Phan, L. H. (2008). Reflecting on Western TESOL training and communicative language teaching: Bangladeshi teachers' voices. *Asia Pacific Journal of Education*, *28*(3), 305–316. https://doi.org/10.1080/02188790802236006

Clarke-Jones, L. (2021). Engaging learners in pronunciation: Developing learner autonomy via an action research approach. *Language Teaching, 54*(3), 434-437. https://doi.org/10.1017/S0261444821000112

Dao, P., Nguyen, M. X. N. C., Duong, P. T., & Tran–Thanh, V. U. (2021). Learners' engagement in L2 computer-mediated interaction: Chat mode, interlocutor familiarity, and text quality. *The Modern Language Journal*, *105*(4), 767–791. https://doi.org/10.1111/modl.12737

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

DelliCarpini, M. (2008). Enhancing cooperative learning in TESOL teacher education. *ELT Journal*, *63*(1), 42–50. https://doi.org/10.1093/elt/ccn016

Ellis, C., Adams, T. E., & Bochner, A. P. (2011). Autoethnography: An overview. *Historical Social Research / Historische Sozialforschung, 36*(4), 273-290. http://www.jstor.org/stable/23032294

Ellis, R. (2003). Designing a task-based syllabus. *RELC Journal*, *34*(1), 64-81. https://doi.org/10.1177/00336882030340010

Ellis, R., Skehan, P., Li, S., Shintani, N., & Lambert, C. (2020). *Task-based language teaching: Theory and practice*. Cambridge University Press.

Faez, F., & Valeo, A. (2012). TESOL teacher education: Novice teachers' perceptions of their preparedness and efficacy in the classroom. *TESOL Quarterly*, *46*(3), 450–471. https://doi.org/10.1002/tesq.37

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, *74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Fredricks, J. A., Filsecker, M., & Lawson, M. A. (2016). Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues. *Learning and Instruction*, *43*(43), 1-4. https://doi.org/10.1016/j.learninstruc.2016.02.002

Freeman, D., & Johnson, K. E. (1998). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, *32*(3), 397. https://doi.org/10.2307/3588114

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.

Hawkey, R. (2006). Teacher and learner perceptions of language learning activity. *ELT Journal*, *60*(3), 242–252. https://doi.org/10.1093/elt/ccl004

Hoang, C. H. (2018). Conducting research in local and global contexts: Discursive identities of Vietnamese scholars in Vietnam and the diaspora [Doctoral dissertation, Monash University]. Melbourne, Australia.

Huynh, H. H., & Adams, M. (2022). Vietnamese teacher educators' perceptions of silence during online English as a Foreign Language classes. *Journal of Silence Studies in Education*, *1*(2), 57-69. https://doi.org/10.31763/jsse.v1i2.10

Ilieva, R., & Ravindran, A. (2018). Agency in the making: Experiences of international graduates of a TESOL program. *System*, *79*, 7–18. https://doi.org/10.1016/j.system.2018.04.014

Jensen, A. (2019). Fostering preservice teacher agency in 21st century writing instruction. *English Teaching: Practice & Critique*, *18*(3), 298-311. https://eric.ed.gov/?id=EJ1336074

Johnson, K. E. (2009). *Second language teacher education*. Routledge. https://doi.org/10.4324/9780203878033

Kumaravadivelu, B. (2006). TESOL methods: Changing tracks, challenging trends. *TESOL Quarterly*, *40*(1), 59–81. https://doi.org/10.2307/40264511

Kumaravadivelu, B. (2012). *Language teacher education for a global society: A modular model for knowing, analyzing, recognizing, doing, and seeing*. Routledge.

Larsen-Freeman, D., & Anderson, M. (2013). *Techniques and principles in language teaching 3rd edition - Oxford handbooks for language teachers*. Oxford University Press.

Le, V. C. (2020). Remapping the teacher knowledge-base of language teacher education: A Vietnamese perspective. *Language Teaching Research*, *24*(1), 71–81. https://doi.org/10.1177/1362168818777525

Le, X. M., & Le, T. T. (2022). Factors affecting students' attitudes towards learning English as a foreign language in a tertiary institution of Vietnam. *International Journal of TESOL & Education*, *2*(2), 168–185. https://doi.org/10.54855/ijte.22229

Lincoln, Y. S., & Guba, E. G. (2016). *The constructivist credo*. Routledge. https://doi.org/10.4324/9781315418810

Morgan, A. (2019). *Teaching English language learners: A handbook for elementary teachers*. Rowman & Littlefield.

Morrison, A. H. (2017). *The art gallery of the English language*. Trieste Publishing Pty Limited.

Nguyen, H. T. M., & Ngo, N. T. H. (2017). Learning to reflect through peer mentoring in a TESOL practicum. *ELT Journal*, *72*(2), 187–198. https://doi.org/10.1093/elt/ccx053

Nguyen, H. T. M., & Tran, T. L. A. (2022). Contradictions in a TESOL mentoring programme in Vietnam: Implications for practice. In M. Wyatt & K. Dikilitaş (Eds.), *International Perspectives on Mentoring in English Language Education* (pp. 71-86). Springer. https://doi.org/10.1007/978-3-030-99261-3_5

Nguyen, M. H. (2019). *English language teacher education: A sociocultural perspective on preservice teachers' learning in the professional experience*. Springer. https://doi.org/10.1007/978-981-13-9761-5

O'Neill, G. (2015). English as a medium of instruction in Japanese universities. *OTB Forum*, *7*(1), 38-45.

Ping, W. (2015). An evaluation of the preservice English teacher education in a university in China: Pros and cons from an insider's journey of learning. *Journal of Pedagogy*, *6*(1), 151–174. https://doi.org/10.1515/jped-2015-0008

Pretorius, L. (2019). Prelude: The topic chooses the researcher. In L. Pretorius, L. Macaulay, & B. Cahusac de Caux (Eds.), *Wellbeing in doctoral education: Insights and guidance from the student experience* (pp. 3-7). Springer. https://doi.org/10.1007/978-981-13-9302-0_1

Pretorius, L. (2022). A harmony of voices: the value of collaborative autoethnography as collective witnessing during a pandemic. In B. Cahusac de Caux, L. Pretorius, & L. Macaulay (Eds.), *Research and teaching in a pandemic world: The challenges of establishing academic identities during times of crisis* (pp. 25-33). Springer. https://doi.org/10.1007/978-981-19-7757-2_3

Pretorius, L. (2024). "I realised that, if I am dead, I cannot finish my PhD!": A narrative ethnography of psychological capital in academia. In M. S. Edwards, A. J. Martin, N. M. Ashkanasy, & L. E. Cox (Eds.), *Research handbook of academic mental health* (pp. 46-61). Edward Elgar Publishing. In Press. Preprint available via Research Square. https://doi.org/10.21203/rs.3.rs-1868055/v2

Pretorius, L., & Cahusac de Caux, B. (2024). *The AI literacy framework for higher education: A grounded theory exploration of the foundational, social, conceptual, ethical, and affective domains of AI literacy.* Monash University Research Repository. https://doi.org/10.26180/25965178

Pretorius, L., & Cutri, J. (2019). Autoethnography: Researching personal experiences. In L. Pretorius, L. Macaulay, & B. Cahusac de Caux (Eds.), *Wellbeing in doctoral education: Insights and guidance from the student experience* (pp. 27-34). Springer. https://doi.org/10.1007/978-981-13-9302-0_4

Pretorius, L., & Ford, A. (2016). Reflection for learning: Teaching reflective practice at the beginning of university study. *International Journal of Teaching and Learning in Higher Education*, *28*(2), 241–253. http://www.isetl.org/ijtlhe/pdf/IJTLHE2142.pdf

Pretorius, L., & Macaulay, L. (2021). Notions of human capital and academic identity in the PhD: Narratives of the disempowered. *The Journal of Higher Education*, *92*(4), 623–647. https://doi.org/10.1080/00221546.2020.1854605

Richards, J. C. (2017). Teaching English through English: Proficiency, pedagogy and performance. *RELC Journal*, *48*(1), 7-30.

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching*. Cambridge University Press.

Rose, H., & Galloway, N. (2019). *Global Englishes for language teaching.* Cambridge University Press.

Smith, B. (2018). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health*, *10*(1), 137-149. https://doi.org/10.1080/2159676X.2017.1393221

Stahl, N. A., & King, J. R. (2020). Expanding approaches for research: Understanding and using trustworthiness in qualitative research. *Journal of Developmental Education*, *44*(1), 26–28. http://www.jstor.org/stable/45381095

Swan, M. (2018). Applied linguistics: A consumer's view. *Language Teaching*, *51*(2), 246–261. https://doi.org/10.1017/S0261444818000058

Tomlinson, B. (2016). The importance of materials development for language learning. In M. Azarnoosh, M. Zeraatpishe, A. Faravani, & H. R. Kargozari (Eds.). *Issues in materials development. Critical new literacies: The praxis of English language teaching and learning (PELT)*. SensePublishers. https://doi.org/10.1007/978-94-6300-432-9_1

Vygotsky, L. S. (1994). The problem of the environment. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338–354). Blackwell.

Vygotsky, L. S. (1998). The collected works of L.S. Vygotsky: Vol. 5. *Child psychology*. Plenum Press

Zhang L. J., & Zhang D. (2015). Identity matters: An ethnography of two non-native English-speaking teachers in a new English context. In Y. L. Cheung, S. B. Said, & K. Park (Eds.), *Language teacher identity: Current trends and perspectives* (pp. 116–131). Routledge. https://doi.org/10.4324/9781315775135-13

Huy-Hoang Huynh is a PhD student in the Faculty of Education at Monash University. He holds a master's degree in TESOL from Monash University and a bachelor's degree in English language from the University of Education, Ho Chi Minh City, Vietnam. He has worked as a lecturer and TESOL teacher educator in different contexts. His approaches to teacher training and professional development primarily focus on engaging student teachers coming from various backgrounds to co-constructively contribute their experiences. He also presents at international conferences with studies exploring issues about TESOL professional development, teacher and learner identity, learners' engagement, and silence-related issues in education.

Dr Lynette Pretorius is an award-winning educator and researcher in the fields of academic language, literacy, research skills, and research methodologies. She has experience teaching undergraduate, postgraduate, and graduate research students, including supervising PhD students. Lynette is the author of multiple journal articles and two academic books focused on the experiences of graduate research students in academia. She has qualifications in Medicine, Science, Education, as well as Counselling, and her research interests include doctoral education, academic identity, student wellbeing, reflection, and qualitative research methods. Lynette is also a Senior Fellow of the Higher Education Academy.

Expanding teacher understanding of scaffolding for multilingual learners using a language-based approach to content instruction

Alissa Blair[1]

[1]Assistant Professor, Department of Curriculum and Instruction, University of Arkansas, USA

Luciana C. de Oliveira[2]

[2]Professor & Associate Dean, School of Education, Virginia Commonwealth University, USA

Mary A. Avalos[3]

[3]Research Professor & Co-Director, School of Education, University of Miami, USA

Abstract

Scaffolding ensures multilingual learners (ML) are adequately challenged and supported at school while learning English and subject area content. Due to the dynamic nature of language development, teachers may struggle to anticipate how to adequately scaffold lessons or reflect on their practice to identify areas for improvement. This paper examines how nine middle and secondary teachers across different content areas expanded their understandings of scaffolding for MLs. Using qualitative case study methods, data were collected through M.S. Ed. in TESOL coursework incorporating a Language-Based Approach to Content Instruction (LACI). LACI emphasizes teaching content through language, ensuring MLs access grade-level content while supporting language development. Data sources include major course assignments: (a) a designed lesson plan and reflection of the taught lesson, and (b) a video-based observation of a lesson. Both assignments incorporated the six Cs of Support (namely, a means of scaffolding based on LACI). Findings indicate that teachers deepened their understanding of scaffolding in general and in relation to the six Cs of Support for MLs. This study anticipates how teachers approach, expand upon, and apply their understandings of scaffolding practice, offering insights and implications for teacher educators to enhance how scaffolding is presented in coursework with a focus on MLs.

Correspondence
Alissa Blair
ab139@uark.edu

Introduction

In an era marked by increased mobility and growing cultural and linguistic diversity in U.S. schools and globally (Vertovec, 2023), scaffolding plays a crucial role in facilitating students' access to challenging, grade-level curriculum while learning English as an additional language. Scaffolding for multilingual learners (MLs) at varying English language proficiency (ELP) levels demands nuanced approaches from educators to effectively challenge and support all students within each lesson (Athanases & de Oliveira, 2014; Johnson, 2019). Recognizing the dynamic nature of language development, teachers must adapt to students' evolving language abilities. It is important to view scaffolding as dynamic and non-routine to avoid inadvertently hindering students' progress (de Oliveira & Athanases, 2017; Johnson, 2019, 2021). Teachers sometimes lean too heavily on specific scaffolding strategies (Daniel et al., 2016) or overly structure student interactions (Alvarez et al., 2023), which can hinder conceptual learning and limit MLs' active participation in classroom discussions (Daniel et al., 2016; Alvarez et al., 2023). Therefore, scaffolding for MLs requires balancing language support with opportunities for meaningful engagement in content learning.

While existing literature informs scaffolding learning for MLs (Gibbons, 2009; Walqui & Van Lier, 2010), recent research focuses on how teachers develop these practices (Bunch & Lang, 2022; Peercy & Chi, 2022). This work emphasizes providing educators opportunities to enact and reflect on scaffolding (Shall-Leckrone, 2018), clarifying ambiguous conceptual foundations (Peercy & Chi, 2022). In U.S. teacher education, Bunch and Lang (2022) guided pre-service teachers through activities fostering a sociocultural understanding of scaffolding, while Peercy and Chi (2022) highlighted scaffolding as a humanizing practice crucial for equitable curriculum access. Despite challenges in linking theory to practice and developing self-awareness, reflection with an observer benefited novice teachers (Peercy & Chi, 2022). Reflection is crucial in teacher education, especially for preparing teachers to work with MLs, as misconceptions and deficit orientations often persist (Rose, 2019). Quality reflection involves critical thought, problem-posing, and self-awareness (Elliot-Johns, 2015; Peercy & Chi, 2022). Further research is needed to support in-service teachers and guide teacher educators in enhancing reflective practices that effectively integrate scaffolding strategies for MLs.

This paper investigates how middle and secondary in-service teachers' understanding of scaffolding learning for MLs expands within the context of M.S. Ed. TESOL coursework that integrates Language-Based Approach to Content Instruction (LACI). LACI emphasizes teaching content through language, facilitating MLs' access to grade-level curriculum while supporting language development and scaffolding learning through the 6 Cs of Support (de Oliveira, 2023). Given the typically limited training in language and literacy instruction for middle and secondary teachers, especially compared to elementary educators (Shanahan & Shanahan, 2008), LACI provides a valuable framework for supporting language development

and scaffolding learning for MLs. The study's focus is: How do teachers' understandings of scaffolding evolve through M.S. Ed. TESOL coursework integrating LACI?

Theoretical framework

Language-based approach to content instruction

LACI integrates principles from systemic functional linguistics, viewing language as integral to meaning in context (Halliday & Matthiessen, 2004). This approach supports MLs in content area classrooms by emphasizing simultaneous language and content learning. Unlike content-based instruction, which motivates language learning through content, LACI underscores language as essential for comprehending and accessing content (de Oliveira, 2023). LACI employs scaffolding organized around the 6 Cs of Support to assist teachers in supporting MLs. The 6 Cs of Support, drawing on established literature on language and literacy development in diverse classrooms, enhances MLs' access to content while honoring students' home languages and experiences. The C of connection links pedagogy and curriculum to students' backgrounds, enhancing learning (Lucas & Villegas, 2013). The C of culture leverages students' funds of knowledge to bridge home and school contexts (Moll et al., 1992). The C of code-breaking deconstructs academic and disciplinary literacy codes necessary for content learning (Fang, 2006; Moore & Schleppegrell, 2014). The C of challenge sets high expectations and promotes disciplinary literacy and reasoning (Hammond, 2009). The C of community and collaboration fosters collaborative knowledge construction (Cooper & Slavin, 2001; Lave & Wenger, 1991). The C of classroom interactions enhances teacher–student exchanges through effective questioning and supportive discourse practices (de Oliveira, 2023).

Defining, refining, and reflecting on practice

Teacher education coursework plays a crucial role in equipping teachers with the conceptual and pedagogical knowledge needed to cultivate essential practices such as scaffolding. Broadly defined, "practice" refers to the coordinated integration of understanding, skill, and relationships to execute specific activities in particular environments (Grossman et al., 2009). According to Grossman et al.'s (2009) framework, preparing novice educators centers on three key concepts: representations, decomposition, and approximations of practice. Representations of practice encompass the diverse ways that teaching methods are portrayed in professional education, making these methods visible for novice educators. Decomposition of practice involves breaking down intricate strategies into manageable components for effective teaching and learning. Approximations of practice provide novice educators with authentic opportunities to engage in activities that mirror the responsibilities they will encounter in their professional roles.

The LACI framework with the six Cs of Support provides a representation of practice by naming, delineating, and providing examples of different scaffolding strategies, thus making visible different scaffolding practices to use in content-area classrooms with MLs. Providing opportunities for the decomposition of practice, the Cs of Support integrated into our lesson plan format and observation tool allows teachers to plan and reflect on instruction by looking at one C of Support at a time. Providing opportunities to our students for approximations of practice through reflective assignment components prepares them for engaging in reflective practice in their teaching careers.

Reflective practice, integral to Grossman et al.'s (2009) framework for professional practice and emphasized in teacher preparation programs, has been widely adopted to deepen understanding and refine professional skills. Studies highlight its value in teacher education, demonstrating its role in fostering deeper knowledge of teaching practices (Beauchamp, 2015; Loughran, 2002). Effective reflection spans informal contemplation to structured inquiry, encouraging educators to challenge assumptions and integrate new perspectives (Loughran, 2002). Utilizing tools such as video-recorded lessons further enhance reflective practice, with structured protocols for video reflection shown to facilitate grounded and critical insights into teaching practices (Beauchamp, 2015). Relatedly, assignments in our M.S. Ed. in TESOL coursework were designed to integrate reflection with scaffolding practices, including a video-based observation assignment providing a unique vantage point for teachers to reflect deeply on their instructional methods and student interactions.

Methodology

Research context

This research is part of a larger study exploring the effectiveness of master's education coursework in shaping middle and secondary in-service teachers' classroom practices. The larger study was conducted as part of redesigning and implementing an applied graduate education program (Galluzzo et al., 2012) in partnership with a large urban school district in Southeastern U.S., aimed at better serving its sizable population of linguistically and culturally diverse students. Districtwide, 17% of students identified as "English learners" (ELs) qualifying for English language services; 73% were enrolled in the federal free/reduced meal program; and 73% identified as Latinx, 16% African American, and 6% non-Hispanic White.

For this analysis, participants include a cohort of nine in-service middle and secondary teachers pursuing an M.S. Ed. in TESOL with the expressed desire to better serve MLs in their content-area classes (see Table 1). Each teacher selected a focal classroom to implement what they learned in their coursework as part of the applied approach to graduate education.

Recognizing the importance of sustained exposure to course concepts (Bunch & Lang, 2022; Peercy & Chi, 2022), participants engaged over two semesters in two courses with

scaffolding concepts to deepen their understanding and classroom application. In the methods course, teachers were introduced to LACI through reading, class discussion, and a lesson plan template based on the framework (de Oliveira, 2020). In the subsequent advanced methods course, participants furthered their understanding of LACI through additional readings and discussions, and a video-based observation tool that incorporated the six Cs of Support (Blair et al., 2024).

The research team consisted of individuals with varying levels of involvement in the initial conceptualization of LACI, the design of the six Cs of Support tool, and in teaching the courses. Ranging from insider to outsider knowledge (Dwyer & Buckle, 2009), these varying viewpoints were crucial for critically examining the integration and effectiveness of the scaffolding concepts within the coursework.

Table 1

Overview of participant demographics and teaching focus

Participant	Content area	Grade	Number of ELs per total students in focal class
Black, female identifying	English language arts (ELA)	9th	4/24
Hispanic, male identifying	ELA	9th	19/19
Hispanic, female identifying	ELA	9th	7/23
Hispanic, female identifying	ELA	6–7th	16/16
White, female identifying	Social Studies	6–7th	24/24
Hispanic, female identifying	Social Studies	6th	27/27
Hispanic, male identifying	Mathematics	7th	15/15
Hispanic, female identifying	Mathematics	8th	8/8
Black, female identifying	Mathematics	8th	13/20

We employed a qualitative case study approach (Creswell & Poth, 2018; Merriam, 2001) to examine teachers' evolving understanding of scaffolding. Data sources include major course assignments with reflection components. The first involved preparing, delivering, and reflecting on a lesson plan using a LACI-based template. This template outlined lesson procedures, identified integrated Cs of Support, and included reflections on student responses across different ELP levels. The second assignment required teachers to video-record a lesson and select a clip using the six Cs of Support Observation Tool. This tool featured guiding questions for observing, noting examples, contrary instances, and missed scaffolding opportunities. Synthesizing reflection questions prompted teachers to reflect on their lesson and scaffold use.

Data analysis proceeded as follows. Building on prior research (de Oliveira et al., 2021), we initially used the six Cs of Support as coding categories (Miles et al., 2014). Grounded analysis was then employed to identify codes extending beyond the framework (Saldaña, 2009). We noted the frequency and timing of Cs of Support to track how scaffolding strategies were implemented across lessons and teachers. These observations were documented through memos and discussed within the research team to capture patterns within and across data sources (Creswell, 2003; Saldaña, 2009). We acknowledge that while teachers responded to the prompts and evaluation criteria as integral to the assignments, it was insightful to explore their evolving understandings of scaffolding demonstrated through these tasks as evidence of their learning.

Findings

Based on data analysis across sources, findings indicate that teachers deepened their understandings of scaffolding in general, as well as several of the Cs of Support. The first set of themes explore teachers' general take-aways about scaffolding, while the second set of themes explore their expanded understandings related to strategies specific for supporting MLs.

Deepening general understandings of scaffolding

Exposure to LACI's Cs of Support through the reflective assignments prompted participants to acknowledge the critical need for scaffolding in the first place. It became clear to the participating teachers that the lesson cannot be taught "to the middle" or solely rely on "canned curricula" and pacing guides provided by the district. In reflecting on one of her lessons focused on the Federalist Era with a class consisting entirely of MLs, the 6th grade social studies teacher adjusted the course objectives to make the material more focused and manageable over multiple class periods. She states,

> *(T)his particular lesson plan idea is derived from the district provided plans, but for it to work in my classroom with the needs of my students it had to be modified. Had this original lesson plan been given to my students with no supports, I would have had half of the classroom that was very much at a loss that would have led to frustration or apathy with the assignment.*

This statement underscores the necessity of thoughtful scaffolding in lesson delivery to ensure all students can effectively engage with the material.

One take-away from analysis of teachers' reflections of the lesson plan projects and using the observation tool was the need for and use of multiple scaffolds within a single lesson. Several Cs of Support were implemented and reflected upon at multiple points within a lesson. For

instance, in a 7th grade civics lesson focused on conflict and cooperation, a 6th and 7th-grade social studies teacher employed a variety of scaffolding techniques. Students predominantly engaged in group work using structured packets to guide their reading and responses to primary source documents about U.S. involvement in international conflicts. The lesson began with a teacher-led introduction and concluded with a whole-class conversation to review and discuss their work. The teacher reflected,

> *Due to the reading being chunked, close reading symbols, mixed level ability grouping, sentence frames, identification by teacher of key academic vocabulary, and a synonym wall with visuals, I believe this lesson was in fact appropriate for students of all levels.*

This example highlights the importance of integrating multiple scaffolding strategies, particularly in lesson planning, to support comprehension and engagement across different learning abilities.

When scaffolding was effectively implemented, as in the instance above, teachers saw a positive response from students. A developmental reading teacher for 6th and 7th grades reflected on the language-focused segment of her lesson centered on "what we wear," exploring how people's occupations influence clothing choices. This lesson allowed students to engage with two everyday topics—work and clothing. The teacher even dressed up and encouraged students to share about the clothes they wear. According to her, "*the engagement of the lesson was a success, not only because students got very excited and participative with our introductory discussion but also, they felt confident enough throughout the lesson to share their ideas.*" These reflections illustrate that well-planned scaffolding not only enhances student understanding but also fosters a supported learning environment.

However, lessons with inadequate scaffolding led teachers to backtrack, reteach concepts, and extend the anticipated timeframe. A 7th grade mathematics teacher reflected on this experience, noting,

> *I geared the beginning of the lesson towards the students who had a better grasp of the concepts involved than to those students that might not have understood everything from the get-go. If I had done a better job of gearing the lesson to all of my students, everyone would have benefited.*

An 8th grade mathematics teacher had a similar realization, prompted by reflecting on her lesson with the observation tool: "*I realized after answering the 6 C's questions, I needed to provide a more in-depth front-loading lesson.*" This insight arose from students' difficulty recalling information and struggling with challenging textbook examples in a unit on calculating volume for various shapes. These reflections underscore the importance of scaffolding, demonstrating how structured reflection heightens teachers' awareness of the necessity to effectively support a range of learners' needs.

Expanded understandings related to the six Cs of support

This section highlights how insights more specific to the six Cs of Support helped teachers reflect on and intentionally scaffold learning for MLs. The findings encompass how teachers engaged with the Cs as presented in presented in their coursework, sometimes applying or underleveraging these principles, and occasionally in novel or unexpected ways—to enhance scaffolding practices for their MLs.

Connection-making spanning Cs.

Analysis across data sources reveals multiple and distinct ways teachers connected to students' prior knowledge, illustrating how this connection-making spanned Cs of Support. The C of connection was typically incorporated at least once per class, often at the beginning of lessons. This timing is strategic on the teachers' part and aligns with the coursework concept of the C of connection, which aims to refresh prior learning, enabling students to build upon existing knowledge and facilitate new learning (de Oliveira, 2023). In this study, connection-making took various forms. Reminding involved brief references to previous class topics (e.g., "Do you remember last week how we…"). Reviewing occurred when teachers re-taught specific concepts, skills, or ideas (e.g., "This is how we plot a point on a coordinate plane"). Question-asking involved teachers posing questions requiring students to explain prior material (e.g., "Who can tell me what volume is?"). Open-ended questions were used to encourage students to share relevant knowledge or experiences (e.g., "What pets do you or have you owned" as a warm-up to debate the pros and cons of exotic animal ownership). Tasks were also used to connect learning, requiring students to demonstrate recently taught material (e.g., "Solve this problem for the bell ringer"). These examples illustrate a variety of approaches—from quick and teacher-centered (reminding) to more involved (reviewing) and student-centered (question-asking and tasks)—through which teachers connected to prior knowledge, illustrative of the C of connection.

In addition to documenting how teachers facilitate connections to prior knowledge, this analysis highlights the types of knowledge being connected. As envisioned by the C of connection presented in coursework, the teacher helps students in linking prior academic knowledge, learning experiences, and personal or cultural backgrounds to new learning (de Oliveira et al., 2021). This study reveals that most connection-making instances involved linking prior academic knowledge with new learning, such as activating understanding of "volume" before discussing calculations for different shapes. Additionally, connections were made between personal or cultural knowledge and new learning, exemplified by discussing pet ownership to explore broader themes. Teachers predominantly characterized these instances of connection-making under the C of connection, as seen in the examples provided. Less frequently, the C of culture was used to categorize these connections. For instance, in the 6–7th developmental reading class focusing on profession-specific clothing, the teacher used images of cowboys from different cultures to help students understand cultural contexts. Here, the emphasis was not on eliciting specific student knowledge of culture but rather on

encouraging students to connect their cultural experiences with the lesson content, illustrating how certain garments are culturally significant in specific settings. The dual focus on how connections are made, and what they are made to, underscores the range of considerations involved in implementing the C of Connection, as well as the areas of overlap within the C of Support to effectively scaffolding student learning.

Interacting and facilitating interactions.

In exploring interactions and their facilitation, analysis of course assignment data underscored teachers' recognition of the importance of promoting interaction. This emphasis resonates across Cs of Support, especially in the C of community and collaboration and the C of classroom interactions. Community and collaboration were integrated into the lessons through two primary methods: classroom routines, such as seating arrangements and classroom norms, and specific tasks, such as collaborative group work. Teachers intentionally created a welcoming and respectful classroom climate through these routines. For example, a 9th grade developmental reading teacher shared that she formed small groups to "*create a safe and welcoming environment*" and "*classroom routines are practiced so students feel comfortable with the procedures.*" An 8th grade mathematics teacher implemented a daily routine for students to "*check each other's answers and provide peer feedback.*" Teachers also fostered community and collaboration through cooperative group activities, such as think-pair-share, gallery walks, waterfall reading, shared problem-solving, and role-play. To promote teamwork, a 7th grade social studies teacher reported that she "*assigns roles*" and gives "*a shared grade for their task of working as a community*" in order to "*help keep students focused and in a team spirit.*" Among the Cs of Support, teachers expressed the greatest success in implementing the C of community and collaboration, as noted in their reflections.

Classroom interactions were facilitated multiple times in each lesson, typically during a teacher-guided portion of the lesson and while monitoring peer-work. One 9th grade ELA teacher employed probing questions such as "*Can you expand on that? Ask one of your group members for help. What did you intend to say? Do you have any other ideas?*" These questions effectively stimulated student engagement and fostered robust classroom discussions. In other instances, teacher questioning proved instrumental in identifying and addressing student misunderstandings. In a 7th grade mathematics lesson focusing on percent ratio and financial literacy, for example, the teacher asked a student to explain his thinking ("*Why do you think that item would be a better deal?*"), to which the student replied, "*Because the price is the lowest*". Upon reflection, the teacher noted,

> *That's where I discovered that some of the students weren't looking for the lowest unit price but were instead looking for the lowest price period. I was able to demonstrate how the unit price differed from the price paid and had the higher-level students get involved in the discussion.*

These examples illustrate that while it is important for teachers to include probing questions in their lesson plans, they must be responsive to student responses to seize opportunities for clarification during interactions. Instances like these, where teachers used probing questions to prompt students to expand on or clarify their responses, and even encouraged peer assistance, highlight important forms of interactional scaffolding in their lessons. Moreover, teachers sometimes identified student-to-student interactions as exemplifying the C of classroom interactions. For instance, an 8th grade mathematics teacher shared that "*students working on group activities*" as an instance of classroom interactions in her reflection on scaffolding learning. Similarly, a 9th grade ELA teacher described "*moving from whole group to partner work to practice writing*" as a way of scaffolding through classroom interactions. While the C of classroom interactions emphasizes prompts and strategies teachers use to enhance classroom discourse (de Oliveira et al., 2023), these examples underscore the value of student-to-student interactions in peer and group work. Both teacher-facilitated and student-to-student interactions are integral to scaffolding learning while promoting language development and refining conceptual understanding.

Challenge as a C of support and overall goal.

"Challenge" appeared in teachers' reflections in two distinct ways: (a) as the C of challenge and (b) as a consideration when applying the other Cs of Support. The C of challenge was usually evident in the teacher-guided portion of the lesson or the practice/group work lesson portions. Tasks requiring higher-order thinking and reasoning skills were frequently cited as examples, such as inference questions (e.g., drawing conclusions about executive branch powers from presidential actions), application questions (e.g., solving story problems using formulas), "real-world" problems (e.g., evaluating purchases as a "good deal" using percent ratios). Teachers also emphasized the importance of student reasoning and reflection in these tasks. In ELA, some teachers explicitly taught students how to find textual evidence to support claims, while others regularly posted "why-questions" to deepen student understanding. On fewer occasions, the C of challenge appeared in the form of hands-on tasks or experiments. In one instance, an 8th grade mathematics teacher had students create a model silo and calculate the volume using construction paper, tape, and a ruler.

"Challenge" appeared in teachers' reflections not only as a stand-along principle but also in conjunction with the other Cs of Support, serving as an overarching goal for scaffolding instruction. For instance, a 7th grade social studies teacher mixed and paired students based on their ELP levels, integrating the C of challenge and community and collaboration. Reflecting on her rationale, the teacher noted how the group work opportunity helped "*aid in understanding for students struggling with English*" and it gave her a chance to "*challenge students not struggling with English*" by checking in with individuals to verify the accuracy of their responses. Similarly, a 9th grade ELA teacher reflected that her practice of prompting students to elaborate on their responses during classroom interactions aimed to "*provide high support and high challenge*" aligning with the aims of the C of challenge within the LACI

framework (de Oliveira, 2023), as well as with broader principles of scaffolding to ensure the support is adequate for the academic challenge (Gibbons, 2009).

Breaking down code-breaking.

This analysis underscores that code-breaking, involving explicit attention to patterns in language and literacy use, was consistently integrated into lessons, typically occurring once or at most twice per class during teacher-guided segments. Teachers frequently employed modeling techniques, such as think-alouds, to demonstrate problem-solving strategies or how to extract evidence from texts. For instance, they might articulate their thought process when analyzing literature or solving mathematical problems. Explicit vocabulary instruction was another common strategy observed. This involved highlighting and annotating key terms within texts, and sometimes utilizing tools like word walls or semantic maps. By explicitly teaching vocabulary, educators aimed to enhance students' understanding and retention of new terminology. Sentence frames were also utilized, often displayed on classroom boards or provided in worksheets.

Despite concerted efforts to explicitly address language in their lessons, these examples (modeling, explicit vocabulary instruction, and sentences frames) are among the most common but not robust strategies within the LACI framework (de Oliveira et al., 2021) and teachers critically assessed their ability to effectively engage in code-breaking. According to their reflections using the observation tool, code-breaking emerged as a challenging C of Support for teachers to implement. For example, a 9th grade social studies teacher reflected that she was not teaching "*the right language*" for student success. Despite pre-teaching vocabulary and having students identify these terms in readings, their written responses did not reflect the language taught. The teacher noted, "*I do not feel that I did a sufficient job in explicitly teaching language forms, functions, and skills. While I focus on vocabulary in every lesson, I failed to model other aspects of language.*" Similarly, a 9th grade ELA teacher reflected, "*Had I initially focused more on teaching language skills, I would have better prepared my students for the writing portion of the lesson*." Instances of robust code-breaking as presented in the course, such as teacher-led analysis of language patterns in authentic texts and collaborative text writing and editing, were not prominently featured in the analyzed lessons. Incorporating these practices, which emphasize how language constructs meaning beyond the use of individual vocabulary words, would have helped teachers identify and address broader aspects of language in their lessons that they felt were missing.

Leveraging culture to scaffold learning.

The C of culture was acknowledged and utilized to scaffold learning, often occurring each lesson, particularly when students' personal or cultural knowledge was leveraged to connect with new content, as discussed earlier. Throughout the analysis, various cultural and linguistic resources were recognized as examples of the C of culture, including students'

home languages, interests, and out-of-school experiences. Teachers facilitated learning by encouraging students to utilize their home languages during peer work, with instances where teachers were fluent in students' languages resulting in increased participation during whole-class discussions. In more robust applications, teachers utilized cognates and context clues to deepen students' understanding of topic-specific vocabulary. However, there was little evidence of teachers tailoring topics or discussions specifically to individual students' or groups' interests or experiences. Instead, teachers generally aimed to incorporate elements they believed students could relate to within the lesson's topic and activities. For example, in a 6th grade social studies lesson on the Federalist Era, a teacher explained the term "*elected*" by contrasting it with a coin toss, which she felt would resonate with students as a method of selecting a leader. Her goal was to "*explain the terms so that students can relate to how these terms and phrases are still used today*."

Despite these attempts to acknowledge students' linguistic and cultural resources, the focus remained largely on surface-level aspects without deeper exploration into students' families, cultural practices, communities, or pertinent out-of-school issues. According to reflections using the completed tool, teachers indicated that culture was the C of Support they most struggled to implement meaningfully. For instance, in a 9th grade developmental reading lesson, a teacher aimed to highlight the "universality" of *Romeo and Juliet* as an illustration of cultural relevance. However, the lesson missed opportunities to prompt students with questions or present contrasting stories (such as *West Side Story* or modern adaptations of *Romeo and Juliet*) that could have demonstrated how the story resonates across different cultural contexts. Similarly, in another 9th grade developmental reading class, a teacher encouraged students to brainstorm in their home languages, yet reflected afterward, "*Maybe one of the things I also should have done was to connect the topic of the writing with their communities and native countries*". The writing prompt focused on social media which relates to youth culture, but the teacher thought she could have pushed students to "say more" with additional prompts making their cultural knowledge more central. Reflecting on the lesson and mindful of her students' diverse national backgrounds, the teacher suggested alternative prompts such as "*What do you think about social media in your native countries? Is internet access an issue in your countries? Why?*" Reflecting further, the teacher noted, "*These questions would have motivated the students to participate and think about reasons, facts, ideas, and opinions that they could have used in their writing*." Teachers' reflections highlighted the challenge of implementing the C of culture effectively yet underscored their commitment to enhancing future practices with more culturally responsive approaches.

Discussion

The manner in which the Cs of Support are referenced and reflected upon reveals participating teachers' understanding of these concepts, as well as scaffolding practices in general. Analysis also demonstrates that teacher reflection using the six Cs of Support Observation Tool contributed to enhancing participating teachers' comprehension and

implementation of scaffolding strategies. This study, conducted with in-service teachers engaged in M.S. Ed. TESOL coursework, underscores the distinction between general scaffolding knowledge and the specialized knowledge required for effectively supporting MLs. This distinction contrasts with studies involving pre-service teachers, highlighting the practical experience these teachers bring to planning and implementing instruction. While both pre-service and in-service teacher studies emphasize the importance of clarifying and familiarizing teachers with the theoretical foundations of scaffolding practices (Bunch & Lang, 2022; Peercy & Chi, 2022), this study illustrates that broader understandings of scaffolding were affirmed and expanded to address the specific needs of MLs.

Analysis of teacher reflection through course assignments reveals that scaffolding was implemented in anticipated ways, such as connecting at the beginning of lessons and integrating multiple scaffolding strategies using various Cs of Support. However, the analysis also brings forth several points pertinent to the discussion on scaffolding for MLs. For instance, it highlights the varied methods of accessing prior knowledge and prompts consideration of which types of knowledge are being tapped into to promote new learning. Additionally, it distinguishes between eliciting specific student knowledge about culture (such as social media practices in different countries) and encouraging students to connect their cultural experiences with lesson content (as exemplified by work and clothing choices).

Another aspect illuminated by the study pertains to prompting interactions. The C of classroom interactions pertains to teacher facilitation (de Oliveira et al., 2023), but also underscores teachers' attention to promoting student-to-student interactions. This not only fosters community and collaboration but also propels classroom discussions forward. Another aspect of scaffolding highlighted is the robust portrayal of challenge, emphasizing higher order thinking, along with broader utilization of other Cs of Support to ensure balance with the level of support provided to reach higher levels of content area learning (Gibbons, 2009).

It is noteworthy that the Cs of codebreaking and culture which are particularly relevant to serving MLs, but that teachers may not have had extensive exposure to prior to TESOL coursework, were also perceived as their weakest Cs of Support. Explicit attention to language patterns and literacy, as emphasized by codebreaking, is crucial for supporting language development while engaging students in content area learning. The challenge in implementing robust strategies related to codebreaking suggests a learning curve or a need for deeper knowledge of language to move beyond traditional approaches like vocabulary pre-teaching (Molle et al., 2021) or heavy reliance on sentence frames (Alvarez et al., 2023). Implementing more robust strategies in codebreaking requires deeper understanding and application of language structures and functions.

Given that culture offers a valuable resource for teaching and learning, effectively utilizing the C of culture through students' languages, national origins, and cultural references could have enhanced scaffolded learning experiences. While teachers have much to draw upon, they may not always feel adequately conversant in their students' languages or cultures. Instead, creating space for students to share their cultural perspectives can foster a classroom

community where students learn from each other. When integrated with other Cs of Support, such as collaboration and community, this approach not only enhances cultural understanding but also empowers students to lead and contribute to their learning experiences.

Limitations and implications

The limitations of this study stem from its reliance on teacher-reported reflections gathered from courses assignments spanning coursework over two semesters. Another limitation is the study's focus on the six Cs of Support, which, while integral to the research design and reflective of the constructs presented, may have inadvertently constrained exploration of alternative considerations for scaffolding relevant in fostering comprehensive support for MLs.

Despite the limitations, this study holds several implications for teacher education. By identifying common understandings and underutilized aspects of the six Cs of Support and scaffolding practices more broadly, teacher educators can proactively integrate clarifications learning experiences in teacher preparation courses to ensure a more robust understanding. Strategic decisions can be made regarding which Cs to prioritize initially in order to scaffold teachers' learning about effective scaffolding practices. Ultimately, the objective is not for teachers to simply memorize the Cs of Support or identify examples of scaffolding within this framework. Instead, the primary goal is to expose teachers to a range of scaffolding strategies and enhance their ability to apply these strategies with MLs. This approach aims to better equip teachers to support, challenge, and engage these students in language-rich content-area instruction, thereby promoting equitable and effective educational practices.

References

Alvarez, L., Capitelli, S., & Valdés, G. (2023). Beyond sentence frames: Scaffolding emergent multilingual students' participation in science discourse. *TESOL Journal, 14*(3), 1–19. https://doi.org/10.1002/tesj.720

Athanases, S. Z., & de Oliveira, L. C. (2014). Scaffolding versus routine support for Latina/o youth in an urban school: Tensions in building toward disciplinary literacy. *Journal of Literacy Research, 46*(2), 263–299. http://dx.doi.org/10.1177/1086296X14535328

Beauchamp, C. (2015). Reflection in teacher education: Issues emerging from a review of current literature. *Reflective Practice, 16*(1), 123–141. https://doi.org/10.1080/14623943.2014.982525

Blair, A., de Oliveira, L. C., & Avalos, M. (2024). Expanding teacher understanding of scaffolding for multilingual learners: A video-based observation tool incorporating a language-based approach to content instruction. *MinneTESOL Journal, 40*(1). https://minnetesoljournal.org/expanding-teacher-understanding-of-scaffolding-for-multilingual-learners-a-video-based-observation-tool-incorporating-a-language-based-approach-to-content-instruction/

Bunch, G. C., & Lang, N. W. (2022). Scaffolding "scaffolding" in pre-service teacher education. In L. C. de Oliveira & R. Westerlund (Eds.), *Scaffolding for multilingual learners in elementary and secondary schools* (pp. 197–214). Routledge.

Cooper, R., & Slavin, R. E. (2001). Cooperative learning programs and multicultural education: Improving intergroup relations. In F. Salili & R. Hoosain (Eds.), *Multicultural education: Issues, policies and practice* (pp. 15–33). Information Age Pub.

Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design choosing among five approaches* (4th ed.). Sage.

Daniel, S. M., Martin-Beltrán, M., Peercy, M. M., & Silverman, R. (2016). Moving beyond yes or no: Shifting from over-scaffolding to contingent scaffolding in literacy instruction with emergent bilingual students. *TESOL Journal, 7*(2), 393–420. https://doi.org/10.1002/tesj.213

de Oliveira, L. C. (2020). Planning and application using a language-based approach to content instruction (LACI) in multilingual classrooms. *MinneTESOL Journal, 36*(2). https://minnetesoljournal.org/wp-content/uploads/2020/11/de-Oliveira_Planning-and-application-using-a-language-based-approach-to-content-instruction-LACI-in-multilingual-classrooms.pdf

de Oliveira, L. C. (2023). *Supporting multilingual learners' academic language development: A language-based approach to content instruction*. Routledge.

de Oliveira, L. C., & Athanases, S. Z. (2017). A framework to reenvision instructional scaffolding for linguistically diverse learners. *Journal of Adolescent & Adult Literacy, 61*(2), 123–129. http://dx.doi.org/10.1002/jaal.663

de Oliveira, L. C., Braxton, D., & Gui, J. (2021). Planning for instruction using a language-based approach to content instruction for multilingual learners. *Journal of English Learner Education, 13*(1), 12–29. https://stars.library.ucf.edu/cgi/viewcontent.cgi?article=1043&context=jele

de Oliveira, L. C., Jones, L., & Smith, S. L. (2023). Interactional scaffolding in a first-grade classroom through the teaching–learning cycle. *International Journal of Bilingual Education and Bilingualism*, *26*(3), 270–288. https://doi.org/10.1080/13670050.2020.1798867

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods, 8*(1), 54–63. http://dx.doi.org/10.1177/160940690900800105

Elliot-Johns, S. (2015). Towards meaningful reflection in teacher education as professional learning. *Teaching for Tomorrow Today,* 33–41. http://dx.doi.org/10.36510/learnland.v8i1.677

Fang, Z. (2006). The language demands of science reading in middle school. *International Journal of Science Education, 28*(5), 491–520. http://dx.doi.org/10.1080/09500690500339092

Galluzzo, G., Isenberg, J. P., White, S. C., & Fox, R. K. (2012). *The master's degree in education as teacher professional development: Re-envisioning the role of the academy in the development of practicing teachers*. Rowman & Littlefield Publishers.

Gibbons, P. (2009). *English learners, academic literacy, and thinking: Learning in the challenge zone.* Heinemann.

Grossman, P., Compton, C., Igra, D., Ronfeldt, M., Shahan, E., & Williamson, P. W. (2009). Teaching practice: A cross-professional perspective. *Teachers College Record*, *111*(9), 2055–2100. https://tedd.org/wp-content/uploads/2014/03/Grossman-et-al-Teaching-Practice-A-Cross-Professional-Perspective-copy.pdf

Halliday, M. A. K., & Matthiessen, C. (2004). *An introduction to functional grammar* (3rd ed.). Arnold.

Hammond, J. (2009). High challenge, high support programs with ESL learners: A teacher-researcher collaboration. In J. Miller, M. Gearon & A. Kostogriz (Eds.), *Linguistically and culturally diverse classrooms: New dilemmas for teachers* (pp. 56–74). Multilingual Matters. https://doi.org/10.21832/9781847692184-006

Johnson, E. M. (2019). Choosing and using interactional scaffolds: How teachers' moment-to-moment supports can generate and sustain emergent bilinguals' engagement with challenging English texts. *Research in the Teaching of English, 53*(3), 245–269. https://www.jstor.org/stable/26802741

Johnson, E. M. (2021). Contingency in context: A study of exemplary reading teachers' use of planned scaffolds in secondary English classes with emergent bilinguals. *Reading & Writing Quarterly, 37*(3), 260–278. http://dx.doi.org/10.1080/10573569.2020.1776654

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.* Cambridge University Press.

Loughran, J. J. (2002). Effective reflective practice: In search of meaning in learning about teaching. *Journal of Teacher Education, 53*(1), 33–43. http://dx.doi.org/10.1177/0022487102053001004

Lucas, T., & Villegas, A. M. (2013). Preparing linguistically responsive teachers: Laying the foundation in preservice teacher education. *Theory Into Practice, 52*(2), 98–109. http://dx.doi.org/10.1080/00405841.2013.770327

Merriam, S. B. (2001). *Qualitative research and case study applications in education.* Jossey-Bass.

Miles, M. A., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.

Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory Into Practice*, *31*(2), 132–141. http://dx.doi.org/10.1080/00405849209543534

Molle, D., de Oliveira, L. C., MacDonald, R., & Bhasin, A. (2021). Leveraging incidental and intentional vocabulary learning to support multilingual students' participation in disciplinary practices and discourses. *TESOL Journal, 12*(4), e616. http://dx.doi.org/10.1002/tesj.616

Moore, J., & Schleppegrell, M. (2014). Using a functional linguistics metalanguage to support academic language development in the English Language Arts. *Linguistics and Education, 26*, 92–105. http://dx.doi.org/10.1016/j.linged.2014.01.002

Nieto, S. (2000). Placing equity front and center: Some thoughts on transforming teacher education for a new century. *Journal of Teacher Education, 51*(3), 180–187. http://dx.doi.org/10.1177/0022487100051003004

Peercy, M. M., & Chi, J. K. (2022) "Oh, I was scaffolding!": Novice teachers' use of scaffolding as humanizing practice with multilingual students. In L. C. de Oliveira & R. Westerlund (Eds.), *Scaffolding for multilingual learners in elementary and secondary schools* (pp. 102–120). Routledge.

Rose, H. (2019). Dismantling the ivory tower in TESOL: A renewed call for teaching-informed research. *TESOL Quarterly, 53*(3). http://dx.doi.org/10.1002/tesq.517

Saldaña, J. (2009). *The coding manual for qualitative researchers* (3rd ed.). Sage.

Schall-Leckrone, L. (2018). Coursework to classroom: Learning to scaffold instruction for bilingual learners. *Teacher Education Quarterly, 45*(1), 31–56. https://doi.org/10.2307/90018182

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content-area literacy. *Harvard Educational Review*, *78*(1), 40–59. https://psycnet.apa.org/doi/10.17763/haer.78.1.v62444321p602101

Vertovec, S. (2023). *Superdiversity: Migration and social complexity*. Routledge.

Walqui, A., & Van Lier, L. (2010). *Scaffolding the academic success of adolescent English language learners: A pedagogy of promise*. WestEd.

Dr Alissa Blair is an Assistant Professor in the Department of Curriculum and Instruction at the University of Arkansas, Fayetteville, USA. She researches K-12 multilingual learners' education, focusing on language and literacy in content areas, bilingual education, and teacher education. Her work appears in peer-reviewed journals including *TESOL Quarterly* and *Review of Research in Education* and others. Alissa is passionate about equitable schooling for linguistically and culturally diverse youth.

Dr Luciana C. de Oliveira is the Associate Dean for Academic Affairs and Graduate Studies in the School of Education and a Professor in the Department of Teaching and Learning at Virginia Commonwealth University, Richmond, Virginia, USA. Her research focuses on teaching multilingual learners at elementary and secondary levels. She has authored or edited 28 books and over 200 publications. Dr de Oliveira was the first Latina President of TESOL International Association.

Dr Mary A. Avalos is a Research Professor in the Department of Teaching and Learning at the University of Miami (FL) and co-directs the School of Education and Human Development's Community and Educational Well-being Research Center. Her research interests include equity-focused projects in public school and community settings and working with teachers to improve multilingual teaching and learning in reading/language arts, science, mathematics, and social studies content areas. Mary has published her work in practitioner and scholarly journals, including *Urban Review*, *The Elementary School Journal*, *The Reading Teacher*, and *Bilingual Research Journal*.

AMEP and the Burden of Compliance

Chris Corbel   The University of Melbourne, Australia

Abstract

This article explores the 'burden of compliance' experienced by providers and teachers in the Adult Migrant English Program (AMEP), a large national English as an Additional Language (EAL) program in Australia. It shows how compliance requirements have been shaped by the relationship between two groups, those who make and operationalise relevant policies (mainly politicians and public servants) and those engaged in the practice of developing and teaching English courses (mainly teachers, program providers, and academics). These two groups are engaged in a struggle for the control of a metaphoric 'pedagogic device' (Bernstein, 2000) which shapes curriculum documents such as the frameworks, scales and teaching resources used in the AMEP. The article examines three key teaching and assessment documents and shows how the compliance requirements attached to each have been shaped by the relationship between these two groups over time. A crucial dynamic governing this relationship is the level of trust between and within them. The article argues that changes in levels and types of trust account for many of the tensions within the AMEP. It begins by describing how compliance was raised as an issue and introduces the key concepts that inform the discussion. The second part of the article tracks changes in approaches to compliance as manifested in three AMEP curriculum documents over 75 years. The third part identifies three policy trends that contributed to compliance becoming the burden currently experienced by providers and teachers. The article concludes that there are signs that trust between stakeholders may be changing, with a potential reduction in the burden of compliance.

Introduction

This article arose from a presentation entitled *A reflection on curriculum innovation in the AMEP* (Corbel, 2023). For over fifty years I have been a teacher, curriculum manager, professional development manager, national project manager and academic consultant for public and private providers of the Adult Migrant English Program (AMEP), a large national English language program for adult migrants to Australia. In June 2023, I was an invited speaker at its 75th anniversary AMEP Service Provider conference. My topic was a personal reflection on innovation in the AMEP curriculum. My theme was "meeting midway", a reference to the name of the migrant hostel where I had my first AMEP teaching job in 1974, and also to the relationship between program stakeholders themselves. The 75th anniversary conference celebrated AMEP successes, as had the 50th anniversary conference in 1999 at which I also spoke. But, as with most anniversaries, there was an undercurrent. This came to the surface at the end of my presentation when a participant suggested that I had overlooked the 'burden of compliance', the increasingly onerous requirements of documenting curriculum activity (Department of Home Affairs, 2021). This turned out to be a common topic throughout the casual conversations taking place among conference participants. My contact with the program had lessened between the 50th and 75th anniversaries, so I was confused. What had happened to the AMEP curriculum in this period that had led to this dissatisfaction among many of its teachers? Did this dissatisfaction have serious implications for the AMEP itself? It seemed that while "meeting midway" was a noble collaborative goal, and had apparently achieved some successes, something was happening which did not involve meeting midway at all. Why had this question about compliance been the only one raised as a challenge to my account of curriculum innovation?

To address this question, I have drawn on the theories of Basil Bernstein, whose work offers explanations of the reproduction of inequalities in education and possibilities for challenging them (Barrett, 2024; Bernstein, 2000). Curriculum for Bernstein is the knowledge, both knowing-*that* and knowing-*how* (Winch, 2017), which is the content of a course of study. The process whereby knowledge moves from its source format to the format with which learners engage is referred to metaphorically as the 'pedagogic device' (Barrett, 2024; Singh, 2002). The curriculum as it is experienced by teachers is shaped by the power of the group most able to exert influence and control over the knowledge selected as content for the curriculum. For Bernstein, the curriculum is a site of struggle.

There are three stages in the process of curriculum development in Bernstein's model—Production, Recontextualization, and Reproduction. The focus in this article is on the second stage. It is at this point that there are substantive choices to be made about the selection, sequencing, format, presentation, and assessment of knowledge. It is here that the struggle for control of the curriculum is focused. There are two broad groups involved in this struggle (Bernstein, 2000). The Official Recontextualisation Field (ORF) comprises politicians, policy makers, industry associations, regulatory agencies, and public servants. They are responsible for setting broad directions and governing and regulating the overall field of education. The

Pedagogic Recontextualisation Field (PRF) comprises education academics, professional associations, providers, and teachers. They are responsible for actual educational programs, including shaping what is delivered and how. Both groups share a concern for planning and implementing courses of action that meet their goals. If the goals align, there is cooperation. If they do not align, there is tension and even conflict. The resulting tension is what Bernstein calls the struggle for control of the pedagogic device (Bernstein, 2000). This struggle is captured in key curriculum texts.

An important element in the relationship between the ORF and the PRF is the level of reciprocal trust. The kind of power held by the ORF dictates that the ability of professionals— in this context, the PRF—to exercise "discretionary power" is an indicator of the level of trust by the ORF in their work (Frowe, 2005). What counts as professional trustworthiness has traditionally derived from the mastery of a professional body of knowledge, the requirements for entering a profession, and the altruistic motives ascribed to professionals (Frowe, 2005; Young & Muller, 2014). However, this "occupational" type of professionalism (Evetts, 2018) is no longer as prominent as it once was. Evetts (2009) suggests that a second "organisational" (also referred to as "managerial or "instrumental") type of professionalism has emerged. In this view, professionals' responsibility is not to the values, norms, and standards of a profession, but to the goals and methods of the organisation within which they work. Professionals are no longer evaluated externally by peers, but internally by managers. My observation of the AMEP over decades is that many members of the PRF demonstrate a third type of professionalism, "personal" professionalism (Bathmaker & Avis, 2013), typified by a strong personal commitment to their learners. This personal professionalism is as strong as occupational and organisational professionalism in the AMEP.

In the last 30 years in particular, there has been a steady erosion of the PRF's discretionary power as the ORF has sought to exert control over the AMEP curriculum through increasingly onerous forms of compliance. The burden of compliance perceived by the PRF suggests that the organisational view of professionalism has been imposed by the ORF, which is at odds with the more discretionary occupational view held by many in the PRF. The perceived burden of compliance suggests there has been an over-reliance on the personal professionalism of many AMEP teachers as well.

Over the 75 years of the AMEP, there has been increasing distrust between governments and the providers and users of government services. This has been the case in all social service sectors in "Western welfare states" (Yeatman, 1990), not least in education (Neidlich et al., 2021). My argument is that this distrust is an important force behind the compliance burden facing AMEP providers and teachers. An examination of changes in the key AMEP curriculum texts over time will provide insights into the development of the burden of compliance now encountered by teachers and providers.

Changes in curriculum compliance

Over time, the three most significant curriculum texts for the AMEP have been *Situational English for Newcomers to Australia* (Australian Government Publishing Service [1968], hereafter *Situational English)*; the *Australian Second Language Proficiency Ratings* (Ingram & Wylie [1984], hereafter the ASLPR); and the *Certificate(s) in Spoken and Written English* (Hagan et al., [1993], hereafter the CSWE). Almost every AMEP teacher has had to engage with one of them in some way or another. These texts can be seen to represent the heart of the struggle over the AMEP curriculum and the pedagogic device.

From its inception in the late 1940s until the mid-70s, the AMEP was viewed by the Commonwealth Government as a temporary measure to address increasing post-war immigration (Martin,1999). The Commonwealth funded TAFE Colleges to deliver the AMEP, together with what became the Adult Migrant English (or Education) Services in Victoria and NSW, until 1998. Producing the AMEP curriculum was the responsibility of a handful of language experts in the Commonwealth Office of Education. There was no government interest in the details of the curriculum as such (Martin, 1999). Teaching revolved around a key curriculum text, *Situational English,* a series of six books with a teacher's book and a student's book at each of three levels. The focus was on the very detailed Teacher's Book, which provided a tight framing of the structure and wording of lessons (Martin, 1999). Compliance requirements were to do with teaching, not assessment. There was no formal mechanism for assessing students. *Situational English* was based on the Australian Situational Method, which in turn was based on the Direct Method (Hornby, 1950) and audiolingualism (Rivers, 1968). A method is a fixed way of doing things, and this method was indeed firmly fixed. It emphasised habit formation through repetition and substitution drills. The term 'situational' refers to the teaching techniques used in the classroom rather than social situations likely to be encountered by the learners. The format and presentation were also firmly fixed, as was the content and sequencing.

Within the ORF, government and public servants trusted a handful of language experts (the PRF), to decide what should be taught. However, my experience as a teacher suggested a lower level of trust *within* the PRF. The Australian Situational Method developers allowed very little discretion on the part of teachers. This was a realistic and broadly (though not universally) accepted response to the needs of teachers, some of whom were not trained in English language teaching beyond basic techniques. Teachers were treated as "executive technicians" (Winch, 2017) rather than professional language teachers, so the issue of professional trust, and hence discretionary judgment, other than in the minute-by-minute work of the classroom, did not arise (Martin, 1999). In the absence of a professionalised PRF, there was therefore no struggle for control over the pedagogic device as it was manifested in *Situational English.* The only compliance required was using the Teacher's Book. By the 1970s, however, there were increasing tensions (Nunan, 2013) over the rigidities and inappropriateness of *Situational English*. Over time, variations to the sequence and content became tolerated (Martin, 1999). Other named methods with distinctive techniques, such as *All's Well*, *Suggestopedia* and *The*

Silent Way, began to be used. In my experience as an organiser of teacher training, these too required strict compliance with their specific teaching techniques.

A major review of the AMEP (Galbally, 1978), initiated and then accepted by the then-Government, led to the introduction in the early 1980s of a second key curriculum text, the *Australian Second Language Proficiency Ratings* (ASLPR) (Ingram & Wylie, 1984), as a common reference point for placement, teaching and assessment. The focus on specific elements of language structures of *Situational English* was replaced with a focus on general levels of language use, termed 'proficiency'. Unlike *Situational English,* the ASLPR was a reference, not a source of teaching activities. These were to be chosen by the teacher.

This change reflected the global shift in the PRF towards a 'Communicative Approach' (Nunan, 2013), which focused on the social purposes (or 'functions') of language. Unlike a method such as the Australian Situational Method, an approach is less directive. It requires teachers to draw upon principles of teaching and learning to design their own responses to a more complex view of learner needs. Although Communicative Language Teaching attracted some named approaches such as the Natural Approach (Richards & Rodgers, 2014) and became primarily associated with a range of teaching techniques such as group work and tasks, it was not a fixed method and had no compliance requirements for how students were actually taught. The adoption of the ASLPR was thus a high-trust decision by the ORF. It required all teachers to both teach and assess students, which required a higher level of professional knowledge and skill. To facilitate this, teachers now had more professional development requirements and opportunities, including university English Language Teaching qualifications, as well as well-developed professional development programs offered by the AMEP providers (Bottomley et al., 1994; Martin, 1999).

There were tensions between the ORF and the PRF in the transition to the new approach, however, as exemplified by the National Curriculum Project (Burton, 1987; Nunan, 1987). A review of the AMEP (Campbell, 1986) found considerable uncertainty among teachers about the application of the extensive range of resources that had replaced *Situational English*. The review recommended that a small group of experts be assembled to prepare national guidelines and resources, as had been done with *Situational English*. An alternative was suggested by the heads of the National Curriculum Resource Centre (NCRC), a PRF entity, which was to undertake a national development project drawing on the expertise of all teachers as the basis for the curriculum resources. The ORF accepted the PRF experts' recommendation that teachers had the capacity to do this work. The result was an optional collection of resources called *Frameworks* (Nunan, 2013). Overall, it was a time of "meeting midway" between the ORF and a more professionalised PRF, which was now able to exercise more discretion in pedagogy and resource development. The ORF had created the conditions that fostered the professionalisation of the PRF at the same time as ideas about language teaching expanded and became more complex, requiring that very professionalism. By the end of the 1980s, compliance for teachers only related to the occasional use of the ALSPR and did not affect day to day classroom teaching (Bottomley et al., 1994). The PRF now had greater control over the

pedagogic device, in the form of the discourse of the 'learner-centred' curriculum (Martin, 1999; Nunan, 2013).

In the early 1990s the AMEP came under the influence of the Vocational Education and Training (VET) sector, which itself had moved from being a national training system to a national training market. Both the ORF and PRF were now driven by the government's National Training Agenda, which required the reform and accreditation of programs to align with its economic requirements (Martin, 1999; Moore, 2001). AMEP courses now needed to be based on the nationally mandated Competency Based Training (CBT) curriculum model, introducing a vocational perspective into what had been seen as a settlement focused program. Competency Based Training was ideal for the requirements of the National Training Agenda, not because it reflected sound educational principles and practice, but because it used finely detailed outcomes descriptors. These were amenable to simple, detailed measurements suitable for checking compliance with program goals, which were now employment rather than settlement related (Jones & Moore, 1995). It met political (ORF) rather than educational (PRF) needs (Moore, 1996). Whether or not what was being measured was educationally valid or appropriate had never been the primary concern of the ORF. Their concern was only whether the program outcomes could be understood by the "consumers" of the information, from the minister of the day down through employers and ultimately, in theory, the taxpayer (Wheelahan, 2010). The AMEP had no choice but to address this change.

As a result, a third key curriculum text was chosen for the AMEP, the *Certificate(s) in Spoken and Written English* (CSWE) (Hagan et al.,1993). Unlike the *Situational English* focus on specific elements of language structure, and the ASLPR focus on levels of language use, the CSWE focused on specific elements of language tasks. Developed by members of the PRF, the CSWE followed the VET curriculum format, containing detailed information about target task behaviours (described as competencies) and their assessment. The CSWE brought together an increasingly influential view of language in Australia, based on Systemic Functional Grammar, with the VET curriculum paradigm, Competency Based Training (Tilney, 2023). The CSWE also offered resources and a teaching method, the Teaching Learning Cycle (Tilney, 2023).

The location of the AMEP in VET had a major impact on the curriculum. In principle, the CBT model in Australian VET curriculum is agnostic regarding pedagogy. In a highly structured, outcomes-focused VET curriculum, it is the one area where teachers have notional agency. In practice this is easily overwhelmed by the details involved in assessment, which has a much higher focus in CBT. The PRF, in theory, manages the inputs, while the ORF is more concerned with the outcomes. However, the washback effect of the intended outcomes drove the teachers' work, as teachers were required to, in effect, teach to the test. Unlike the professional judgment required of an approach, or even a method, the term *training* in CBT implies the routine following of rules mandated by the ORF. Compliance now required the following of these rules as set out in the VET training packages. Compliance no longer related to teaching, however, but to the detailed rules relating to assessment. While the actual curriculum contents were the products of work by elements of the PRF, the overall VET framing of the AMEP meant that the pedagogic device was once again largely in the hands of the ORF.

How compliance became a burden

During the 1990s, a more onerous accountability regime was imposed in the form of a new curriculum framework in which compliance with rigid techniques of assessment and a focus on outcomes was central. This reflected a growing distrust among the politicians and public servants from the Official Recontextualisation Field (ORF) of the providers and teachers of the Pedagogic Recontextualising Field (PRF). Three features of the broader political and ideological environment—the certification of outcomes, competition between providers, and conflation of programs—reflected and exacerbated the lowering of trust on the part of the ORF in the professional discretion of the PRF.

The first of these features was the certification of curriculum outcomes. The discourse of nationally agreed standards and descriptors of the National Training Agenda led to the development of accredited and therefore standardised certification of outcomes. Certification reflected the change in goals by the ORF from what was said to be "inputs" to "outputs". No longer satisfied with statements of hours spent in learning, the ORF focus was now on what the taxpayers were getting for their dollars (Moore, 1996). This was a result of a change in the ORF itself, as the public service moved towards the "neoliberal" ideology of New Public Management (Evetts, 2009; Yeatman, 1990), with a focus on 'steering rather than rowing'. Instead of providing services directly, the government now set the course and used the public service to outsource the work to third party providers. This required greater control in the name of 'transparency' through the increasing use of audits (Rose, 1993).

The second feature of the new environment that affected trust was competitive tendering between providers for delivery of the AMEP (Martin, 1999) and the admission of private providers into what was now seen as a 'market'. In the New Public Management environment of the early 1990s, those who deliver services were now suspect in the eyes of the ORF. There was fear of 'provider capture'—the steerers and rowers were seen to be too strongly aligned. The collaboration that had led to the successes of the 1980s was now replaced by competition. The well-established, professionally staffed, and highly specialised Adult Migrant Education Services in each state now faced competition from other providers, both public and private (Ball & Youdell, 2008). This was not necessarily a bad thing if the arrangements maintained the quality and continuity needed for the continued success of the program. That, however, was not necessarily the case (Moore, 2022a). Teachers now worked for providers under constant pressure of compliance with the requirements of their registration as a provider, as a deliverer of courses, and possibly a more general scheme such as the International Organization for Standardization (ISO) standards. Their employment was increasingly dependent upon short term contracts. Many AMEP teachers had become members of the "precariat" (Standing, 2011).

Thirdly, the conflation of language, literacy and, later, digital literacy and employability into Foundation skills added to the increasing burden of compliance by combining students into classes funded from multiple sources. The language/literacy conflation was supported by the impetus provided by International Literacy Year (in 1987, the United Nations General

Assembly proclaimed 1990 to be International Literacy Year) and entwined in later policy debates around the National Policy on Languages and the Australian Language and Literacy Policy (Moore, 2002). The upshot was that English as an Additional Language (EAL) was no longer seen as a distinct area of learning by the ORF, notwithstanding continuing debates on the issue within the PRF. There were also debates within the PRF relating to the distinctiveness of adult language learning in relation to adult literacy learning. The ORF saw this debate about distinctions between language and literacy in language policy as special pleading or as simply irrelevant (Moore, 2002). To a lesser extent there were elements of disagreement within the PRF over the move to the CSWE (Bottomley et al, 1994). These divisions worked to the ORF's advantage, as did the closing over time of the various national support units. Professional development was now focused simply on basic competency-based training rather than other pedagogical and curriculum issues. The ORF had now fully wrested back control of the pedagogic device.

How the burden of compliance became unsustainable

"Professionals clearly need to be accountable for their actions, but what they are accountable for and to whom are thorny questions" (Frowe, 2005, p. 43). In the AMEP the answers have come in the form of the imposition of ever more onerous curriculum compliance. This burden of compliance became unsustainable after the introduction of the AMEP's New Business Model in 2017 (Australian Council of TESOL Associations [ACTA], 2024). Although there was no change to the overall CBT curriculum framing, the changes to the AMEP delivery contract created a period of unparalleled complexity. Crucially, this contract allowed choice of the curriculum, an apparent indicator of trust in the PRF. However, the professionalism of teachers was primarily called upon not to make the choice but simply to implement whatever had been chosen for them. There was tension in trying to reconcile the demand for consistent national reporting with the need to assess against the various curriculums chosen. To achieve national comparability, all providers were now required to use the *Australian Core Skills Framework* (ACSF) as a reporting tool (further embedding the conflation mentioned above). Providers and teachers found themselves under pressure from two directions. They needed to carry out teaching assessments as required as a registered training organisation and also to report learners' progress, not against the ASLPR (now ISLPR), but against the ACSF, in order to meet AMEP Key Performance Indicator requirements. Unlike the ISLPR, the ACSF was not designed for reporting on second language learning, thus adding to the complexity. This had the effect of heightening still further the compliance requirements. For some it was just too much (ACTA, 2024; Moore, 2022a, 2022b).

Reducing the burden of compliance

Compliance by professionals in an environment of trust need only be part of routine professional practice, not a burden. Reducing the burden of compliance thus requires an

increase in the level of trust between the ORF and the PRF. There have been signs that this is happening. A focus within the AMEP at any time is preparation for the next AMEP triennial contract. It is in the consultations for this contract that the struggle over the pedagogic device is most active. An indicator of renewed trust in the early 2020s was a series of engagements between the ORF and the PRF that informed the planning for the next AMEP contract (Department of Home Affairs, n.d.). In 2023, after surveys of providers and users and discussion with PRF representatives in an AMEP Advisory Committee, the ORF announced that a single national curriculum framework would be re-introduced in 2025. This would be the *Certificates in English as an Additional Language* (CEAL), which had emerged from an EAL context and has already been in use in the AMEP.

Following these consultations, another "New Business Model" was announced (Department of Home Affairs, n.d.), with three components that have the potential to ameliorate the burden of compliance. The first component is the reintroduction of a national curriculum, the CEAL, mentioned above. An advantage of a common curriculum will once again be to provide a shared curriculum language and avoid the excesses of reporting against two frameworks or converting one to the other. A second component of the model is the AMEP Academy. The valuable role of central professional development centres in the AMEP is well documented (Martin,1999; Tilney, 2023). The previous success of these nationally focused entities could provide an appropriate research and support agenda that could be driven by the PRF as well as the ORF. Professional development could focus not just on VET compliance issues but also on issues of adult EAL learning. A third component, AMEP Innovate, could bring the previous two components together with local involvement to recapture the previous strengths of the program. Investigating ways of reducing the burden could be the focus of innovations such as those showcased at the 75th AMEP anniversary conference. Moore (2022b) presents detailed suggestions about what could be expected from these initiatives.

There are also changes taking place within the broader VET curriculum. A current project, VET Qualification Reform, has recommended three new broad qualification types, including qualifications that develop cross-sectoral or foundation skills and knowledge which may be applied across industries, or lead to tertiary education and training pathways (Department of Employment and Workplace Relations, 2024). This is in keeping with Wheelahan's (2016) call for a new focus on broader capabilities and capacities in the VET curriculum. However, though some amelioration of the burden of compliance may be possible, competency-based training itself will not be going away any time soon (Department of Employment and Workplace Relations, 2024). It will therefore remain in place for the AMEP as well.

In the absence of substantive change, how can AMEP teachers act to reduce the burden of compliance in a continuing low-trust environment? This varies between education sectors. For teachers in schools, Ro (2024) recommends more engagement in curriculum planning and design. This is unrealistic in the VET sector, where such decisions are made by the ORF on behalf of industry as much as by the PRF on behalf of students. Gore et al. (2023) show how professional development can "create spaces of freedom even within regimes of performative accountability" (p. 466). They too are talking about schools, which at least have the benefit of

co-location of staff. Such co-location is less a feature of AMEP delivery now than it once was, and its benefits are thus harder to achieve. For teachers in Further Education in England, whose conditions are much more like those of Australian VET teachers, Bathmaker and Avis (2013) recommend a focus on pedagogy as the bridge between teachers' actual work and the broader context. They focus on a fourth type of "transformational" professionalism:

> Such an approach would combine the pressing need to find ways to enable practitioners to engage critically and reflexively with issues that are important to their practice, including teaching and learning, relations with students, and subject specialism, with the construction of more democratic forms of professionalism. (Bathmaker & Avis, 2013, p. 745)

It is here that professional associations play a crucial supporting role. Yet time is again a problem. What should be the focus of professional learning? Newer pedagogical directions, such as plurilingualism (Choi et al., 2024), could be of interest to teachers, but even the established teaching methods are no longer supported (Tilney, 2023). At the personal level, Mercer's (2021) call for 'wellbeing competence' is a sign of the times, and one with which many would agree, though yet another competence may be one too many. Essentially, individuals need to recognise the version of professionalism that resonates for them. Whichever it is, the nature of the contest between the ORF and the PRF, and their struggle for control of the pedagogic device, is part of the professional understanding that all language professionals need to have.

Conclusion

Compliance is not inherently a problem when it supports the professionalism of the teachers and bodies who are required to abide by its requirements. It became a burden in the AMEP when the ORF's trust in the professionalism of the PRF was reduced and compliance requirements came to dominate all aspects of teachers' professional work. It was underpinned by a wider move to public administration that, among other things, no longer trusted professional experts. It became unsustainable when, ironically, greater freedom of curriculum choice by providers was allowed, creating a greater need for control by the ORF and greater complexity for the PRF. There is now a fourth key curriculum text, though it remains within the CBT paradigm. There are signs of increased trust between the PRF and ORF over recent years. All of this was the undercurrent that I encountered in my presentation at the 75th anniversary of the AMEP.

In this article I have analysed these events in Bernsteinian terms as manifestations of the struggle for control of the pedagogic device, focusing on professionalism and trust among two stakeholder groups, members of the Official Recontextualization Field (ORF) and the Pedagogic Recontextualization Field (PRF). I have examined this struggle as it has been manifested in three curriculum texts. Each of these had compliance requirements, which varied

in the extent to which they drew upon the professionalism of teachers. As trust in teachers lessened these requirements became more burdensome. This analysis is both informed and limited by my own experience. A more detailed examination of the experiences of members of the ORF and PRF regarding the issues of professionalism and trust would provide further insights.

I conclude that there is potential for the amelioration of the burden of compliance in the AMEP curriculum. There will always be tensions between those responsible for governing a program (the ORF) and those responsible for delivering it (the PRF): their responsibilities are different. The tensions need to be understood and respected on both sides. Trust occurs when both groups believe they are working in their different ways to achieve a common goal—meeting midway, so to speak. There are signs that this is happening. At the 100th anniversary of the AMEP, we might look back and see the 75th anniversary as the beginning of renewed trust in AMEP educators and a reduction in the burden of compliance.

References

Australian Council of TESOL Associations (ACTA). (2024). *Submission to the Parliamentary Joint Committee of Public Accounts and Audit Inquiry into the Contract Management Frameworks Operated by Commonwealth Entities*. https://tesol.org.au/2024-september-actas-submission-to-parliamentary-inquiry-into-contract-management-frameworks/

Australian Government Publishing Service. (1968). *Situational English for newcomers to Australia.* Longmans.

Ball, S. J., & Youdell, D. (2009). Hidden privatisation in public education. *Education Review*, *21*(2), 73–83.

Barrett, B. (2024). *Basil Bernstein: Code Theory and beyond*. Springer. https://doi.org/10.1007/978-3-031-50745-8

Bathmaker, A. M., & Avis, J. (2013). Inbound, outbound or peripheral: The impact of discourses of 'organisational' professionalism on becoming a teacher in English further education. *Discourse: Studies in the Cultural Politics of Education, 34*(5), 731–748. https://doi.org/10.1080/01596306.2013.728367

Bernstein, B. (2000). *Pedagogy, symbolic control and identity* (2nd ed.). Rowman and Littlefield.

Bottomley, Y., Dalton, J., & Corbel, C. (1994). *From proficiency to competencies: A collaborative approach to curriculum innovation*. National Centre for English Language Teaching and Research.

Burton, J. (Ed.) (1987). *Implementing the learner-centred curriculum.* National Curriculum Resource Centre.

Campell, J. (1986). *Towards active voice: Report of the Committee of Review of the Adult Migrant Education Program.* Australian Government Publishing Service.

Choi, J., Cleeve Gerkens, R., & Ohki, S. (2024). Multilingual authors 'standing taller' in arts-rich translanguaging spaces. *Language and Education*, 1–28. https://doi.org/10.1080/09500782.2024.2348599

Corbel, C. (2023, June 7). *Meeting midway: A reflection on curriculum innovation in the AMEP* [Paper presentation]. AMEP Service Provider Conference, Melbourne, Victoria, Australia.

Department of Employment and Workplace Relations. (2024). *Unlocking the Potential of VET.* https://www.dewr.gov.au/skills-reform/resources/qualification-reform-design-group-initial-advice-skills-ministers

Department of Home Affairs. (n.d.). *Reform of the Adult Migrant English Program (AMEP)* https://www.homeaffairs.gov.au/reports-and-publications/submissions-and-discussion-papers/reform-of-the-adult-migrant-english-program

Department of Home Affairs. (2021). *Responses to commonly asked stakeholder questions*. https://www.homeaffairs.gov.au/reports-and-pubs/PDFs/reform-amep-responses-commonly-asked-questions.pdf

Evetts, J. (2009). New professionalism and new public management: Changes, continuities and consequences. *Comparative Sociology*, *8*(2), 247–266. https://doi.org/10.1163/156913309X421655

Evetts, J. (2018). Professions in turbulent times: Changes, challenges and opportunities. *Sociologia, Problemas e Práticas, 88*, 43–59. http://journals.openedition.org/spp/4955

Frowe, I. (2005). Professional trust. *British Journal of Educational Studies*, *53*(1), 34–53. https://doi.org/10.1111/j.1467-8527.2005.00282.x

Galbally, F. C. (1978). *Migrant services and programs: Report of the review of post-arrival programs and services for migrants*. Australian Government Publishing Service.

Gore, J., Rickards, B., & Fray, L. (2023). From performative to professional accountability: Re-imagining 'the field of judgment' through teacher professional development. *Journal of Education Policy*, *38*(3), 452–473. https://doi.org/10.1080/02680939.2022.2080274

Hagan, P., Hood, S., Jackson, E., Jones, M., Joyce, H., & Manidis, M. (1993). *Certificates in spoken and written English I - IV*. NSW Adult Migrant English Services/National Centre for English Language Teaching and Research.

Hornby, A. S. (1950). The situational approach in language teaching (I). *ELT Journal*, *4*(4), 98–103.

Ingram, D. E., & Wylie, E. (1984). *Australian second language proficiency ratings (ASLPR)*. Adult Migrant Education Service.

Jones, L., & Moore, R. (1995). Appropriating competence: The competency movement, the new right and the 'culture change' project. *British Journal of Education and Work*, *8*(2), 78–92.

Martin, S. (1999). *New life, new language: The history of the Adult Migrant English Program*. National Centre for English Language Teaching and Research.

Mercer, S. (2021). An agenda for well-being in ELT: An ecological perspective. *ELT Journal*, *75*(1), 14–21. https://doi.org/10.1093/elt/ccaa062

Moore, H. (1996). Why has competency-based-training become the 'solution'? *Prospect*, *11*(2), 28–46.

Moore, H. (2001). Although it wasn't broken, it certainly was fixed: Interventions in the Australian Adult Migrant English Program 1991-1996. In J. Lo Bianco & R. Wickert (Eds.), *Australian policy activism in language and literacy* (pp. 93-120). Language Australia.

Moore, H. (2002). Who will guard the guardians themselves? National interest versus factional corruption in policymaking for ESL in Australia. In J. W. Tollefson (Ed.), *Language*

policies in education: Critical issues (pp. 111-135). Lawrence Erlbaum Associates, Publishers.

Moore, H. (2022a, September 26). *Can't find the wood for the trees? Substantive outcomes versus ticked boxes* [Paper presentation]. 2022 Australian Council of TESOL Associations International Conference, Hilton Brisbane, Queensland, Australia.

Moore, H. (2022b). W(h)ither the AMEP? *Fine Print*, *45*(1), 31–43. https://tesol.org.au/wp-content/uploads/2022/05/Whither-the-AMEP.pdf

Niedlich, S., Kallfaß, A., Pohle, S., & Bormann, I. (2021). A comprehensive view of trust in education: Conclusions from a systematic literature review. *Review of Education*, *9*(1), 124-158. https://doi.org/10.1002/rev3.3239

Nunan, D. (1987). *The teacher as curriculum developer: An investigation of curriculum processes within the AMEP*. National Curriculum Resource Centre.

Nunan, D. (2013). *Learner-centered English language education: The selected works of David Nunan*. Routledge. https://doi.org/10.4324/9780203096888

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.

Rivers, W. (1968). *Teaching foreign language skills*. The University of Chicago.

Ro, J. (2024). Enacting powerful knowledge: Overcoming the chasm of curriculum and teaching through teacher professionalism. *Journal of Curriculum Studies, 56*(3), 283-296. https://doi.org/10.1080/00220272.2024.2318726

Rose, N. (1993). Government, authority and expertise in advanced liberalism. *Economy and Society*, *22*(3), 283–299.

Singh, P. (2002). Pedagogising knowledge: Bernstein's theory of the Pedagogic Device. *British Journal of Sociology of Education*, *23*(4), 571–582. https://doi.org/10.1080/0142569022000038422

Standing, G. (2011). *The Precariat*. London: Bloomsbury Academic.

Tilney, M. (2023). Where is systemic functional grammar in the Adult Migrant English Program? *TESOL in Context*, *31*(1), 27–47. https://doi.org/10.21153/tesol2022vol31no1art1622

Wheelahan, L. (2010). *Why knowledge matters in education: A social realist argument*. Routledge.

Wheelahan, L. (2016). Patching bits won't fix vocational education in Australia – a new model is needed. *International Journal of Training Research, 14*(3), 1–17. https://doi.org/10.1080/14480220.2016.1254368

Winch, C. (2017). *Teachers' know-how: A philosophical investigation*. Wiley.

Yeatman, A. (1990). *Bureaucrats, technocrats, femocrats*. Allen & Unwin.

Young, M., & Muller, J. (Eds.). (2014). *Knowledge, expertise and the professions*. Routledge.

Dr Chris Corbel is a lecturer in the Master of TESOL and Master of Modern Languages Education courses in the Faculty of Education, University of Melbourne. He has over 50 years' experience as an adult EAL teacher, teacher-trainer, curriculum designer, and project manager in post-compulsory, vocational, and tertiary education, across the public, not-for-profit, and private sectors. His research focuses on the phraseology of education policy discourse.

Inclusion in the learning game: Applying considerations from cognitive neuroscience, educational psychology, and SLA to language learning activity and materials design

Joshua Wedlock[1]

[1]Department of Linguistics, Macquarie University, Australia

Nick Wilson[2]

[2]School of Modern Languages & Applied Linguistics, University of Limerick, Ireland

Abstract

Considering the need for pedagogically effective learning activities and materials to support language learning, particularly within teacher-led instruction, it is curious that at present there is no overarching, research-based framework available to educators to draw from when designing and implementing such activities and materials. To address this gap, the authors of this paper have drawn from a host of relevant research pertaining to cognitive neuroscience, educational psychology, and second language acquisition to establish a framework for designing and implementing activities and learning materials capable of facilitating enhanced language learning outcomes within an inclusive classroom. Incorporating ten key considerations – attention and focus, desirable difficulty, depth of processing, deliberate practice, novelty and surprise, wakeful rest, visible learning, meaningful feedback, affective engagement, and strategic choice and use – this versatile framework not only provides teachers with necessary knowledge for designing language learning activities and materials in an engaging and efficacious manner but may also embolden them to do so.

Keywords: *Evidence-based teaching; learning activities; learning material design; neurodiversity; second language acquisition; technology-enhanced language learning; task design; TESOL.*

Introduction

Teaching is ultimately about improving learning outcomes for students. It is thus imperative for professional educators to possess a comprehensive understanding of how people learn and be equipped with a repertoire of research-informed and evidence-based learning activities, materials, and protocols they can draw from to effectively guide their students towards achieving their learning goals. By incorporating such approaches, educators can enhance the efficacy of their instructional practices and promote optimal learning outcomes for their students.

Fortunately, over the past decades, research from the domains of educational psychology, cognitive neuroscience, and second language acquisition (SLA) has uncovered practices and concepts which have demonstrably enhanced learning outcomes across a broad range of domains. Unfortunately, the majority of TESOL educators have either not been made privy to these research findings during their pre-service teacher training, possibly due to varying degrees of quality, duration, and focus of English Language Teaching courses (see Freitas, 2017; Jha, 2015) or have not engaged in continuing education practices that may provide this information (Binnie & Wedlock, 2022).

With the goal of adopting a research-informed approach in the language teaching industry, this paper introduces ten evidence-based considerations aimed at enhancing learner engagement and fostering improved learning outcomes in the context of utilizing and designing activities and learning materials to promote effective and efficient language learning. These considerations are based on the premises that:
   i)   language educators should embrace a research-informed approach to education;
   ii) appropriate pedagogical strategies can significantly enhance learning outcomes and learner engagement;
   iii) at least 20% of the population are neurodivergent (Goldberg, 2022) meaning that there exists significant, but often unrecognised, neurodiversity among language learners. To maximise learner engagement, pedagogical strategies should cater to both neurodivergent (ND) and neurotypical (NT) ways of learning; and
   iv) a deeper understanding of the neurobiological and psychological aspects that underpin the learning process can support teachers in making more effective pedagogical decisions for all learners.

How people learn: Four ways

Before presenting our framework, we feel it pertinent to offer a concise overview of the four fundamental ways in which people learn. This serves a dual purpose: firstly, to furnish educators with the theoretical underpinnings that form the basis of our subsequent framework, and secondly, to offer some useful theoretical knowledge deemed integral for a comprehensive understanding of the learning process.

Novelty

Extensive research exploring the relationship between novel stimuli and critical cognitive processes (Barto et al., 2013; Bunzeck & Düzel, 2006; Daffner et al., 2000; Kafkas & Montaldi, 2018) has shown that the human brain displays a natural inclination towards novelty (Daffner et al., 2000; Mather, 2013). This connection extends to crucial aspects of learning, establishing links between novelty and key processes like reinforcement learning (Gershman & Niv, 2015; Houillon et al., 2013), declarative memory (Quent et al., 2021), recognition and recall (Tulving & Kroll, 1995), and curiosity (Gruber & Ranganath, 2019; Mather, 2013). Moreover, novelty is implicated in motivating both exploratory and avoidance behaviors (Barto et al., 2013), enhancing attention and retention (Bunzeck & Düzel, 2006; Kafkas & Montaldi, 2015; Van Kesteren et al., 2012), and fostering motivation (Barto et al., 2013). However, it is worth noting, when integrating the needs of NT and ND learners, a supportive environment is crucial, as novelty, especially absolute novelty (see below), can provoke anxiety for some ND learners. It is thus vital that appropriate levels of scaffolding are used by educators and that levels of novelty are appropriate for different students (Goldberg, 2022).

Novelty, far from being a unidimensional construct, takes various forms, notably absolute, contextual, and relative (see Kafkas & Montaldi, 2018; Quent et al., 2021; Van Kesteren et al., 2012). Absolute novelty pertains to stimuli devoid of prior encounters, lacking pre-existing representations (i.e., schemas) in the brain. Contextual novelty arises from incongruities between stimulus components and their contextual framework, while relative novelty is characterized by situations where familiar features are arranged in novel combinations. In relation to learning from novelty, a high level of prediction error (i.e., the range of discrepancy between expectation and reality or outcome) is generally required. Thus, it is posited that "incongruent information that is inconsistent with a dominant schema" (Van Kesteren et al., 2012, p. 211) (i.e., contextual novelty and relative novelty) enhances memory for novel stimuli since it introduces the highest level of prediction error. This aligns with Mather's (2013) assertion that the optimal level of novelty exists when there is a moderate "discrepancy between a stimulus and an observer's representation of that stimulus" (Mather, 2013, p. 492). Conversely, novel stimuli in a novel location (i.e., absolute novelty) may not result in enhanced memory due to the absence of pre-existing schemas, thus limiting prediction error (see Quent et al., 2021; Van Kesteren et al., 2012). These nuanced classifications provide educators with a lens to examine the impact novelty has on learning. Recognizing the various forms of novelty allows educators to strategically design and implement learning protocols and activities that best capitalize on the power of novelty in learning (Quent et al., 2021; Van Kesteren et al., 2012).

Repetition and recall

The concept of learning through repeated exposure, known as Hebbian repetition learning, is grounded in the principle that "cells that wire together, fire together" (Attout et al., 2020; Munakata & Pfaffly, 2004). Initially demonstrated through an immediate serial recall task, the

Hebbian repetition learning effect manifests as an incremental improvement in recalling repeated digit sequences compared to novel ones (Hebb, 1961). This fundamental learning mechanism underscores the idea that repeated exposure leads to the wiring together of neural cells, facilitating enhanced firing. Such learning processes are pivotal in various domains, encompassing vocabulary acquisition (McMurray et al., 2012), reading (Bogaerts et al., 2016; Attout et al., 2020), mathematics (De Visscher et al., 2015), and statistical learning, which is vital for language processing (Munakata & Pfaffly, 2004; Tovar & Westermann, 2023), as well as phonological awareness (Page & Norris, 2009). However, research on Hebbian repetition with adults on the autistic spectrum finds that while (visual) repetition improves recall, this improvement is generally not transferred when the task is slightly changed (Harris et al., 2015). In this study, they also found that less frequent repetition of stimuli led to improved habituation.

In conjunction with Hebbian repetition learning, the significance of retrieval and recall in the learning process is underscored by the foundational principle that effective learning is not solely about encoding and storage but crucially hinges on the ability to retrieve information (McDermott & Roediger, 2018; Rajaram & Barber, 2008; Tulving, 1991). Recalling learned material through focused methods such as testing and free or cued recall tasks (see Rajaram & Barber, 2008), especially in situations where the learner is cognitively engaged in processing the stimulus, acts as a powerful form of repetition, strengthening neural pathways (Sousa, 2016). This targeted and intentional repetition enhances memory consolidation and promotes more robust long-term retention. Research, dating back to Ebbinghaus (1885/1964) and extending through subsequent decades, consistently highlights the positive impact of repeated retrieval on long-term retention. Furthermore, retrieval processes may contribute to metacognitive awareness, allowing learners to gauge their understanding, identify knowledge gaps, and refine study strategies – although explicit coaching in such strategies is often required (Carpenter et al., 2022), especially for ND learners. In essence, retrieval and recall are not mere consequences of learning but practices that actively contribute to learning itself (Karpicke & Roediger III, 2008; Tulving, 1991, 1995).

Affective resonance

Several decades of research has demonstrated that emotions profoundly impact diverse cognitive processes, encompassing perception, attention, learning, memory, reasoning, and problem-solving (Dolcos et al., 2020; Tyng et al., 2017). Significantly, content or contexts eliciting emotional responses, whether positive or negative, consistently exhibit heightened memorability, underscoring the integral role of emotion in the cognitive landscape (Dolcos et al., 2020). Beyond influencing the initial encoding and retrieval of information, the impact of emotions on learning extends to attention modulation, shaping its selectivity, and motivating actions and behaviors (for further discussion, see Tyng et al., 2017). For instance, a state of curiosity, characterized as an affective state associated with psychological interest in novel or surprising stimuli, often prompts further exploration and primes the brain for learning (Gruber & Ranganath, 2019; Kang et al. 2009; Oudeyer et al., 2016). Conversely, feelings of surprise, an affective state denoting a mismatch between prior expectations and what is observed or

experienced (Barto et al., 2013), is implicated in learning for the role it plays in not only directing attention toward the to-be-learned material but also enhancing its saliency (Itti & Baldi, 2005).

In terms of academic emotions, i.e., affective states "directly linked to learning, instruction, and academic achievement in formal and informal settings" (Um et al., 2012, p. 1), numerous studies reveal that positive affect plays a pivotal role in various cognitive processes essential to learning (Tyng et al., 2017). These processes include information processing, communication processing, negotiation processing, decision-making processing, category sorting tasks, and creative problem-solving processes (Isen, 2015). Exemplifying the intricate connection between emotional experiences and cognitive functions, these findings emphasize the pivotal role that emotions play in the learning process, whether in face-to-face settings (Vogel & Schwabe, 2016) or online environments (Shen et al., 2009; Um et al., 2012).

Association

Almost six decades ago, Ausubel (1968) asserted that "the most important single factor influencing learning is what the learner knows already" (p. vi). This foundational notion underscores the integral significance of prior knowledge in shaping comprehension, retention, and broader learning outcomes, as corroborated by extensive research (e.g., Brod, 2021; McCarthy & McNamara, 2021; Tse et al., 2007; Van Kesteren et al., 2014). Functioning as a form of cognitive infrastructure, prior knowledge facilitates the assimilation of new information into existing schemas, optimizing memory processes (Tse et al., 2007).

However, the impact of prior knowledge on learning is nuanced and hinges on three key determinants: the activation of prior knowledge, its relevance to the learning task at hand, and congruence with the content being learned. The interplay of these determinants shapes the relationship between prior knowledge and learning outcomes (Brod, 2021; McCarthy & McNamara, 2021). Navigating these nuances is essential for educators to effectively leverage learners' prior knowledge in shaping educational strategies and optimizing the learning experience.

In the context of education, recognizing how knowledge acquisition guides successful learning becomes fundamentally important (Van Kesteren et al., 2012). In short, learning is enhanced when new information aligns with existing mental frameworks or schemas, serving as organizational tools that enable individuals to understand and assimilate new knowledge and skills more readily. Educators play a pivotal role in facilitating learning by encouraging learners to establish connections between new material and their prior knowledge or by devoting time to helping learners develop appropriate schemas (see Hattan et al., 2023). Such intentional association and schema activation not only contribute to heightened comprehension but also significantly aid in the long-term retention of information.

To enhance and guide the schema building and activation process, educators need to maintain an understanding of the role of scaffolding, especially macro-scaffolding for long-term planning, meso-scaffolding for guiding task selection and sequencing, and micro-scaffolding for supporting real-time interactions between educators and students (see De Oliveira, 2023; Walqui, 2006). By possessing knowledge of how schemas promote learning, educators are in a better position to design more effective learning protocols.

In summary, the literature review above has elucidated the four fundamental ways people learn: novelty, repetition and recall, affective resonance, and association. With this understanding, we will now shift our focus to presenting ten considerations that language educators are urged to bear in mind when designing and implementing activities, tasks, games, and materials aimed at facilitating language learning in an efficacious way.

Designing and implementing activities for language learning: Ten considerations informed by cognitive neuroscience, educational psychology, and SLA

Grounded in an extensive body of research pertaining to cognitive neuroscience, educational psychology, and second language acquisition (SLA), the framework presented in this paper offers educators a comprehensive approach to guide the selection, design, and implementation of activities and materials for language learning purposes. By integrating research-based strategies, this framework aims to enhance learner engagement, motivation, and self-efficacy, optimizing language learning outcomes while also considering learner neurodiversity. The framework presented below comprises 10 considerations that educators can embed within their learning and teaching design. These considerations are:

1. Encourage attention & focus;
2. Factor in desirable difficulties;
3. Ensure depth of processing;
4. Don't be afraid of deliberate practice;
5. Exploit novelty and surprise;
6. Take a wakeful rest;
7. Maximize motivation by providing opportunities for visible learning and micro successes;
8. Remember, affective engagement matters;
9. Provide meaningful feedback and feedforward; and
10. Strategic selection and use.

In the exposition of these considerations, we provide tips alongside each that demonstrate how educators can employ them in their learning and teaching. It should be noted that we are not suggesting that all of these considerations need to be embedded in every bout of learning and teaching, or in every activity, but that these are ways in which learner engagement and efficacy of learning can be improved. Educators may want to adopt some or all of them in their

pedagogy. Indeed (and we hope), many educators may already be doing these things, and our framework simply provides an explanation for why they work, thus affirming existing teaching practices.

Through the incorporation of this framework, we believe that educators will be better equipped to select, design, implement, and leverage activities and learning materials to create engaging and pedagogically beneficial language learning experiences for their students. It should, however, be noted that as the research tends to focus on neurotypical learners, some of these strategies may not be effective for neurodivergent learners. Where it would make sense to adjust such strategies to create an inclusive classroom, this is signalled in our discussion.

Encourage attention & focus

When it comes to learning, one thing is certain, without attention, focus, and engagement, very little learning takes place. This assertion, which is supported by findings from cognitive neuroscience (e.g., Chun & Turk-Browne, 2007; Craik & Lockhart, 1972), educational psychology (e.g., Kirschner & Hendrick, 2020), and SLA (e.g., Schmidt, 2012), is congruent with Posner and Rothbart's (2014) claim that "[o]f all the factors that influence learning, attention to the learned material may be the most important" (Posner & Rothbart, 2014, p.14). Bearing in mind Leamnson's (2000) contention that "the really difficult part of teaching is not organizing and presenting the content (by whatever technology) but rather in doing *something* that inspires students to focus on that content" (Leamnson, 2000, p. 39 – original italics), a suggested approach is to design activities that learners are inspired to engage with. Distraction can be a problem for both NT and ND learners, so by managing the learning environment in such a way that learners are not distracted from the learning activity, and the learning activity is somehow interesting to the learner, educators can encourage greater attention on task. One way to do this is to avoid information overload and to present tasks in small, easily absorbed chunks. Another is to provide clearly structured activities where the instructions and goals are clear (Mohebbi, 2023). Indeed, taking this approach would not only help ensure that neurotypical (NT) learners remain focused but also promote a more inclusive learning environment for neurodivergent (ND) learners. However, additional consideration needs to be given to the specific difficulties with focused attention experienced by learners with attention-deficit/hyperactivity disorder (ADHD). This can be achieved by mitigating distractions and disorientation and by providing clear instructions (Meyers & Bagnal, 2015).

> **Tip 1**
>
> To design learning activities and materials that encourage greater levels of attention, focus, and engagement, educators should attempt to leverage reward prediction error (see Consideration 5), provide an element of novelty and surprise (see Consideration 5), be affectively stimulating (see Consideration 8), and present activities in ways that motivate learners to engage with the activity with limited prompting from the teacher (something which

can often be achieved by incorporating an element of fun, encouraging friendly low-stakes competition between learners, and where possible, highlighting the relevance of the learning outcome to the students). Finally, ensure the duration of the task does not exceed the learners' capacity to concentrate, and, as much as possible, minimize competing stimuli in the learning environment to reduce distractions (Wedlock & Binnie, 2023).

Factor in desirable difficulties

Consistent with research indicating the benefits of desirable difficulties, which involve adaptive task manipulations requiring increased cognitive effort (Bjork & Bjork, 2011; Bjork & Kroll, 2015), studies from various domains suggest that optimal learning occurs when there is a balance between an individual's perceived skills and the difficulty level of the learning activity (Kidd et al., 2012; Metcalfe & Kornell, 2005; Wilson et al., 2019), and when one's expectancy of success in a given learning task is high (Bandura, 1977; Rea, 2000). This sweet spot for optimal learning (Wilson et al., 2019), often referred to as the "Goldilocks Zone" (Kidd et al., 2012), is hypothesized to occur when training accuracy is around 85% (Wilson et al., 2019). Although this accuracy rate is dynamic and influenced by several factors beyond the scope of this paper, research suggests that training that is neither too easy nor too hard not only supports learner interest and arousal, but also expedites learning (Rea, 2000; Wilson et al., 2019). Additionally, this zone promotes "flow"—a state where learners become so engrossed in an activity that they lose track of time (Engeser & Rheinberg, 2008; Nakamura & Csikszentmihalyi, 2014; Rea, 2000)—and provides challenges that learners perceive as realistically achievable (for more on optimal challenges, see Abuhamdeh & Csikszentmihalyi, 2012; Rea, 2000).

Tip 2

Keeping in mind that the goal of teaching is to facilitate robust learning outcomes for students, learning activities and materials should be designed in such a way as to capitalize on the benefits of various desirable difficulties. This can be done by presenting appropriate to-be-learned materials in a randomized order, interleaving recently-learned material with to-be-learned material, introducing a mismatch between where encoding and retrieval take place (so as to limit the impact of place-dependent memory), testing (i.e., recalling the target material), adding level/skill-appropriate time pressure, encouraging the generation of answers (even if these answers are incorrect, as this affords the teacher an opportunity to provide meaningful feedback), and varying the way the to-be-learned material is presented and engaged with (e.g., processed visually and then spoken out loud, processed auditorily and then written down) (see Consideration 10 for further ideas).

In addition, educators should consider both the 'nominal difficulty' (i.e., the task's inherent difficulty), which involves evaluating not only the complexity of the task or activity itself but also the difficulty of the to-be-learned target language (for an overview of *second language*

difficulty, see Housen & Simoens, 2016), and the 'functional difficulty' (i.e., the level of challenge for an individual under various conditions) of any given learning task or activity (for a comparable view of task difficulty in language education, see Hlas, 2021). These considerations provide educators with an effective means of gauging the overall skill-challenge balance of a given task and allow for a productive learning experience for a broader range of learner neurotypes (see Guadagnoli & Lee, 2004).

Ensure depth of processing

Since the way in which a learner engages with a given stimulus (i.e., the target language) largely determines their learning outcomes (Craik & Lockhart, 1972; Kirschner & Hendrick, 2020; Leow & Mercer, 2015; Schmidt, 2012), teachers should strive to ensure learning activities and materials are designed so that they promote deeper levels of cognitive processing and engagement with the to-be-learned material.

Tip 3

Given that the use of the target language is essential for promoting deeper levels of processing, it is paramount to design or implement activities that encourage students to use the target language in progressively more intricate ways as their linguistic competence increases (see Considerations 2 and 7). If designing or utilizing a game, this objective can be achieved by incentivizing longer or more complex responses, or the use of new language, with additional game points or other game-related benefits.

In relation to depth of processing and material design, it is important for educators to design learning materials in a manner that encourages learners to actively reflect on, apply, and manipulate the target language to yield enhanced learning outcomes. As such, learning materials should be designed so they encourage learners to connect new language elements with existing knowledge and schemas. Existing research suggests that educators should design tasks that go beyond simple fill-in-the-blank activities and aim at creating learning materials that provide an optimal skill-balance challenge (see Consideration 2), requiring learners to engage in deeper levels of cognitive processing.

Don't be afraid of deliberate practice

Drawing on the seminal work of Ericsson et al. (1993) and their concept of deliberate practice, research on expert performance consistently highlights the significance of deliberate effort rather than sheer experience in acquiring expertise (Van Gog et al., 2005). Aligned with the concept of desirable difficulties (see Consideration 2) and incorporating elements such as immediate feedback (see Consideration 9), problem-solving and evaluation time, and opportunities for repeated performance to refine skills, deliberate practice not only represents

the gold standard of practice (Ericsson & Pool, 2016) but is also conducive to language learning (Wedlock & Binnie, in press). Hence, when designing activities for language learning purposes, educators are encouraged to incorporate deliberate practice, characterized by effortful and goal-directed exercises aimed at skill and knowledge improvement (see Wedlock & Binnie [in press] for caveats and considerations).

Tip 4

Deliberate practice may be promoted by designing activities that require or encourage the learner to intentionally and repeatedly process and/or use the target language during the activity. For example, if the goal of a game or activity is to help learners develop their ability to use six-digit numbers, the game should not only provide more opportunities to use six-digit numbers but also reward their correct use with more game points compared to the use of other numbers (see Consideration 5 for a caveat). During the game, the frequency and type of errors are noted by the teacher and feedback is provided (see Consideration 9). Finally, based on the level of mastery attained, the teacher modifies the activity to not only consolidate what has been learned thus far, but also to promote additional learning before repeating the activity again in a future class (see Consideration 10 for a discussion on the importance of the strategic use of activities and learning materials).

To apply the principles of deliberate practice to learning material design (e.g., worksheets), educators need to structure resources with well-defined learning objectives, targeting specific language skills. The materials should offer repeated opportunities for focused effort and advancement, challenging learners slightly beyond their current proficiency levels. Immediate feedback mechanisms, such as answer keys or peer evaluations, play a crucial role in refining responses and facilitating learning (see Consideration 9). The incorporation of repetition and variation, along with incremental progression and opportunities for feedback, not only reinforces learning but also contributes to enhanced comprehension and learning outcomes.

Exploit novelty and surprise

If it is true that at the most fundamental and mechanistic level, learning is a neurobiological phenomenon that results in physical changes in the brain cells (Owens & Tanner, 2017), then "the ability of a teaching technique to harness the processes in a student's brain that support the formation and retrieval of long-term memories will help determine that technique's effectiveness in promoting that student's learning" (Owens & Tanner, 2017, p. 7). This being the case, and understanding the important roles that the neurotransmitters dopamine, acetylcholine, and norepinephrine (Kafkas & Montaldi, 2018; Shohamy & Adcock, 2010) play in attention and focus regulation, learning, and motivation, the concepts of novelty (i.e., something not previously experienced or encountered), surprise (i.e., the result of the mismatch between an expectation and the actuality), and reward prediction error (i.e., the differences

between received and predicted rewards) (see Shohamy & Adcock, 2010; Watabe-Uchida et al., 2017), should not be overlooked when designing activities for educational purposes (Barto et al., 2013; Kafkas & Montaldi, 2018). Optimal learning, as noted by Boeve-de Pauw et al. (2019), seems to occur in settings of moderate novelty, striking a balance between too little, which can cause boredom, and too much, which can be distracting or create anxiety. As educators with experience of ND learners will understand, complete surprise is not a desirable strategy for some of these learners (e.g. ASD) while others (ADHD) may actively seek out novelty (Goldberg, 2022), so this may be one strategy that might be adjusted using greater scaffolding, which requires educators to have a good level of understanding of their students and their learning needs. In other words, what we are advocating is that a one size fits all approach is not advisable, and the role of the teacher as an active facilitator of learning is essential.

Tip 5

To leverage the power of novelty, surprise, and reward prediction error, educators should consider designing their activities so that not all payoffs (e.g., game points, outcomes) match the learners' expectations. For example, let us assume you have designed an activity that incorporates both previously learned vocabulary and new vocabulary, and unbeknown to your learners you have structured the activity so that students get larger payoffs for engaging with the new material than for engaging with known material. Instead of always rewarding engagement with the to-be-learned material with larger payoffs and the engagement with previously learned material with smaller payoffs, incorporate surprise by occasionally rewarding engagement with known materials with larger payoffs, and engagement with the new material with smaller payoffs (or even larger than expected payoffs). Not only can this approach support learning (students are usually rewarded for taking on challenges), but it can also keep an activity novel (needed for engagement) and allow learners who may not be ready to take on a desirable difficulty or engage with the new material, an opportunity to experience positive reward prediction errors (thus boosting their motivation and levels of affective engagement) (see Consideration 7).

When designing worksheet-style activities or learning materials, educators can strategically incorporate elements of novelty, surprise, and reward prediction error to optimize the neurobiological processes supporting learning, although care should be taken not to overstimulate or confuse learners by providing too much novelty at once. Introducing novel or unexpected elements within the worksheet content or format can capture students' attention and stimulate the release of neurotransmitters like dopamine, known to enhance memory formation and motivation (Kafkas & Montaldi, 2018; Shohamy & Adcock, 2010). Moreover, educators may consider integrating reward systems or unexpected positive reinforcements within the worksheet structure. This approach aligns with the concept of reward prediction error, where disparities between anticipated and actual rewards can foster heightened engagement and cognitive processing (Watabe-Uchida et al., 2017). By strategically infusing these neurobiologically relevant elements into worksheet design, educators have the potential to create more effective and engaging learning experiences for students.

Additionally, it is crucial to recognize that the "novelty effect" tends to diminish with overutilization of an activity, possibly due to habituation and a reduction in its novelty value (e.g., Fryer et al., 2019; Zhang & Zou, 2022). To address this, educators are advised to take a strategic approach to the frequency of activity use (see Consideration 10). Lastly, educators should be aware that novelty is not always a prerequisite for learning success. Familiarity with a given task or learning protocol can often yield superior results (Poppenk et al., 2010), especially for some ND learners for whom novelty and surprise may be uncomfortable. Therefore, deciding whether to incorporate or forgo novelty depends on the specific learning goal, stage of learning, and characteristics of the learners.

Take a wakeful rest

The brain consolidates memories through rest, hence why sleep is so important for learning (Walker & Stickgold, 2004). However, as important as sleep is for the consolidation of memories, it has also been suggested that the consolidation process could be enhanced by taking brief breaks interspersed throughout a learning bout, or between the conclusion of one learning task and the commencement of another (e.g., Bönstrup et al., 2019). Indeed, this is a widely implemented strategy for ND learners who may need frequent breaks from learning activities, and movement breaks tend to be a preferred option (Peiris et al., 2021). Moreover, movement breaks have been found to be useful for both ND and NT learners, with Peiris et al. (2021) finding that regular movement breaks within university classes improved alertness, concentration, and enjoyment for students. Wakeful rests have been shown to enhance memory retention under certain circumstances (e.g., Bönstrup et al., 2019; Dewar et al., 2014; Helton & Russell, 2015). Theorized to provide "optimal conditions for consolidation of recently acquired memories, perhaps due to minimal encoding of novel interfering information" (Dewar et al., 2014, p. 1), findings from a number of studies indicate that wakeful rests have the potential to reinforce the encoding and consolidation processes of learning (Bönstrup et al., 2019; Dewar et al., 2014; Helton & Russell, 2015), and may be as important to learning as practice itself (Bönstrup et al., 2019). Turning to the neuroscience of learning, Mazzoli et al. (2021), who investigated a mixed ND & NT sample of primary school students, find a "greater positive change in the proportion of deoxygenated haemoglobin in the left dorsolateral prefrontal cortex of children assigned to cognitively engaging active breaks compared to the control group" (Mazzoli et al., 2021, p. 2). This measure of neural efficiency also correlates with increased engagement in classes for both NT and ND students, further underscoring the value of breaks during classes.

Tip 6

Wakeful rests can be used to re-focus the learners' attention (see Consideration 1) while at the same time potentially allowing for the memory consolidation process to begin. Wakeful rests also allow teachers the opportunity to re-focus their attention and level of engagement

in the teaching process and/or make any adjustments to the activity deemed necessary to match the learners' current performance (see Considerations 2 and 7). It is advisable to either schedule wakeful rests at the end of each activity (within reason), or design activities and materials that incorporate wakeful rests within the activity/material itself (e.g., a wakeful rest could be placed after the second round of a three-round game or placed after the second activity on a worksheet). Some studies, (e.g. Mazzoli et al., 2021) suggest that rests that involve movement, or at least not sitting down, are more effective than resting in place, so if the environment allows, some movement is encouraged during such breaks.

Maximize motivation by providing opportunities for visible learning and micro successes

To achieve optimal motivation, Rea (2000) posits that three conditions must be met: (i) an optimal challenge must be provided (see Consideration 2), (ii) students must be 100% focused and engaged (see Consideration 1), and (iii) a state of optimal arousal must be reached. Based on the concept of "flow" (see Csikszentmihalyi, 1990; Nakamura & Csikszentmihalyi, 2014), these three conditions, according to Rea (2000), can be met when there is a balance between the serious-minded process and the fun-minded process, a process referred to as "serious-fun" (Rea, 2000). Elaborating on this notion further, Rea (2000) posits that the ideal learning condition to promote motivation is therefore one which provides learners with interesting challenges that they believe, based on their current abilities, can be overcome (i.e., the learners have a high expectancy of success) (see also Abuhamdeh & Csikszentmihalyi, 2012).

In line with the above assertion, and grounded in research suggesting that when it comes to learning, success breeds success (e.g., Wulf & Lewthwaite, 2016; Salanova et al., 2012), several scholars have emphasised the positive contribution that signs of visible learning and successful learning attempts have on one's feelings of self-efficacy and motivation (e.g., Bandura, 1977; Busse, 2014; Deci & Ryan, 2000; Kirshner & Hendrick; 2020; Rea, 2000; Salanova et al., 2012). As such, educators are strongly recommended to consider the facilitative role micro successes and signs of visible learning can play in supporting motivation, and to design their activities accordingly (see Consideration 2).

Tip 7

Since successful attempts at learning often result in increased feelings of self-efficacy and motivation, activities and learning materials should be designed so that they provide learners with manageable, but not overwhelming, challenges (i.e., optimal challenges). This can be done by designing activities/materials which combine previously learned items with to-be-learned items, especially in ways that necessitate the use of current knowledge to process and/or assimilate new linguistic input. For example, if using an activity to introduce new vocabulary (e.g., fruit), incorporating several known vocabulary items (e.g., colours) into the activity can be an effective way to not only increase depth of processing (see Consideration 3) and consolidate and/or review known vocabulary items, but also as a way to provide

learners with visible micro successes as they figure out the relationship between the previously learned items and the to-be-learned items (e.g., a yellow banana, a green grape).

Remember, affective engagement matters

From modulating attention and motivating action, to facilitating the encoding and retrieval of the target stimuli, the influence emotions have on learning has been widely discussed in the literature (e.g., Ki & Jeong, 2020; Tyng et al., 2017). Considering the relationship that exists between the psychological and neurobiological processes implicated in learning (Ki & Jeong, 2020; Leamnson, 2000; Tyng et al., 2017), the importance of affective engagement should not be overlooked when it comes to designing and implementing games, tasks, and activities for educational purposes.

Beginning with the design process, Houser and DeLoach (1998) assert that effective game design (or, for this paper, activity, task, and material design) should be visually pleasing; incorporate an "attract mode" (e.g., an appealing title page or introduction video) aimed at capturing the attention and imagination of potential players (i.e. learners); have clearly defined goals; and be user-friendly. These design principles, coupled with research indicating that catalysts for affective engagement, including passionate teachers (e.g., Leamnson, 2000; Serin, 2017), social interaction (e.g., Ki & Jeong, 2020), optimal challenges (e.g., Bjork & Kroll, 2015; Rea, 2000), self-efficacy (e.g., Bandura, 1977; Rea 2000), and enjoyment (Lucardie, 2014), suggest that for learning activities and materials to be affectively engaging, they should be designed with both the psychological and neurobiological processes of learning in mind.

Tip 8

Design elements—like the school's emblem, visually appealing layouts, and the inclusion of teacher and/or student names or photos (mindful of privacy and legal considerations)—add a touch of familiarity and relevance, thus contributing to a more engaging and personalized experience.

Regardless of specific design choices and modifications, educators play a vital role in deepening affective engagement when implementing learning activities. By injecting enthusiasm, being emotionally invested, adding a touch of humour, and fostering a classroom culture that values inclusion and sees mistakes as valuable learning opportunities, educators can create a learning environment that resonates with students on both a personal and pedagogical level. Incorporating these intentional design and instructional elements not only enhances emotional engagement but also helps establish a conducive environment for learning.

Provide meaningful feedback and feedforward

There is little question that, independent of what is being learned, feedback is necessary for correcting mistakes, monitoring progress, and improving the skill, knowledge, and performance of learners (Heritage, 2019; Luft, 2014). However, since the impact of feedback will vary depending on the type of feedback given (Ammar & Spada, 2006; Li, 2010), the learner's proficiency level (Ammar & Spada, 2006; Li, 2010; Lim & Renandya, 2020), the type of error made (i.e., a knowledge error or a performance error), the skill and knowledge of the teacher (Heritage, 2019), and as a direct result of the way a learner processes and actions feedback (Luft, 2014; Metcalfe, 2017), it is recommended that educators think about their feedback goals and strategies before employing their learning activities. Additionally, and as mentioned above, feedback is not solely about error correction; it also involves guiding future performance (Heritage, 2019). This is where the concept of feedforward – a formative process aimed at providing learners with information they can use to enhance future performance or facilitate progress (Hattie and Timperley, 2007) – is crucial. To effectively integrate feedforward, educators might find it beneficial to consider which strategies they can employ to capitalize on any formative feedback opportunities that arise during a lesson.

> **Tip 9**
>
> Teachers have numerous options for developing a feedback/feedforward strategy. For example, they could provide feedback whenever an error is made, at defined points (e.g., during slide transitions or at various stages throughout a game), or at the conclusion of the activity. Alternatively, educators may make strategic decisions, such as only providing implicit correction (e.g., a recast) for previously encountered items, and more explicit and detailed correction and feedback for to-be-learned items or structures. However, regardless of the type and intensity of feedback and feedforward provided, if it is not noticed, considered, and acted upon by the learner, it is arguably of little benefit.

Strategic selection and use

When it comes to learning, the deliberate selection and strategic utilization of activities and learning materials are of paramount importance in promoting robust learning outcomes. If the primary aim of learning is to enhance individuals' knowledge, skill, or performance in a specific domain, the learning activity/material should be chosen, designed (or modified), and implemented purposefully to achieve this goal. Merely selecting an activity or learning material in an ad hoc manner, or because it is perceived as inherently enjoyable or assumed to miraculously enhance learner motivation, does not guarantee its suitability for the intended learning outcomes, or its intended learners.

An inappropriately chosen game or activity may result in disengaged learners – a facet not extensively explored in much of the literature on second language learning or education in

general but experienced by many teachers. To optimize learning outcomes, educators must consider not only the learning goals but also the protocols they will employ, such as spaced repetition, daily practice, low-stakes competition, testing, deliberate practice, or leaderboards. Additionally, they should consider the stage of learning in which to employ these learning activities to best help realize any stated learning goals.

Tip 10

Unless being repeatedly utilized as part of a deliberate practice protocol (see Consideration 4), or as part of structured curriculum, it is important that educators refrain from overusing their favourite activities (since overuse often results in declined levels of student engagement, as mentioned in Consideration 5), or simply employing them for "fun". Limiting the use of each individual activity allows these resources to not only remain novel (see Consideration 5), but also allows them to retain their value as viable pedagogical tools capable of enhancing affective engagement (see Consideration 8). Therefore, it is advised that educators develop a range of fit-for-purpose, research-informed activities and learning materials that can be strategically employed in their classrooms as a means of complementing other intentionally selected learning tasks to optimize learning outcomes (also see Zhang & Zou, 2022).

Conclusion

This paper has introduced an evidence-informed framework designed to support educators in the effective design and implementation of learning activities (which also include games and tasks) and materials for language learning purposes. By utilizing this framework, educators can expect to enhance pedagogical effectiveness, increase student engagement, foster emotional investment, and elevate motivation levels in language learning. To ensure the utilization of resources with genuine pedagogical benefits, educators are encouraged to consider not only the key aspects of how people learn, such as novelty/surprise, repetition and recall, affective resonance, and association but also the underlying mechanisms that drive the learning process, including focus, depth of processing, optimal challenges, deliberate practice, and feedback.

In conclusion, while the framework presented in this paper specifically focuses on activities and materials for language learning, it is important to acknowledge that educators, regardless of their subject area, who possess a more comprehensive understanding of the neurobiological and psychological processes involved in learning for both NT and ND learners are better positioned to harness the pedagogical potential of a wide range of learning technologies, traditional, online or otherwise. By leveraging this understanding, educators can optimize the design and implementation of learning activities, thereby creating meaningful and effective educational experiences, all while encouraging inclusion in the learning game. To this end, we hope this paper has provided insightful contributions.

References

Abuhamdeh, S., & Csikszentmihalyi, M. (2012). The importance of challenge for the enjoyment of intrinsically motivated, goal-directed activities. *Personality and Social Psychology Bulletin, 38*(3), 317-330. https://doi.org/10.1177/0146167211427147

Attout, L., Ordonez Magro, L., Szmalec, A., & Majerus, S. (2020). The developmental neural substrates of Hebb repetition learning and their link with reading ability. *Human Brain Mapping, 41*(14), 3956-3969. https://doi.org/10.1002/hbm.25099

Ausubel, D. P. (1968). *Educational psychology: A cognitive view*. Holt, Rinehart and Winston of Canada Ltd.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. https://doi.org/10.1037//0033-295x.84.2.191

Barto, A., Mirolli, M., & Baldassarre, G. (2013). Novelty or surprise? *Frontiers in Psychology*, *4*, 907. https://doi.org/10.3389/fpsyg.2013.00907

Binnie, C., & Wedlock, J. (2022). Self-Directed learning: Exploring the continuous professional development of native English-speaking teachers in South Korea. *The Journal of AsiaTEFL*, *19*(3), 871-895. http://dx.doi.org/10.18823/asiatefl.2022.19.3.8.871

Bogaerts, L., Szmalec, A., De Maeyer, M., Page, M. P. A., & Duyck, W. (2016). The involvement of long-term serial-order memory in reading development: A longitudinal study. *Journal of Experimental Child Psychology, 145*, 139–156. https://doi.org/10.1016/j.jecp.2015.12.008

Bönstrup, M., Iturrate, I., Thompson, R., Cruciani, G., Censor, N., & Cohen, L. G. (2019). A rapid form of offline consolidation in skill learning. *Current Biology*, *29*(8), 1346-1351.

Bjork, E. L., & Bjork, R. A. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. In M. A. Gernsbacher, R. W. Pew, L. M. Hough, & J. R. Pomerantz (Eds.), *Psychology and the real world: Essays illustrating fundamental contributions to society* (pp. 56–64). Worth Publishers.

Bjork, R. A., & Kroll, J. F. (2015). Desirable Difficulties in Vocabulary Learning. *The American Journal of Psychology*, *128*(2), 241–252. https://doi.org/10.5406/amerjpsyc.128.2.0241

Boeve-de Pauw, J., Van Hoof, J., & Van Petegem, P. (2019). Effective field trips in nature: The interplay between novelty and learning. *Journal of Biological Education, 53*(1), 21-33. https://doi.org/10.1080/00219266.2017.1418760

Brod, G. (2021). Toward an understanding of when prior knowledge helps or hinders learning. *npj Science of Learning*, *6*(1), 24. https://doi.org/10.1038/s41539-021-00103-w

Bunzeck, N., & Düzel, E. (2006). Absolute coding of stimulus novelty in the human substantia nigra/VTA. *Neuron*, *51*(3), 369-379. https://doi.org/10.1016/j.neuron.2006.06.021

Busse, V. (2014). Visible learning and visible motivation. *Motivation and Foreign Language Learning: From Theory to Practice, 40,* 157. https://doi.org/10.1075/lllt.40.08bus

Carpenter, S. K., Pan, S. C., & Butler, A. C. (2022). The science of effective learning with spacing and retrieval practice. *Nature Reviews Psychology*, *1*(9), 496-511. https://doi.org/10.1038/s44159-022-00089-1

Chun, M. M., & Turk-Browne, N. B. (2007). Interactions between attention and memory. *Current Opinion in Neurobiology*, *17*(2), 177–184. https://doi.org/10.1016/j.conb.2007.03.005

Craik, F. I., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior, 11*(6), 671–684. https://doi.org/10.1016/S0022-5371(72)80001-X

Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience* (Vol. 1990). New York: Harper & Row.

Daffner, K. R., Mesulam, M. M., Scinto, L. F. M., Acar, D., Calvo, V., Faust, R., ... & Holcomb, P. (2000). The central role of the prefrontal cortex in directing attention to novel events. *Brain*, *123*(5), 927-939. https://doi.org/10.1093/brain/123.5.927

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *4*, 227–268. https://doi.org/10.1207/S15327965PLI1104_01

DeKeyser, R. M. (2007). *Practice in a second language: Perspectives from applied linguistics and cognitive psychology.* New York: Cambridge University Press.

De Oliveira, L. C. (2023). *Supporting multilingual learners' academic language development: A language-based approach to content instruction*. Taylor & Francis. https://doi.org/10.4324/9781003264927

De Visscher, A., Szmalec, A., Van Der Linden, L., & Noël, M. P. (2015). Serial-order learning impairment and hypersensitivity-to-interference in dyscalculia. *Cognition*, 144, 38-48. https://doi.org/10.1016/j.cognition.2015.07.007

Dewar, M., Alber, J., Cowan, N., Della Sala, S. (2014) Boosting long-term memory via wakeful rest: Intentional rehearsal is not necessary, consolidation is sufficient. *PLoS ONE*, *9*(10): e109542. https://doi.org/10.1371/journal.pone.0109542

Dolcos, F., Katsumi, Y., Moore, M., Berggren, N., de Gelder, B., Derakshan, N., ... & Dolcos, S. (2020). Neural correlates of emotion-attention interactions: From perception, learning, and memory to social cognition, individual differences, and training interventions. *Neuroscience & Biobehavioral Reviews*, *108*, 559-601. https://doi.org/10.1016/j.neubiorev.2019.08.017

Ebbinghaus, H. (1964). *Memory: A contribution to experimental psychology* (H. A. Ruger & C. E. Bussenius, Trans.) New York: Dover (original work published 1885).

Engeser, S., & Rheinberg, F. (2008). Flow, performance and moderators of challenge-skill balance. *Motivation and Emotion, 32*, 158-172. https://doi.org/10.1007/s11031-008-9102-4

Ericsson, A., & Pool, R. (2016). *Peak: Secrets from the new science of expertise*. Random House.

Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, *100*, 363–406. https://doi:10.1037/0033-295X.100.3.363

Freitas, D. (2017). Overcoming the theory and practice divide: A perspective from the TESOL Plus Program. *TESL Ontario Contact Magazine, November Early View*, 12-18. http://contact.teslontario.org/wp-content/uploads/2017/10/10Freitas-TESOLPlus.pdf#:~:text=A%20Perspective%20from%20the%20TESOL%20Plus

Fryer, L. K., Nakao, K., & Thompson, A. (2019). Chatbot learning partners: Connecting learning experiences, interest and competence. *Computers in Human Behavior*, *93*, 279-289. https://doi.org/10.1016/j.chb.2018.12.023

Gershman, S. J., & Niv, Y. (2015). Novelty and inductive generalization in human reinforcement learning. *Topics in Cognitive Science*, *7*(3), 391-415. https://doi.org/10.1111/tops.12138

Goldberg, H. (2022). Growing brains, nurturing minds—Neuroscience as an educational tool to support students' development as life-long learners. *Brain Sciences*, *12*(12), 1622 https://doi.org/10.3390/brainsci12121622

Gruber, M. J., & Ranganath, C. (2019). How curiosity enhances hippocampus-dependent memory: The prediction, appraisal, curiosity, and exploration (PACE) framework. *Trends in Cognitive Sciences, 23*(12), 1014-1025.

Guadagnoli, M. A., & Lee, T. D. (2004). Challenge point: a framework for conceptualizing the effects of various practice conditions in motor learning. *Journal of Motor Behavior, 36*(2), 212-224. https://doi.org/10.3200/JMBR.36.2.212-224

Harris, H., Israeli, D., Minshew, N., Bonneh, Y., Heeger, D. J., Behrmann, M., & Sagi, D. (2015). Perceptual learning in autism: Over-specificity and possible remedies. *Nature Neuroscience*, *18*(11), 1574–1576. https://doi.org/10.1038/nn.4129

Hattan, C., Alexander, P. A., & Lupo, S. M. (2023). Leveraging what students know to make sense of texts: What the research says about prior knowledge activation. *Review of Educational Research*. https://doi.org/10.3102/00346543221148478

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81-112. https://doi.org/10.3102/003465430298487

Hebb, D. O. (1961). Distinctive features of learning in the higher animal. In J. F. Delafresnaye (Ed.), *Brain mechanisms and learning* (pp. 37–46). Oxford: Blackwell.

Helton, W. S., & Russell, P. N. (2015). Rest is best: The role of rest and task interruptions on vigilance. *Cognition*, *134*, 165-173. https://doi.org/10.1016/j.cognition.2014.10.001

Heritage, M. (2019). Feedback for enhanced English language learning. *Second Handbook of English Language Teaching*, 497–515. https://doi.org/10.1007/978-3-030-02899-2_27

Hlas, A. C. (2021). High-leverage teaching practices: Designing tasks for interaction. In P. M. Wesely (Ed.), *One vision – multiple perspectives* (pp. 31–46). Central States Conference on the Teaching of Foreign Languages. https://files.eric.ed.gov/fulltext/ED614612.pdf#:~:text=In%20High-Leverage%20Teaching%20Practices:%20Designing%20Tasks

Houillon, A., Lorenz, R. C., Böhmer, W., Rapp, M. A., Heinz, A., Gallinat, J., & Obermayer, K. (2013). The effect of novelty on reinforcement learning. *Progress in Brain Research*, *202*, 415-439. https://doi.org/10.1016/B978-0-444-62604-2.00021-6

Housen, A., & Simoens, H. (2016). Introduction: Cognitive perspectives on difficulty and complexity in L2 acquisition. *Studies in Second Language Acquisition*, *38*, 163–175. https://doi.org/10.1017/S0272263116000176

Houser, R., & DeLoach, S. (1998). Learning from games: Seven principles of effective design. *Technical Communication*, *45*(3), 319-329.

Isen, A. M. (2015). On the relationship between affect and creative problem solving. In S. W. Russ (Ed.), *Affect, creative experience, and psychological adjustment* (pp. 3-17). Routledge. https://doi.org/10.4324/9781315784557

Itti, L., & Baldi, P. (2005). Bayesian surprise attracts human attention. *Advances in Neural Information Processing Systems, 18*. https://doi.org/10.1016/j.visres.2008.09.007

Jha, S. K. (2015). Myths and Realities of Tertiary ELT Programmes. *International Journal of Innovations in TESOL and Applied Linguistics, 1*(1), 1-14. https://ijital.org/images/6.pdf#:~:text=Myths%20and%20Realities%20of%20Tertiary%20ELT

Kang, M. J., Hsu, M., Krajbich, I. M., Loewenstein, G., McClure, S. M., Wang, J. T. Y., & Camerer, C. F. (2009). The wick in the candle of learning: Epistemic curiosity activates reward circuitry and enhances memory. *Psychological Science*, *20*(8), 963-973. https://doi.org/10.1111/j.1467-9280.2009.02402.x

Kafkas, A., & Montaldi, D. (2018). How do memory systems detect and respond to novelty? *Neuroscience Letters, 680*, 60-68. https://doi.org/10.1016/j.neulet.2018.01.053

Karpicke, J. D., & Roediger III, H. L. (2008). The critical importance of retrieval for learning. *Science, 319*(5865), 966-968. https://doi.org/10.1126/science.1152408

Kidd, C., Piantadosi, S. T., & Aslin, R. N. (2012). The Goldilocks effect: Human infants allocate attention to visual sequences that are neither too simple nor too complex. *PLoS One, 7*(5): e36399. https://doi.org/10.1371/journal.pone.0036399

Kirschner, P. A., & Hendrick, C. (2020). *How learning happens: Seminal works in educational psychology and what they mean in practice.* Routledge. https://doi.org/10.4324/9780429061523

Leamnson, R. (2000). Learning as biological brain change. *Change: The Magazine of Higher Learning*, *32*(6), 34-40. https://doi.org/10.1080/00091380009601765

Leow, R. P., & Mercer, J. D. (2015). Depth of processing in L2 learning: Theory, research, and pedagogy. *Journal of Spanish Language Teaching*, *2*(1), 69-82. https://doi.org/10.1080/23247797.2015.1026644

Li, S. (2010). The effectiveness of corrective feedback in SLA: A meta-analysis. *Language Learning*, *60*(2), 309-365. https://doi.org/10.1111/j.1467-9922.2010.00561.x

Lim, S. C., & Renandya, W. A. (2020). Efficacy of written corrective feedback in writing instruction: A meta-analysis. *TESL-EJ*, *24*(3), n3.

Lucardie, D. (2014). The impact of fun and enjoyment on adult's learning. *Procedia-Social and Behavioral Sciences*, *142*, 439-446. https://doi.org/10.1016/j.sbspro.2014.07.696

Luft, C. D. B. (2014). Learning from feedback: The neural mechanisms of feedback processing facilitating better performance. *Behavioural Brain Research*, *261*, 356-368. https://doi.org/10.1016/j.bbr.2013.12.043

Mather, E. (2013). Novelty, attention, and challenges for developmental psychology. *Frontiers in Psychology*, *4*, 491. https://doi.org/10.3389/fpsyg.2013.00491

Mazzoli, E., Salmon, J., Teo, W.-P., Pesce, C., He, J., Ben-Soussan, T. D., & Barnett, L. M. (2021). Breaking up classroom sitting time with cognitively engaging physical activity: Behavioural and brain responses. *PLOS ONE*, *16*(7), e0253733. https://doi.org/10.1371/journal.pone.0253733

McCarthy, K. S., & McNamara, D. S. (2021). The multidimensional knowledge in text comprehension framework. *Educational Psychologist*, *56*(3), 196-214. https://doi.org/10.1080/00461520.2021.1872379

McDermott, K. B., & Roediger, H. L. (2018). Memory (encoding, storage, retrieval). *General Psychology FA2018. Noba Project: Milwaukie, OR*, 117-153.

McMurray, B., Horst, J. S., & Samuelson, L. K. (2012). Word learning emerges from the interaction of online referent selection and slow associative learning. *Psychological Review*, *119*(4), 831. https://doi.org/10.1037%2Fa0029872

Metcalfe, J. (2017). Learning from errors. *Review of Psychology*, *68*, 465-489. https://doi.org/10.1146/annurev-psych-010416-044022

Metcalfe, J., & Kornell, N. (2005). A region of proximal learning model of study time allocation. *Journal of Memory and Language*, *52*(4), 463-477. https://doi.org/10.1016/j.jml.2004.12.001

Meyers, C. A., & Bagnall, R. G. (2015). A case study of an adult learner with ASD and ADHD in an undergraduate online learning environment. *Australasian Journal of Educational Technology*, *31*(2), Article 2. https://doi.org/10.14742/ajet.1600

Mohebbi, A. (2023). Optimising language learning for students with ADHD: Strategies for cultivating attentional mechanisms. In X. Jiang (Ed.), *Psycholinguistics—new advances and real-world applications*. IntechOpen. https://doi.org/10.5772/intechopen.1003025

Munakata, Y., & Pfaffly, J. (2004). Hebbian learning and development. *Developmental Science*, *7*(2), 141-148. https://doi.org/10.1111/j.1467-7687.2004.00331.x

Nakamura, J., & Csikszentmihalyi, M. (2014). The concept of flow. In M. Csikszentmihalyi (Ed.), *Flow and the foundations of positive psychology: The collected works of Mihaly Csikszentmihalyi* (pp. 239-263). Springer Dordrecht. https://doi.org/10.1007/978-94-017-9088-8_16

Oudeyer, P. Y., Gottlieb, J., & Lopes, M. (2016). Intrinsic motivation, curiosity, and learning: Theory and applications in educational technologies. *Progress in Brain Research, 229*, 257-284. https://doi.org/10.1016/bs.pbr.2016.05.005

Owens, M. T., & Tanner, K. D. (2017). Teaching as brain changing: Exploring connections between neuroscience and innovative teaching. *CBE—Life Sciences Education*, *16*(2), fe2. https://doi.org/10.1187/cbe.17-01-0005

Page, M. P. A., & Norris, D. (2009). A model linking immediate serial recall, the Hebb repetition effect and the learning of phonological word forms. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *364*(1536), 3737-3753. https://doi.org/10.1098%2Frstb.2009.0173

Peiris, C. L., O'Donoghue, G., Rippon, L., Meyers, D., Hahne, A., De Noronha, M., Lynch, J., & Hanson, L. C. (2021). Classroom movement breaks reduce sedentary behavior and increase concentration, alertness and enjoyment during university classes: A mixed-methods feasibility study. *International Journal of Environmental Research and Public Health*, *18*(11), Article 11. https://doi.org/10.3390/ijerph18115589

Poppenk, J., Köhler, S., & Moscovitch, M. (2010). Revisiting the novelty effect: when familiarity, not novelty, enhances memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 36*(5), 1321. https://doi.org/doi/10.1037/a0019900

Posner, M. I., & Rothbart, M. K. (2014). Attention to learning of school subjects. *Trends in Neuroscience and Education*, *3*(1), 14–17. https://doi.org/10.1016/j.tine.2014.02.003

Quent, J. A., Henson, R. N., & Greve, A. (2021). A predictive account of how novelty influences declarative memory. *Neurobiology of Learning and Memory*, *179*, 107382. https://doi.org/10.1016/j.nlm.2021.107382

Rajaram, S., & Barber, S. J. (2008). 2.16-Retrieval processes in memory. *Learning and Memory: A Comprehensive Reference, 2*, 261-283. https://doi.org/10.1016/B978-012370509-9.00169-8

Rea, D. W. (2000). Optimal motivation for talent development. *Journal for the Education of the Gifted*, *23*(2), 187-216. https://doi.org/10.4219/jeg-2000-574

Salanova, M., Martínez, I., & Llorens, S. (2012). Success breeds success, especially when self-efficacy is related with an internal attribution of causality. *Estudios de Psicología*, *33*(2), 151-165. https://doi.org/10.1174/021093912800676420

Schmidt, R. (2012). Attention, awareness, and individual differences in language learning. *Perspectives on Individual Characteristics and Foreign Language Education*, *6*, 27. https://doi.org/10.1515/9781614510932.27

Serin, H. (2017). The role of passion in learning and teaching. *International Journal of Social Sciences & Educational Studies*, *4*(1), 60-64. https://doi.org/10.23918/ijsses.v4i1p60

Shen, L., Wang, M., & Shen, R. (2009). Affective e-learning: Using "emotional" data to improve learning in pervasive learning environment. *Journal of Educational Technology & Society, 12*(2), 176-189.

Shohamy, D., & Adcock, R. A. (2010). Dopamine and adaptive memory. *Trends in Cognitive Sciences, 14*(10), 464-472. https://doi.org/10.1016/j.tics.2010.08.002

Sousa, D. A. (2016). *How the brain learns.* Corwin Press. https://doi.org/10.4135/9781071855324

Tovar, Á. E., & Westermann, G. (2023). No need to forget, just keep the balance: Hebbian neural networks for statistical learning. *Cognition*, *230*, 105176. https://doi.org/10.1016/j.cognition.2022.105176

Tse, D., Langston, R. F., Kakeyama, M., Bethus, I., Spooner, P. A., Wood, E. R., ... & Morris, R. G. (2007). Schemas and memory consolidation. *Science, 316*(5821), 76-82. https://doi.org/10.1126/science.1135935

Tulving, E. (1991). Concepts of human memory. In L. R. Squire, N. M. Weinberger, G. Lynch, & J. L. McGaugh (Eds.), *Memory: Organization and locus of change* (pp. 3–32). Oxford University Press.

Tulving, E., & Kroll, N. (1995). Novelty assessment in the brain and long-term memory encoding. *Psychonomic Bulletin & Review*, *2*(3), 387-390. https://doi.org/10.3758/BF03210977

Tyng, C. M., Amin, H. U., Saad, M. N., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology, 8*, 1454. https://doi.org/10.3389/fpsyg.2017.01454

Um, E., Plass, J. L., Hayward, E. O., & Homer, B. D. (2012). Emotional design in multimedia learning. *Journal of Educational Psychology, 104*(2), 485.

Van Gog, T., Ericsson, K. A., Rikers, R. M., & Paas, F. (2005). Instructional design for advanced learners: Establishing connections between the theoretical frameworks of cognitive load and deliberate practice. *Educational Technology Research and Development*, *53*(3), 73-81. https://doi.org/10.1007/BF02504799

Van Kesteren, M. T., Ruiter, D. J., Fernández, G., & Henson, R. N. (2012). How schema and novelty augment memory formation. *Trends in Neurosciences*, *35*(4), 211-219. https://doi.org/10.1016/j.tins.2012.02.001

Vogel, S., & Schwabe, L. (2016). Learning and memory under stress: implications for the classroom. *npj Science of Learning, 1*(1), 1-10. https://doi.org/10.1038/npjscilearn.2016.11

Walker, M. P., & Stickgold, R. (2004). Sleep-dependent learning and memory consolidation. *Neuron*, *44*(1), 121-133. https://doi.org/10.1016/j.neuron.2004.08.031

Walqui, A. (2006). Scaffolding instruction for English language learners: A conceptual framework. *International Journal of Bilingual Education and Bilingualism, 9*(2), 159-180. https://doi.org/10.1080/13670050608668639

Watabe-Uchida, M., Eshel, N., & Uchida, N. (2017). Neural circuitry of reward prediction error. *Annual Review of Neuroscience*, *40*, 373-394. https://doi.org/10.1146/annurev-neuro-072116-031109

Wedlock, J., & Binnie, C. (2023). Selecting and using authentic videos for intentional second language learning: Nine considerations. *English Australia Journal*, *39*(1), 24-40. https://files.eric.ed.gov/fulltext/EJ1388604.pdf#:~:text=ear%20in%20mind%20when%20selecting%20and

Wedlock, J., & Binnie, C. (in press). Optimizing language learning: The potential of deliberate and purposeful practice. *TESOL Quarterly*.

Wilson, R. C., Shenhav, A., Straccia, M., & Cohen, J. D. (2019). The eighty five percent rule for optimal learning. *Nature Communications*, *10*(1), 1-9. https://doi.org/10.1038/s41467-019-12552-4

Wulf, G., & Lewthwaite, R. (2016). Optimizing performance through intrinsic motivation and attention for learning: The OPTIMAL theory of motor learning. *Psychonomic Bulletin & Review*, *23*(5), 1382-1414. https://doi.org/10.3758/s13423-015-0999-9

Zhang, R., & Zou, D. (2022). Types, purposes, and effectiveness of state-of-the-art technologies for second and foreign language learning. *Computer Assisted Language Learning*, *35*(4), 696-742. https://doi.org/10.1080/09588221.2020.1744666

Joshua Wedlock is a visiting professor at Kongju National University, South Korea. He holds an MA of Research, an MA in Applied Linguistics & TESOL, and a PhD from Macquarie University, Sydney, Australia. Joshua's research interests include expedited learning, pragmatics, taboo language, and evidence-based pedagogy.

Nick Wilson is an Associate Professor in Applied Linguistics at the University of Limerick, Ireland, and an Honorary Senior Lecturer in Linguistics at Macquarie University, Australia. He has published research on interpersonal pragmatics in sports teams and taboo language, and he co-authors *An Introduction to Sociolinguistics* with Janet Holmes.

The critical challenge for ELT in Indonesia: Overcoming barriers in fostering critical thinking in testing-oriented countries

Kate Wilson[1]   [1]University of Canberra, Australia

Maya Defianty[2]   [2]State Islamic University Syarif Hidayatullah Jakarta, Indonesia

Abstract

In recent years, the Indonesian government has put greater emphasis on promoting critical thinking in the education system, including the notion of critical thinking in national examinations, curriculum, and graduate outcomes for school education. Nevertheless, as in many testing-oriented countries, fostering critical thinking in the Indonesian context can be challenging, as the long-standing culture of testing, in which every answer is either correct or not, contradicts the concept of critical thinking. This paper focuses on identifying challenges in promoting critical thinking in English Language Teaching, especially in testing-oriented countries. The paper argues that critical thinking can be effectively fostered in students if teachers have a profound understanding of the notion. Demonstrating how critical thinking can be incorporated into teachers' daily pedagogical activities and encouraging teachers to conduct collaborative action research about the teaching of critical thinking are suggested as two productive ways to boost teachers' understanding of the notion of critical thinking.

Keywords: *Critical thinking; challenges; collaborative action research; high-stakes testing*; *testing-culture.*

Introduction

Recently, fostering critical thinking has become one of the primary concerns of education policies in many countries. The central role of critical thinking in the labour market, globalisation, the information revolution, modernity, and in technology and connectivity (Defianty & Wilson, 2019; Vincent-Lancrin et al., 2019) has led several countries to reform their education policies. Furthermore, in the English Language Teaching (ELT) landscape in particular, a recent meta-analysis study conducted by Taherkhani and Gholizadeh (2023) revealed that critical thinking can potentially enhance students' competence in all four macro language skills: reading, writing, listening, and speaking.

Indonesia is among those countries which have reformed their education system, including ELT, by aligning their policies with the notion of critical thinking. For example, the current curriculum, Kurikulum Merdeka, explicitly states that critical thinking is one of the compulsory elements of school graduate profiles. Another major reform has been introduced by changing the national standardised testing system from "high-stakes" to "low-stakes" testing. It was expected that these policy changes would encourage teachers to move away from the traditional emphasis on teaching-to-the-test and allow for greater emphasis on critical thinking. However, research shows that teachers in Indonesia still cling to their former testing regimes and that ELT teachers still have a limited understanding of critical thinking and how to teach it (Defianty & Wilson, 2022; Ilyas, 2018; Puspitasari & Pelawi, 2023). Unfortunately, as Li (2023) pointed out, it appears that policy reform may not automatically change teachers' teaching practice.

In this paper, we argue that a country that has a long history of national high-stakes testing, such as Indonesia, may find fostering critical thinking a challenge, even though the official policy has moved on, as teachers are still strongly influenced by the culture of testing in which they have been immersed since childhood. We first explain the context of ELT in Indonesia and the recent changes in the national testing system; then, we discuss the notion of critical thinking, particularly as it relates to ELT. Next, we explain high-stakes, standardised testing, and its effects on teaching and learning, arguing that it is inimical to the teaching of critical thinking. We then introduce the notion of a "testing culture". Finally, we explore how critical thinking in ELT can be effectively fostered in countries with such a culture.

A glimpse of the assessment system in Indonesia

All schools in Indonesia are required to implement the national curriculum and to administer the national examination. This examination is a "standardised" test, meaning that the same questions and the same method of grading are applied across the entire country to ensure that the test is "fair" and reliable (Brown & Abeywickrama, 2021). National standardised testing has been implemented for decades with various labels.

The current standardised test, entitled AKM, is considered to be a significant reform for the assessment system in Indonesia for the following reasons. First, AKM is the first national standardised test that is "low-stakes" in that, unlike the previous long-standing Ujian Nasional (national examination), the score has no bearing on individual students' eligibility to graduate and to continue towards further learning. Like the NAPLAN test in Australia (ACARA, 2017), the aim of the test is to provide information about whole school performance that can be used to improve learning outcomes. In contrast to the previous testing regime, the current test is administered to students at year five, eight, and eleven, and the results do not hinder students from progressing to the next grade. Only a representative sample of a school population—30 students for elementary level and 45 for lower and higher secondary levels, randomly selected by the school—are required to take the test. Secondly, in contrast to the previous standardised testing, the AKM emphasises students' critical thinking (Ministry of Education and Culture, 2020), whereas previously, the national standardised testing focused on cognitive skills and knowledge at surface level.

Nevertheless, it has been argued that the reform has only been applied at the policy level (Defianty, 2021; Ernawati et al., 2023); in practice, teachers continue to treat AKM like the previous national examination. Thus, schools purposely prepare students for the test despite the fact that the government has explicitly stated that the results of AKM have no consequences for the schools or the students who take the test (Ernawati et al., 2022, 2023). In addition, several studies also show that teachers are not able to construct AKM-like tests with a focus on critical thinking and that many believe that AKM is similar to the previous standardised test, the Ujian Nasional, in that teachers can train their students to answer the test questions and thus get a high score. In other words, they still treat the test as if it were a knowledge and skills-based test with only one possible correct answer for each question (Ernawati et al., 2022; Murni et al., 2022; Nurjati et al., 2022). In the following paragraphs, we will explain why this approach to testing is inimical to the teaching of critical thinking.

The paradox of critical thinking and standardised high-stakes testing

Critical thinking and its application in ELT

To understand the challenges of implementing critical thinking in Indonesia's ELT context, it is important to first clarify what we mean by critical thinking. Critical thinking is now universally recognised as an essential skill or attribute for participation in modern life, enabling citizens to assess situations, evaluate information, make rational decisions, and solve complex problems (Vincent-Lancrin et al., 2019). Nevertheless, defining critical thinking has often been challenging as scholars have not yet formulated any consensus of what critical thinking is and what constitutes its practice.

In the field of education, theories of critical thinking can be attributed to Ennis (1991) who defined critical thinking as "… reasonable, reflective thinking that is focused on deciding what

to believe and do" (p. 6). Another widely accepted definition of critical thinking is from Elder and Paul (2010); they define critical thinking as "…the process of analyzing and assessing thinking with a view to improving it. Critical thinking presupposes knowledge of the most basic structures in thinking (the elements of thought) and the most basic intellectual standards for thinking (universal intellectual standards)" (p. 38).

From numerous theories of critical thinking, Davies and Barnett (2015) distilled three key areas: thinking skills, criticality, and critical pedagogy. On one level, critical thinking involves thinking skills such as analysing, comparing, reasoning, evaluating, and decision-making. However, being equipped with skills is not sufficient, as students also need "criticality"; that is, they need to develop a disposition for thinking critically, to recognise and value critical thinking, and develop habits of thinking critically in their work, everyday lives, and in society. Further, proponents of critical pedagogy urge students to examine pressing social issues and to acquire and practice ethical values such as inclusivity, environmental responsibility, and open-mindedness.

In relation to pedagogy, studies agree that critical thinking can be taught, including in the Indonesian ELT context. Several studies have shown that critical thinking can be embedded in various teaching activities. For example, a meta-analysis including 341 effect sizes from quasi and true-experimental studies revealed that learning activities such as argument mapping, problem-based learning, and cooperative learning, significantly improve students' critical thinking skills (Abrami et al., 2015). Other studies demonstrate how Indonesian students can be taught to develop 'criticality'. For example, Defianty and Wilson (2023) describe how an ELT teacher in Kalimantan introduced her year 12 students to critical thinking. This teacher had her students discuss how the UN's Millenium Goals related to their hometown and what they personally could do to help achieve these goals. In terms of critical pedagogy, Mambu (2010) explains how he engaged students in an ELT class in a rural high school in East Java, albeit with minimal English skills, in critical reflection on issues currently affecting their own school and community. Mambu encouraged students to voice their opinions, by overlooking grammar errors, lending support with vocabulary, and allowing them to code-switch between English and Indonesian where necessary.

While there are examples in the literature of ELT teachers in Indonesia applying critical thinking pedagogies, it may not be clear to many teachers how critical thinking relates to ELT. Studies show that ELT teachers are not confident in explaining critical thinking (Defianty & Wilson, 2022). In the ELT classroom, teachers have long focused on teaching vocabulary and grammar rules: content which has proved to be easily testable in multiple choice formats in standardised tests. This is the content which underpins teachers' traditional confidence in their role as imparters of knowledge. Mambu (2010) suggests that the content of ELT needs to focus instead on problematic themes such as "fast food" or "environmental pollution" supported by visual stimuli to prompt students to participate dialogically in English classes. This approach resonates with Defianty and Wilson (2020) who suggest that critical thinking in ELT entails both thinking analytically *about* the language (e.g., "What is the difference in meaning and usage between the past simple and the present perfect tense?") and thinking *through* the

language; that is, using English to engage in reflection and discussion about problematic topics of contemporary interest. While thinking *about* the language particularly entails thinking skills, such as analysing, comparing, and evaluating, thinking *through* the language affords opportunities for criticality and critical pedagogy.

However, it is a huge challenge for ELT teachers, who are used to teaching language as 'grammar + vocabulary', predominantly through grammar and translation exercises with multiple choice answers, to shift towards teaching students to think critically. If they are to shift towards a focus on critical reflection on challenging issues, as Mambu (2010) proposes, both substantial teacher agency and new skills are required. Rather than controlling their classes by working through the textbook exercises, teachers need to be able to engage students in classroom activities that stimulate critical thinking and encourage students to think, and use English, independently.

Standardised high-stakes testing

Thinking independently was definitely not encouraged in the era of standardised high-stakes testing. Popham (1999) defined standardised tests as "any examination that is administered and scored in a predetermined, standard manner" (p. 8): all candidates answer the same questions, and there is only one acceptable answer. Standardised testing has long been the norm both for national and international "high-stakes" exams where, for example, students are competing for access to limited places in higher education or for entry to elite professions. Although there are many other instruments that can be used to assess students, such as portfolios, self-assessment, peer assessment, and journals, standardised testing has dominated high-stakes assessment for many years, as it is a practical way to attain immediate and comparable information. A uniform test can be administered quickly and efficiently to vast numbers of students, especially where multiple choice formats are applied, in order to obtain reliable results (Hughes, 2013). These results are deemed to be fair (despite the confounding factors that may disrupt this) and cannot easily be challenged by disaffected test-takers. Marking is cheap, rapid, and objective. Thus, from an administrative perspective, as Brown and Abeywickrama (2021) point out, high-stakes, standardised testing has much to recommend it. Standardised, high-stakes testing was well understood by teachers as the form and style of the test generally remained constant from year to year, so question types and content became well known. This made it easy to predict probable test questions and expected answers, so teachers could prepare their students with targeted test-taking skills and knowledge. Teachers' skills in preparing students for high-stakes standardised testing were highly appreciated by school principals, students, and parents, and there was enormous pressure on teachers to "teach-to-the-test", as failure in such high-stakes tests could mean disgrace for the student's family.

Nevertheless, standardised high-stakes tests, such as the long-standing national examination (Ujian Nasional) in Indonesia, have been widely criticised for their negative impacts, including the stress and anxiety they cause for both students and teachers, detracting from the quality of students' learning experience (Furaidah et al., 2015; Romios et al., 2020; Saukah & Chayono,

2015; Sukyadi & Mardiani, 2011). A major drawback from high-stakes testing is the teaching-to-the-test model of learning. Koretz (2017) argued that high-stakes testing shifts teachers' attention towards test preparation and away from more fundamental learning objectives; he pointed out that "high-stakes testing creates strong incentives to focus on the tested sample rather than the domain it is intended to represent" (p. 18). In the same vein, Au (2007) argued that "[high-stakes standardised testing] contradicts curriculum and instruction aligned with professional standards …" (p. 14). Several previous studies have indeed found the negative impact of high-stakes testing. For example, a survey involving 117 teachers in upper elementary schools in California revealed that high-stakes tests negatively affect instructional study and planning. Specifically, teachers purposively spend their allotted teaching time on preparing students for the test (Herman & Golan, 1993). In Indonesia, a recent study which also focused on the impact of the high-stakes standardised testing revealed that teachers still believe the test had negatively affected their teaching roles and instruction (Puspitasari & Pelawi, 2023).

Standardised high-stakes testing leads to a "testing culture"

According to Birenbaum (2016), high-stakes testing, usually involving standardised tests, fosters a "testing culture", characterised by a clear distinction between instruction and assessment, a passive role for students in the assessment, and decontextualised and discrete tests in a multiple-choice format. In contrast, in an "assessment culture", students play an active role; there are multiple forms of assessment; and students' achievement is defined in a profile instead of a single score. In a testing culture, "classroom assessment is seen as simply preparation for an externally set and assessed exam", while in an assessment culture, classroom assessment is guided by "considerations of learning and teaching" (Hamp-Lyons, 2007, p. 488). The features of testing and assessment cultures are identified in Table 1.

Table 1. Testing culture versus assessment culture (adapted from Birenbaum, 2016, pp. 277–286)

Category	Testing culture	Assessment culture
Mindset		
The purpose of assessment	Making grades for reports	Aiming for learning
The function of assessment	Accountability	Direction for further learning
The methods of assessment	Prefers standardised tests	Focuses on establishing dialogue (interaction) with learners
Power relations in assessment	Controlled by assessor	Shared assessment power
Attitudes towards diversity	One instrument will suit all students	Acknowledges students' diversity
Expectations about learning	Teachers believe that students' capacities are fixed	Teachers believe that students have distinct capacities which can be used to move learning forward
The fidelity of assessment	Tests can measure students' ability accurately	Tests may not depict students' overall ability
Classroom assessment		

Formal assessment	Assessment for learning is interpreted as frequent testing, and formative assessment strategies are applied superficially	Emphasises and applies formative assessment
Classroom culture	Competitive and score-oriented	Applies the notions of constructivist learning theory such as collaborative learning, higher-order thinking, student agency
Teacher professional learning	Carried out by external providers which may not be in line with teachers' needs	Focused on developing self-regulated learning
Leadership	Teachers have passive role in making decisions	Emphasis on capacity building, and being pedagogical leaders
The impact of external accountability tests	Applies 'teaching-to-the-test' model	Instruction is not affected by standardised tests

Several features of the testing culture such as rote memorisation and teach-to-the-test teaching tend to hinder students' critical thinking skills from developing (Jiang, 2013). Critical thinking emphasises deep and active learning, reasoning, and tolerance of ambiguity; in contrast, high-stakes testing encourages memorisation, repeating the expected correct answer, and ventriloquising prepared reasons. Thus, negative backwash from high-stakes testing counteracts critical thinking pedagogy.

Moreover, the negative impact of the testing culture and high-stakes testing lingers even when the test is no longer administered. For example, a longitudinal study in Taiwan involving 46,361 students showed that reform in the examination system has not changed the cram schooling culture (Chao et al., 2024). In other words, changes in examination policies may not automatically change the long-standing testing mind-set (Chao et al., 2024). This Taiwanese study corroborated Li's (2016, 2023) argument that reform of the assessment system will not automatically change teachers' practice.

The contrast between "testing culture" and "assessment culture", which reaches into every dimension of teaching-learning, helps to explain why it is that ELT teachers in Indonesia may find it so challenging to respond to the policy change towards low-stakes testing and teaching for critical thinking, which entails a new mindset and major cultural change.

Barriers to fostering critical thinking in ELT within a testing culture

The testing culture that lingers in Indonesia, despite the policy changes which have been introduced, thus presents a number of barriers to the teaching of critical thinking. Most importantly, as the legacy of a lifetime of high-stakes testing, teachers still believe that test preparation is a staple of classroom practice, and they lack knowledge of how to introduce

critical thinking into their assessment practices (Ernawati et al., 2022; Murni et al., 2022; Nurjati et al., 2022).

A further barrier is that teachers in Indonesia still lack understanding of critical thinking and how to teach it. Unfortunately, research shows that teachers in Indonesia, as in some other testing-oriented cultures, still have limited understanding of critical thinking and how to teach it. For example, based on 59 questionnaires answered by teachers from three different regions in Indonesia, Ilyas (2018) concluded that teachers' conceptions of critical thinking are disparate, though one key element shared among the participants is analysis. A similar finding was also shown in a study involving 271 ELT teachers, which revealed that teachers have limited understanding of critical thinking (Defianty & Wilson, 2022). Even when teachers understand the concept of critical thinking, they need to have the willingness—and confidence—to shift their long-held attitudes to teaching associated with the testing culture. Moreover, they themselves need to develop a greater capacity to think critically.

In particular, moving towards a pedagogy for critical thinking necessitates a shift towards more active engagement of students in classroom interaction and a less teacher-dominated classroom culture. This shift requires more agency on the part of both teachers and students and less reliance on a set textbook to control the pace and content of their classes (Fadilah & Mufidah, 2021; van den Ham & Heinze, 2018). This can be threatening for teachers who are steeped in a testing culture of education which depends, in ELT, on students acquiring a set repertoire of grammar and vocabulary, rather than learning how to communicate ideas in English and to think critically about these ideas. Thus, teachers' lack of experience and skills in actively engaging students in participation in the classroom is a further barrier to overcome.

Another barrier is that teachers who are accustomed to a testing culture may not be equipped for a move towards forms of assessment appropriate for an "assessment culture", such as portfolios, creative artefacts, presentations, and journals. Teachers need new understandings and strategies for conceptualising assessment as an integral part of moving learning forward, in other words implementing assessment *for* learning rather than assessment *of* learning (Arrafii & Sumarni, 2018; Widiastuti & Saukah, 2017).

Lastly, studies show that teachers tend to believe that their students' limited English prevents them from participating in critical thinking in the ELT classroom (Defianty & Wilson, 2022; Velayati et al., 2019). This belief is another barrier to overcome while introducing critical thinking into ELT in testing-oriented cultures.

Overcoming the barriers: Possible solutions

Vincent-Lancrin et al. (2019) maintain that fostering critical thinking requires a strategic and on-going plan, particularly in terms of teacher development, as teachers' beliefs and understandings are crucial in bringing critical thinking into the classroom (Li, 2016, 2023).

Several professional development strategies, such as workshops or seminars, have been established in Indonesia to improve teachers' understanding of critical thinking, and the government has published guidelines on how to implement critical thinking for teachers in Indonesia (Ariyana et al., 2018). Nevertheless, these professional development programs and publications have not yet yielded a promising result. Clearly, a sustained approach to professional development is needed in order to enhance teachers' understanding of critical thinking and how to teach it.

One approach to improving the teaching of critical thinking is collaborative action research, which can be defined as a collaborative partnership between teachers and researchers or mentors to identify and resolve problems in teaching–learning (Yuan & Burns, 2017). Collaborative action research involves a cycle of identifying the problem, planning, implementing, evaluating, and redesigning innovations in teaching. It has two major advantages: first, it creates a sense of ownership, as teachers are directly engaged in designing and conducting the research in order to answer their own dilemmas and challenges, but with support and guidance from mentors/ researchers; second, it helps teachers align theory and practice in a meaningful way for their own needs and situation (Kemmis & McTaggart, 2005). An advantage of collaborative action research is that it can be deeply rooted in teachers' daily teaching practice, as the research emerges from teachers themselves in collaboration with researchers. Gandana et al. (2021) showed that top-down introduction of a completely new approach to instruction can be counterproductive. The study involved fifteen ELT teachers in Indonesia. Participants were introduced to how to teach critical thinking through literature by adopting a critical thinking model from Bobkina and Stefanova (2016). Drawing on data from teachers' subsequent instructional activities, the researchers concluded that teachers were still having difficulties in implementing critical thinking in their own classroom context. Gandana et al.'s (2021) study confirmed previous research showing that teachers can be resistant to change, as they need to both learn and unlearn their practice at the same time (see Kennedy et al., 2008). Rather than change being imposed on teachers by external actors, collaborative action research allows teachers themselves to be in control of the innovation with support and mentoring from the researchers.

A second aspect of professional development for critical thinking pedagogy in testing-oriented cultures is that teachers need to see actual examples of how the pedagogy can be applied successfully in their own contexts. Such examples can help to build an awareness and confidence in new teaching practices for critical thinking. A number of studies describing strategies for critical thinking pedagogy have emerged in Indonesia in recent years, such as: extensive reading programs (Husna, 2019); Mobile Assisted Language Learning entitled 'English with Noni' (Agustina et al., 2022); listening journals (Purnamaningwulan, 2022); and Socratic questioning (Lintangsari et al., 2022). These studies and publications offer strategies and inspiration for ELT teachers who are attempting to incorporate critical thinking into their teaching. For example, "English with Noni" (Agustina et al., 2022) encourages students to develop their own clearly reasoned arguments in response to a written text. Similarly, Purnamaningwulan (2022) asked students to understand, analyse, and reflect on audio texts and then to relate them to their own lives, thus involving students in all three dimensions of

critical thinking defined by Davies and Barnett (2015): thinking skills, criticality, and critical pedagogy. Similarly, the examples provided by Mambu (2010) show how students can be involved in critical thinking despite their low English ability. There is an urgent need for more research of this kind as well as wider dissemination of success stories in critical thinking pedagogy.

In addition, more research is needed to show how formative assessment, assessment *for* learning, can be used in the teaching of critical thinking in Indonesia. Such research is essential in supporting the move towards an assessment culture, particularly in underpinning professional development initiatives.

Conclusion: Teachers need more support to overcome the long-standing "testing culture"

This paper has argued that the long-embedded culture of high-stakes standardised testing remains a barrier to introducing critical thinking pedagogy in countries like Indonesia; and that ELT teachers who have been nurtured in a testing culture and have worked and studied within this culture for years may find it very difficult to change their teaching practice, despite the emphasis on critical thinking in the revised curriculum. Brought up themselves in a testing culture, it is hard for teachers to develop a new repertoire of strategies which encourage students to participate more actively and more critically in English language classes.

As we have argued, many ELT teachers are still uncertain how critical thinking applies in their classrooms, particularly when students' language ability is very low. For years, teachers have been used to teaching test-taking skills based on grammar rules and discrete vocabulary. A move towards critical thinking requires them to focus more on students participating actively in using English to make meaning, rather than simply rote-learning given content. This also means moving away from a focus on the 'correct' answer and allowing students to experiment with using English to talk about issues which are important to them, as suggested by Mambu (2010). Importantly, a move to critical thinking pedagogy also entails thinking about assessment as a way to move student learning forward rather than as a tool for reporting, as described in Birenbaum's (2016) view of an "assessment culture". For all of these reasons, moving away from a testing-culture calls upon teachers to make profound changes in the way they conceptualise English language learning and their role and goals as English language teachers, and so teachers need considerable support in re-thinking their approach to ELT.

We have argued, with Vincent-Lancrin et al. (2019), that well-planned teacher development programs are necessary to help teachers develop understanding of critical thinking and how it applies in English language classes. On one hand, teachers need to learn strategies and techniques for developing and assessing critical thinking in teaching English, and professional development workshops can help to disseminate these strategies. However, teacher professional development alone may not overcome teachers' reticence and build their

confidence in a new paradigm of learning. We have suggested that one way to help break through teachers' resistance to change may be to use collaborative action research, in which teachers and mentors together tackle the challenges which teachers face in their own classrooms. Cultural change—changing from a fundamentally testing-oriented culture towards embedding critical thinking in ELT—will not happen quickly. But with more opportunities for teacher development, and for collaborative action research, in particular, a gradual shift towards more critical thinking in ELT can be achieved.

References

Abrami, P. C., Bernard, R. M., Borokhovski, E., Wade, C. A., Surkes, M. A., Tamim, R., & Zhang, D. (2015). Strategies for teaching students to think critically: A meta-analysis. *Review of Educational Research, 85*(2), 275–314. https://doi.org/10.3102/0034654314551063

ACARA. (2017). The National Assessment Program Literacy and Numeracy. https://www.nap.edu.au/docs/default-source/default-document-library/naplan-assessment-framework.pdf

Agustina, N., Mayuni, I., Iskandar, I., & Ratminingsih, N. M. (2022). Mobile learning application: Infusing critical thinking in the EFL Classroom. *Studies in English Language and Education*, *9*(2), 724–743. https://doi.org/10.24815/siele.v9i2.23476

Ariyana, Y., Pudjiastuti, A., Bestary, R., & Zamroni. (2018). *Buku pegangan pembelajaran keterampilan berpikir tingkat tinggi berbasis zonasi. Buku pegangan pembelajaran berorientasi pada keterampilan berfikir tingkat tinggi.* Jakarta: Direktorat Jenderal Guru dan Tenaga Kependidikan Kementrian Pendidikan dan Kebudayaan. https://repositori.kemdikbud.go.id/11316/1/01._Buku_Pegangan_Pembelajaran_HOTS_2018-2.pdf

Arrafii, M. A., & Sumarni, B. (2018). Teachers' understanding of formative assessment. *Lingua Cultura*, *12*, 45–52. https://doi.org/10.21512/lc.v12i1.2113

Au, W. (2007). High-stakes testing and curricular control: A qualitative metasynthesis. *Educational Researcher*, *36*(5), 258–267. https://doi.org/10.3102/0013189x07306523

Birenbaum, M. (2016). Assessment culture versus testing culture: The impact on assessment for learning. In D. Laveault & L. Allal (Eds.), *Assessment for learning: Meeting the challenge of implementation* (pp. 275–292). Springer Link. https://doi.org/https://doi.org/10.1007/978-3-319-39211-0_16

Bobkina, J., & Stefanova, S. (2016). Literature and critical literacy pedagogy in the EFL classroom: Towards a model of teaching critical thinking skills. *Studies in Second Language Learning and Teaching*, *6*(4), 677–696. https://doi.org/10.14746/ssllt.2016.6.4.6

Brown, H. D., & Abeywickrama, P. (2021). *Language assessment: Principles and classroom practices*. Pearson Education.

Chao, T. Y., Sung, Y. T., & Tseng, F. L. (2024). High-stakes test anxiety among Taiwanese

adolescents: A longitudinal study. *Cogent Education, 11*(1). https://doi.org/10.1080/2331186X.2024.2321019

Davies, M., & Barnett, R. (2015). *The Palgrave handbook of critical thinking in higher education.* Palgrave Macmillan. https://doi.org/10.1057/9781137378057

Defianty, M. (2021, March 5). Asesmen pengganti UN akan tetap jadi momok jika guru dan sekolah masih pegang budaya tes. *The Conversation.* https://theconversation.com/asesmen-pengganti-un-akan-tetap-jadi-momok-jika-guru-dan-sekolah-masih-pegang-budaya-tes-155135

Defianty, M., & Wilson, K. (2019). Fostering critical thinking through questioning in EFL: An Indonesian study. In L. Li (Ed.), *Thinking skills and creativity in second language education: Case studies from international perspectives* (pp. 74-94). Routledge.

Defianty, M., & Wilson, K. (2022). Critical thinking in ELT: Indonesian teachers' understanding and practice ten years down the track. *Indonesian Journal of English Education, 9*(1), 120-139. https://doi:10.15408/ijee.v9i1.26673

Defianty, M., & Wilson, K. (2023). Emergency remote teaching in Indonesia: A missed opportunity for greater learner autonomy. *The TEFLIN Journal, 34*(1), 21-38. http://dx.doi.org/10.15639/teflinjournal.v34i1/21-38

Elder, L., & Paul, R. (2010). Critical thinking: Competency standards essential for the cultivation of intellectual skills. *Journal of Developmental Education, 34*(2), 38–39. https://www.jstor.org/stable/42775362

Ennis, R. H. (1991). Critical thinking: A streamlined conception. *Teaching Philosophy, 14*(1), 5–25.

Ernawati, E., Manik, F., Trisnawati, R., Emiliana, E., & Yuliawati, S. (2022). Understanding and quality of minimum competency assessment (AKM) questions made by Integrated Science teachers in junior high schools. *Jurnal Penelitian dan Evaluasi Pendidikan, 26*(2), 251–259. https://doi.org/10.21831/pep.v26i2.48670

Ernawati, E., Rahman, A., Ghani, A., Trisnawati, R. D., & Malik, Z. A. (2023). Teacher's understanding of minimum competence assessment and its impact on assessment conducted in class. *Journal of Research and Educational Research Evaluation*, *12*(1), 86–92. https://doi.org/10.15294/jere.v12i1.66041

Fadilah, R., & Mufidah, A. (2021). Textbook and English teacher in junior high school. *Intensive Journal*, *4*(1). https://doi.org/10.31602/intensive.v4i1.4747

Furaidah, F., Saukah, A., & Widiati, U. (2015). Washback of English national examination in the Indonesian context. *The TEFLIN Journal, 26*(1), 36–58. https://doi.org/http://dx.doi.org/10.15639/teflinjournal.v26i1/36-58

Gandana, I. S. S., Nafisah, N., & Imperiani, E. D. A. (2021). Critical thinking, literature and teachers' instructional activities: An Indonesian case of community service program for English teachers. *English Language Teaching Educational Journal, 4*(2), 138–147. https://doi.org/10.12928/eltej.v4i2.4279

Hamp-Lyons, L. (2007). The impacts of testing practices on teaching. In J. Cummins & C. Davison (Eds.), *International handbook of English language teaching* (Part One, pp. 487–504). Springer.

Herman, J. L., & Golan, S. (1993). The effects of standardized testing on teaching and schools. *Educational Measurement: Issues and Practice*, *12*(4), 20–25. https://doi.org/10.1111/j.1745-3992.1993.tb00550.x

Hughes, A. (2013). *Testing for language teachers* (2nd ed.). Cambridge University Press.

Husna, N. (2019). Developing students' critical thinking through an integrated extensive reading program. *The TEFLIN Journal*, *30*(2), 212–230. https://doi.org/10.15639/teflinjournal.v30i2/212-230

Ilyas, H. P. (2018). Indonesian EFL teachers' conceptions of critical thinking. *JER Journal of ELT Research*, *3*(1), 29–37. https://doi.org/10.22236/JER

Jiang, J. (2013). Critical thinking in general education in China. *International Journal of Chinese Education*, *2*(1), 108–134. https://doi.org/10.1163/22125868-12340016

Kemmis, S., & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 559–603). Sage Publications Ltd.

Kennedy, K. J., Chan, J. K. S., Fok, P. K., & Yu, W. M. (2008). Forms of assessment and their potential for enhancing learning: Conceptual and cultural issues. *Educational Research for Policy and Practice*, *7*(3), 197–207. https://doi.org/10.1007/s10671-008-9052-3

Koretz, D. (2017). *The testing charade: Pretending to make schools better*. The University of Chicago Press.

Li, L. (2016). Integrating thinking skills in foreign language learning: What can we learn from teachers' perspectives? *Thinking Skills and Creativity, 22*. https://doi.org/10.1016/j.tsc.2016.09.008

Li, L. (2023). Critical thinking from the ground up: Teachers' conceptions and practice in EFL classrooms. *Teachers and Teaching: Theory and Practice*, *29*(6), 571–593. https://doi.org/10.1080/13540602.2023.2191182

Lintangsari, A. P., Emaliana, I., & Kusumawardani, I. N. (2022). Improving learners' critical thinking and learning engagement through Socratic questioning in nominal group technique. *Studies in English Language and Education*, *9*(2), 705–723. https://doi.org/10.24815/siele.v9i2.22352

Mambu, J. E. (2010). *Personalising critical pedagogies in foreign language education*. Santa Dharma University Press.

Ministry of Education and Culture. (2020). Asesmen nasional sebagai penanda perubahan paradigma evaluasi Pendidikan. https://www.kemdikbud.go.id/main/blog/2020/10/asesmen-nasional-sebagai-penanda-perubahan-paradigma-evaluasi-pendidikan

Murni, V., Nendi, F., Jundu, R., Men, F. E., Pantaleon, K. V., Jehadus, E., & Jeramat, E. (2022).

Pelatihan penyusunan instrumen Asesmen Kompetensi Minimum (AKM) di SMA Bina Kusuma Ruteng. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM), 5*(8), 2694–2715. https://ejurnalmalahayati.ac.id/index.php/kreativitas/article/view/6031

Nurjati, N., Rahayu, Y. R., & Khabib, S. (2022). Technical guidance for the preparation of AKM-Based national assessment of English learning for state senior high school teachers in Surabaya. *Kanigara: Jurnal Pengabdian Kepada Masyarakat, II*(1), 216–224. http://jurnal.unipasby.ac.id/index.php/kanigara

Popham, W. (1999). *Classroom assessment: What teachers need to know.* Alyn & Bacon.

Purnamaningwulan, R. A. (2022). Listening journals to promote students' critical thinking skills in an integrated listening-speaking course. *Studies in English Language and Education*, *9*(2), 744–760. https://doi.org/10.24815/SIELE.V9I2.23387

Puspitasari, M., & Pelawi, M. A. (2023). English high-stakes testing in Indonesia: Friend or foe? *Journal of English Education and Teaching*, *5*(4), 544–555. https://doi.org/10.33369/jeet.7.4.1071-1084

Romios, L., Ashadi, A., & Purbani, W. (2020). High-stakes testing policy and English language teaching: Voices of the leftovers. *Journal of English as a Foreign Language, 10*(2), 193–221. https://doi.org/10.23971/jefl.v10i2.2005

Saukah, A., & Cahyono, A. E. (2015). National exam in Indonesia and its implications to the teaching and learning of English. J*urnal Penelitian Dan Evaluasi Pendidikan, 19*(2), 243–255. https://doi.org/10.21831/PEP.V19I2.5583

Sukyadi, D., & Mardiani, R. (2011). The washback effect of the English National Examination (ENE) on English teachers' classroom teaching and students' learning. *K@ta, 13*(1), 96–111. https://doi.org/10.9744/kata.13.1.96-111

Taherkhani, R., & Gholizadeh, M. (2023). A meta-synthesis study on the effect of critical thinking on improving language skills. *Forum for Linguistic Studies*, *5*(3), 1–14. https://doi.org/10.59400/fls.v5i3.1687

van den Ham, A. K., & Heinze, A. (2018). Does the textbook matter? Longitudinal effects of textbook choice on primary school students' achievement in mathematics. *Studies in Educational Evaluation*, *59*(April), 133–140. https://doi.org/10.1016/j.stueduc.2018.07.005

Velayati, N., Muslem, A., Fitriani, S., & Samad, I. (2017). An exploration of students' difficulties in using critical thinking skills in reading. *Al-Ta Lim Journal, 24*(3). http://dx.doi.org/10.15548/jt.v24i3.298

Vincent-Lancrin, S., González-Sancho, C., Bouckaert, M., de Luca, F., Fernández-Barrerra, M., Jacotin, G., & Vidal, Q. (2019). *Fostering students' creativity and critical thinking*. Educational Research and Innovation. OECD Publishing. https://doi.org/10.1787/62212c37-en.

Wilson, K. (2019). *Critical thinking in EAP: A brief guide for teachers. Part of the Cambridge Papers in ELT series*. Cambridge University Press. https://www.cambridge.org/elt/blog/wp-content/uploads/2019/06/Critical-Thinking-in-EAP-Wilson-White-paper-21-May-19.pdf

Widiastuti, I., & Saukah, A. (2017). Formative assessment in EFL classroom practices. *Bahasa*

& *Seni*, *45*(1), 50–63. http://journal2.um.ac.id/index.php/jbs/article/view/677/419

Yuan, R., & Burns, A. (2017). Teacher identity development through action research: A Chinese experience. *Teachers and Teaching: Theory and Practice, 23(*6), 729–749. https://doi.org/10.1080/13540602.2016.1219713

Dr Kate Wilson is an Adjunct Associate Professor at the University of Canberra where she lectures in Teaching English to Speakers of Other Languages (TESOL). Previously, she was Head of the School of Languages and International Education, and Director of the Academic Skills Program at the University of Canberra. Her research interests, consultancies, and publications including her doctoral thesis, address critical reading and thinking in English for Academic Purposes, and the first-year experience in higher education.

Dr Maya Defianty is a lecturer at UIN Syarif Hidayatullah Jakarta where she has taught several courses in the area related to Teaching English to Speakers of Other Languages (TESOL). She has an extensive experience in working with English teachers in Indonesia on how to enhance their teaching practice. Her research interest is in teachers' classroom assessment practice and critical thinking. She earned her Ph.D. from the University of Canberra, Australia.

BOOK REVIEW

Kwok, Virginia H. Y. (2023). *Language learning in the digital age: YouTube and learners of English as a foreign language*. Cambridge Scholars Publishing.

Yeong-Ju Lee   Macquarie University, Australia

YouTube has gained global popularity for language education, especially among young language learners in informal contexts. *Language Learning in the Digital Age: YouTube and Learners of English as a Foreign Language* by Virginia H. Y. Kwok explores how university students in Hong Kong use YouTube to enhance their English language proficiency outside formal classroom settings. By focusing on learners' perspectives, this book provides a nuanced understanding of a variety of factors that shape student engagement with YouTube and its role in facilitating autonomous and self-directed language learning. Through a qualitative, case study approach, the author delves into the diverse ways students navigate and personalise their language learning opportunities on YouTube.

The book is grounded in a narrative inquiry approach. This methodology is particularly suited to exploring students' attitudes, motivations, and behaviours that characterise out-of-class language learning, which are otherwise difficult to capture. The book accounts for students' stories and experiences in a way that highlights the 'subjective' realities of language learners. Data collection involved semi-structured interviews, reflective learning journals, and questionnaires designed to elicit detailed accounts of students' perceptions and practices. Participants from a university in Hong Kong represented a range of English language proficiency levels, academic goals, and cultural backgrounds. This multi-layered approach allowed the author to capture the diversity and complexity of learners' interactions with YouTube, providing insights into individual differences in learning experiences. Therefore, by exploring YouTube's educational affordances through students' voices, this book offers a unique lens on how digital platforms reshape technology-enhanced language education.

A key finding of the study is that YouTube served as a 'personalised language laboratory' for students who used it to practice and enhanced specific language skills according to their personal goals. The author describes how students strategically select content that aligns with their interests and learning styles, such as enhancing vocabulary through song lyrics or improving pronunciation with video tutorials. This practice demonstrates students' agency in shaping their own learning pathways, which is critical for organising autonomous learning in the digital age. The findings also reveal that students perceived YouTube as a flexible, engaging, and easily accessible resource that enabled them to 'experiment' with the language, thus supporting risk-taking and creative exploration (which are often limited in formal classroom settings).

Furthermore, the findings show a variety of factors influence learners' perceptions of YouTube as a language learning tool. These factors include students' previous experiences with language learning, the influence of teachers and peers, and student self-efficacy in navigating digital content. The author also identifies five key qualities that facilitate autonomous and experiential learning: intrinsic motivation, digital literacy, self-regulation, resilience, and cultural adaptability. By cultivating these qualities, students in this study could make the most of out-of-class resources like YouTube and develop skills that extend beyond language acquisition and contribute to whole-person development.

The implications of this study are important for educators and policymakers. The author emphasises the potential for YouTube and similar platforms to supplement formal education by addressing the diverse needs of younger learners. The author recommends practical strategies for teachers to guide students in selecting appropriate YouTube content and integrating digital media literacy training into the curriculum. This approach aims to foster a balance between structured in-class and unstructured, student-driven exploration and to bridge gaps between formal and informal language learning environments. The author further highlights the importance of training learners to manage their time effectively when exploring digital content.

The book not only advances our understanding of digital media's role in language learning, but also raises important questions for future research. The author suggests questions, for example, how can educational institutions leverage platforms like YouTube to support out-of-class learning without interfering with learners' autonomy, and what kinds of training do students need to navigate these digital resources effectively? These questions stress the need for ongoing research into digital literacy, learner autonomy, and the changing dynamics between formal and informal language learning spaces.

In summary, the study's methodological rigor and its focus on learners' narratives contribute to the diversity and individuality in how students approach language learning as well as the challenges and opportunities for educators in the digital age. For those interested in the potential of technology to empower language learners, this book is recommended.

Yeong-Ju Lee, Ph.D. is a research and teaching academic in linguistics. She currently teaches in the Master of Applied Linguistics program at Macquarie University, the Master of TESOL program at the University of Wollongong, and the Bachelor of Education program at Australian Catholic University. Her research interests include informal digital language learning, technology use in language education including TESOL, digital literacy, multimodality, digital space, social media, and generative AI.

BOOK REVIEW

Guskaroska, A., Zawadzki, Z., Levis, J. M., Challis, K., & Prikazchikov, M. (2024). *Teaching pronunciation with confidence: A resource for ESL/EFL teachers and learners*. Iowa State University Digital Press.

Skye Playsted   University of New England, Australia

Teaching Pronunciation with Confidence is a comprehensive, open educational resource (OER, 2024) aimed at ESL/EFL teachers and learners, with a focus on effective pronunciation teaching. The book was conceptualized by lead author, Guskaroska, who had worked on a course created by Levis with fellow PhD students at that time, Zawadski and Challis. The purpose of the book was to create an online resource for future students in Levis' pronunciation teaching course that could transform the course's paper-based activities into interactive online activities, providing immediate feedback for students completing the activities. At the same time, an OER publication offered teachers seeking to integrate pronunciation teaching into their classroom practice an accessible resource that drew on up-to-date technological resources and pedagogical approaches. ESL/EFL teachers and students will appreciate its clear, accessible format and descriptions of research-informed classroom activities that are appropriate for most levels of instruction. Teacher educators of TESOL trainees will find that the book (particularly in Chapters 1 and 2) provides succinct but thorough summaries of the theoretical background and research to ESL/EFL pronunciation teaching. Teacher trainers could find it a useful resource to draw on when preparing professional learning sessions. This review briefly outlines and evaluates each of the book's sections, including the foundational aspects of pronunciation instruction, segmentals (vowels, consonants), suprasegmentals (stress, rhythm, intonation), and assessment strategies.

Levis' introductory chapter on the *Basics of teaching pronunciation* explains why teaching pronunciation is crucial, emphasizing intelligibility over native-like accents. The section *What is Pronunciation Teaching?* introduces the purpose of teaching pronunciation in ESL/EFL settings. Here, Levis stresses that the focus of pronunciation teaching has shifted from achieving native-like pronunciation to prioritizing intelligibility and mutual understanding of spoken English inclusive of all accents and dialects. This section highlights research on the impact of pronunciation on intelligibility to support the view taken in the book that there is a relationship between the explicit teaching of pronunciation and improved communication in English. Levis emphasizes the need for teachers to understand how to identify appropriate goals for pronunciation teaching, outlining the book's aims to provide teachers with a systematic "what, why, and how" of pronunciation teaching.

In Chapter 2, *Pronunciation in language teaching,* Levis builds on the introduction with a discussion of pronunciation teaching terms and concepts. Teachers will find an overview of the historical roots to constructs such as intelligibility and nativeness as well as key pedagogical concepts that underpin pronunciation teaching. The nature and role of functional load, suprasegmentals, orthography, and variations in English speech are discussed. This chapter underscores the need for teachers to adopt an "intelligibility-based approach" to teaching pronunciation, highlighting that "not all pronunciation errors are equally important in promoting oral communication". Levis acknowledges the limited time afforded to teaching pronunciation as a standalone skill in most classroom contexts, pointing to a need for teachers to understand how to accurately identify and prioritize areas of pronunciation to best support their students' oral communication. Subsequent chapters detail these areas and suggest relevant activities for each pronunciation teaching priority area.

Part II, *Segmentals,* deals with English vowel and consonant sounds. First, Guskaroska describes the complexities inherent in teaching English vowels, due to the discrepancy between spelling and sound and the fact that an individual vowel grapheme (letter, or combination of letters) can often represent multiple sounds (e.g., *ea* in *speak* vs. *heart)*. An innovative section entitled *Technology Corner* includes links to online vowel instructional resources and practical ideas for utilizing resources such as *Google Pronunciation* and *Google Translate*. Activities in this section include listening discrimination activities with hyperlinks to the recorded sounds. These recordings use a North American accent model, which may limit their applicability to some classrooms. Other activities are described in relation to the nature of the production of the sound (e.g., how the mouth and tongue are positioned to produce the vowel sound described). Activities progress from listening discrimination tasks through to scaffolded, practice activities and then suggest how a teacher can guide students towards more independent production of the target sound taught in communicative activities (e.g., short, partner discussion activities that integrate vocabulary with the target sounds). The section on consonants outlines the concept of functional load in relation to

teaching consonant sounds. Drawing on research by Levis (2019), this section includes a helpful table of consonant contrasts to focus on, based on their highest functional load. Examples include the */p/* and */b/* distinction, which can cause confusion when mispronounced. Teaching activities are described following a similar format to the vowel activities, moving through listening discrimination activities and articulatory descriptions to controlled, guided and communicative activities. Such a structure provides teachers with a systematic approach for introducing and practicing specific English sounds when teaching oral communication skills.

In Part III, Zawadski notes how important *Suprasegmentals* (stress, rhythm, intonation) are for natural-sounding speech in Chapter 6. In the *Word Stress* section, the author emphasizes the importance of teaching stress patterns and rhythm to improve both intelligibility and the natural flow of speech. Misplaced stress can lead to misunderstanding. As English rhythm relies on stressed and unstressed syllables, the author explains how stress and rhythm patterns help speakers convey meaning in English. Rising and falling pitch patterns in speech (intonation) also affect meaning and speaker-listener interaction. Teaching suggestions in this section include identifying same/different words according to word stress heard, marking the main stressed vowel in a word and a hyperlinked interactive activity for students to record themselves reading a passage. Chapter 7, *Rhythm,* introduces readers to the nature of timing patterns in English and how these are built around stressed and unstressed syllables. Such patterns are important for teachers to understand, as they can affect how a speaker is understood and how easy/difficult speech may be for a listener to pick out important information a speaker is conveying. Zawadski notes that, for students accustomed to listening to syllable-timed languages such as French, Spanish, Italian, Japanese and many African languages, understanding how English utilizes rhythm can be key to facilitating oral communication. In Chapter 8, Levis introduces teachers to *Prominence*. A helpful clarification for readers who are familiar with this field in linguistics or applied linguistics is Levis' note that the term prominence (a "special blend of intonation and stress") has different names in pronunciation literature, such as sentence stress, nuclear stress or focus. This section includes activities that help students identify changes in meaning between questions based on where word stress is placed and dialogue activities in which students can practice where to place prominence to adjust meaning. Chapter 9 on *Intonation* deals with the melody or rising and falling patterns of pitch utilized in English speech and how these are used to convey meaning. Listening activities in this section introduce teachers and students to challenges of accurately perceiving how rising and falling intonation impacts on meaning in English. In Chapter 10, co-authors Levis and Challis unpack *Connected Speech,* describing "normal form vs. dictionary form" of English in the context of natural speech. This section introduces readers to how sounds are commonly deleted, added, reduced, or changed in informal speech. Teachers will appreciate the authors' suggestions for visually representing these processes in a sentence (e.g., linking C-V, or the consonant at the end of a word to the vowel at the beginning of a new word).

Part IV, *Assessment*, includes suggestions for diagnostic tasks that help teachers identify pronunciation issues and track student progress. Here, Levis also discusses the importance of providing corrective feedback and offering controlled practice opportunities, such as listen-and-repeat exercises, to help learners improve over time. Tasks begin with initial questions to ask and ways to generally assess a student's overall speaking and pronunciation needs and strengths. There are also suggested tasks to gauge specific areas such as vowel production, word stress and intonation. These include simple ways for a teacher to make notes quickly and unobtrusively on a student's progress and areas in need of support.

Teaching Pronunciation with Confidence is a welcome addition to current pedagogical literature in the field of English language pronunciation teaching. It provides academics, teachers and teacher educators with open access to research and teaching activities grounded in robust, empirical literature. One area I would like to see developed in the book is that of activities relevant to adult students with emergent levels of literacy in English. A suggestion could be to include references to resources currently available in literacy research (e.g., LESLLA). Perhaps activities that draw on plurilingual pedagogies and global Englishes could also be included in future developments of this excellent, teacher-friendly resource. I highly recommend this resource to teachers, trainers, and academics who are interested in learning more about the teaching of pronunciation in practice and thank the authors for making research accessible to classroom teachers through the OER platform.

References

Levis, J. M. (2018). *Intelligibility, oral communication, and the teaching of pronunciation.* Cambridge University Press. https://doi.org/10.1017/9781108241564

Literacy Education and Second Language Learning for Adults. (2024). *LESLLA.* https://www.leslla.org/

Open Educational Resources. (2024). *OER commons.* https://oercommons.org/

Skye Playsted is an educator with over 20 years of teaching experience who has taught in primary and high schools, academic English programs and in the adult migrant English program. She lectures part time in English, literacies, and language education at the University of New England and at the University of Queensland, where she is also a doctoral candidate. Skye's research explores professional learning and the teaching of pronunciation with teachers of preliterate adult EAL students.

ACTA Australian Council of TESOL Associations

Mission statement

ACTA is the national coordinating body representing all teachers of English to speakers of other languages. It aims to promote and strengthen English whilst supporting people's linguistic and cultural heritage. English is the language of public communication and the lingua franca for the many different sociocultural groups in Australia, as well as a major language of international communication. For full and effective participation in education, society, and in the international arena, competence in English is necessary.

TESOL is the teaching of English by specialist teachers to students of language backgrounds other than English in order to develop their skills in spoken and written English communication. At the same time, TESOL teachers strive to be sensitive to the diverse linguistic, cultural, and learning needs of individuals.

TESOL draws on a knowledge of the nature of the English language, first and second language acquisition, crosscultural communication, and appropriate curriculum, materials, and methodology for multicultural contexts. It is an integral part of the broader social, educational, and political context. It can inform and be informed by this context.

As a program, profession, and field of study and research, TESOL shares certain understandings and practices with the subject English as a mother tongue, child and adult literacy, languages other than English (LOTE), and bilingual and multilingual education, but also has distinct characteristics.

ACTA's objectives are

To represent and support the interests of teachers of English to speakers of other languages ACTA is committed to quality teacher training and professional development in TESOL and working conditions and career paths which enable teachers to have the stability and continuity of employment to develop, maintain, and deliver quality programs.

To ensure access to English language instruction for speakers of other languages ACTA is committed to ensuring that all students with ESL needs have access to programs that acknowledge and meet their diverse specific needs.

To encourage the implementation and delivery of quality professional development programs ACTA is committed to the development and maintenance of the highest quality programs for students at pre-primary, primary, secondary, and tertiary levels that are appropriately funded, resourced and staffed, and articulated in clear pathways.

To promote the study, research, and development of TESOL at state, national, and international levels ACTA is committed to ensuring that TESOL and TESOL related issues are debated and accorded due recognition in state and national policy initiatives as well as in the international community.