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# The Case of TESOL in Applied Linguistics

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**Abstract:** This paper considers TESOL as a case of applying applied linguistics to identify some tensions and the increasingly recognized complexities in past and current developments. Against a brief historical background of applied linguistics and the evolution of TESOL as a profession and as a focus for research, the paper makes consistent links with education. It considers some critical features of TESOL pedagogy, intertwined with applied linguistics: language teaching methods, individual differences, teaching English to young learners, the relationship with multilingualism, and using English as medium of instruction. These are also TESOL research areas as are recent developments for research ethics and uses of AI, among other future directions.

**Keywords:** TESOL; applied linguistics; language teaching and learning

## 1. Introduction

The term applied linguistics first emerged in the 1940s and 1950s in both Britain and the United States to denote an emerging academic discipline concerned primarily with developing the roles for linguistics in the teaching and learning of second and foreign languages, particularly English (Johnson & Johnson, 1998). Over time, the scope of applied linguistics has expanded well beyond its original pedagogical focus to encompass a broad, interdisciplinary engagement with seeking solutions to real-world language-related problems. Distinguished from theoretical linguistics by this problem-oriented and socially responsive orientation, applied linguistics now addresses issues spanning second language acquisition (SLA), language education, multilingualism, discourse and pragmatics, cognitive linguistics, sociolinguistics, language policy, and digital communication. Increasingly, applied linguists use their linguistic expertise to clarify how language mediates practices in a variety of professional and social contexts, such as health care, leadership communication, intercultural communication in business contexts, and interactions in hospitality and travel industries.

The evolution of applied linguistics has been closely intertwined with broader historical forces, including shifts in global politics, advances in technology, changing patterns of mobility, and evolving educational ideologies. These developments have repeatedly reshaped the questions those working in the field asks, the methods they employ, and the communities they serve. As a result, applied linguistics currently constitutes a dynamic and reflexive discipline, one that must continually revisit its intellectual foundations, critically reassess current practices, and anticipate emerging challenges related to the complexities of how people use language in an increasingly interconnected world.

Against this backdrop, the present paper offers a critical review of areas of applied linguistics with a particular focus on Teaching English to Speakers of Other Languages (TESOL). We begin by tracing key historical developments from the late nineteenth century through the late twentieth century, highlighting the socio-political conditions and theoretical shifts that shaped how applied linguists see the discipline. We then examine major contemporary research strands within TESOL, including SLA theories, learner motivation and individual differences, multilingualism, English-medium instruction (EMI), and the pedagogical implications of digital and AI-driven technologies. Finally, we consider future directions for the field, arguing that applied linguistics—and TESOL in particular—must continue to integrate rigorous theoretical inquiry with context-sensitive practice to remain socially relevant and educationally impactful. In principle, applied linguistics relates to any and all languages in the world, whether

they are widely used internationally (like Spanish, Arabic, Portuguese, or French as official languages in many countries), minority languages (like Portuguese, Persian or Punjabi in New York, London or Paris communities), or languages are disappearing for two reasons: as their remaining speakers, often elderly, pass away; or as younger speakers turn to speak more dominant languages (such language extinction happens to many languages each year). Within this picture, TESOL is a case of applied linguistics. This case is relevant world-wide since English as a foreign, second or other language is often considered to have dominant roles in many spheres of contemporary life in local, national and international contexts.

## 2. Applied Linguistics: Historical Development

Applied linguistics emerged as a distinct academic discipline in the mid-twentieth century, largely in response to practical language-related needs, most notably foreign language teaching in the aftermath of World War II (Howatt & Widdowson, 2004). A feature was to use linguistic methodological explorations of how language works and techniques of linguistic description more or less directly in the classroom with a target language. Early work in the field was heavily influenced by structural linguistics and behaviourist psychology, which conceptualized language learning as habit formation. This theoretical alignment gave rise to pedagogical approaches such as the Audiolingual Method, emphasizing repetition, with pattern drills to reinforce habits, aid memorization, and avoid errors. For example, minimal pairs of words differing only in one feature of pronunciation became used as classroom pronunciation teaching techniques for contrasting phonemes, or patterns of grammar shown by systematically substituting elements became rapid-fire oral classroom drills with cues for learner responses. Although later generative linguistics, with theories and techniques of analysis developed by Chomsky and others, was not generally applied to classroom practice, in the 1960s and 70s textbooks for English language teacher training courses did include transformational grammar techniques intended to be passed on directly for learners-. Chomsky himself questioned such immediate application, raising an interesting precedent about how applied linguists see theory-practice relations. An observable tendency then, and later, was for the latest idea in theoretical linguistic (or educational) circles to be applied in classrooms in opposition to whatever had gone before., so that historically there were oscillations between teaching the form (e.g., grammatical form) and teaching the functions (uses in contexts). Currently, however, applied linguistics is seen much more about solving real world problems in many social or professional contexts in which language is centrally involved, using in a multi-disciplinary approach. Theories for linguistics, combined with those developed in psychology, sociology or anthropology, may influence professional practices (such as teaching English) but those practices of using language can also influence theoretical stances and their concern.

Although generative linguistics itself was not directly applied to classroom practice, it redirected scholarly attention to learners' internal cognitive processes and contributed to the emergence of SLA as a distinct research domain. Seminal concepts such as *error analysis* (Corder, 1967) and *interlanguage* (Selinker, 1972) reconceptualized learner errors as evidence of systematic developmental processes rather than mere mistakes. How learners, in child language acquisition at home or in language classrooms, used language was seen not necessarily as deficiencies in relation to adult proficiency but rather as learning paths which teachers need to know about. This aimed to shift classroom practices towards more learner-centred ideas based on more positive views oriented to researched concepts of normal language development. English teachers were guided by such theories to cut down on transmission and direct classroom instruction but rather to engage students in activities with wider learner roles to promote their active learning.

During the 1970s and 1980s, applied linguistics expanded its analytical focus from sentence-level grammar to language use in social contexts (De Bot, 2015). Hymes's (1972) notion of *communicative competence* and Halliday's (1978) *systemic functional linguistics* foregrounded the social, functional, and contextual dimensions of language. These perspectives informed the development of Communicative Language Teaching (CLT) and stimulated research into discourse analysis, pragmatics, and sociolinguistics, further broadening the field's intellectual scope into social interaction and conveying meanings in real contexts with much more consideration of differing contexts. This trend emphasized social functions of language in communication, a movement which had been advocated periodically by experts in language pedagogy in the fifteenth, sixteenth and seventeenth centuries in Europe (Masumeci, 1997). Thus, a critical appreciation, with an eye for historical trends may find less innovation—apart from terminology—than was claimed by many applied linguists and language teacher at the time.

The 1980s and 1990s marked a period of diversification, both theoretically and methodologically. Influential SLA frameworks included Krashen's (1982) input hypotheses, Long's (1982) interaction hypothesis, and sociocultural approaches grounded in Vygotskian theory (Vygotsky, 1978), highlighting learner activity in calibrated comprehension with sufficient challenge to advance progress.

Neo-Vygotskyian theories have had strong influences on conceptions of learner activity, with key pedagogic techniques, such as scaffolding in interaction, which have given a wider research basis for TESOL: classroom practices related to teacher talk, uses of learner language in pair and groupwork were among evidence-based extensions from Vygotskian ideas. These developments

strengthened relationships between TESOL and applied educational studies (Moll, 1990; Lantolf & Appel, 1994).

At the same time, applied linguistics expanded into areas such as language testing, and assessment, corpus linguistics, professional and academic discourse, translation studies, and language policy, consolidating its status as a deeply interdisciplinary enterprise and, inevitably introducing new techniques and targets for research, besides wider perspectives Such developments began to relate analyses of language use to even wider contexts for practically any profession (e.g., in health care with doctor-patient talk, or workplace communication between local and migrant workers).

From the late 1990s onward, the field underwent an increasingly critical and social turn, emphasizing socio-political and socio-economic ideas. Scholars increasingly interrogated issues of power, ideology, identity, and inequality, leading to the emergence of Critical Applied Linguistics (Pennycook, 2001; Grabe, 2010). Considering the term 'critical', one could argue that all applied linguistics is necessarily 'critical' in the sense that applying linguistics necessitates using deep reflection for critical analysis and appreciation of language. Similarly, regarding 'applied linguistics', Michael Halliday once remarked, that all linguistics is, surely, 'applied' to real contexts; how could it be otherwise? However, critical discourse, and critical applied linguistics, is generally directed specifically to exposing underlying ideologies or positions of power and inequalities, through language analysis.

More recent developments have emphasized multilingualism, translanguaging practices, global Englishes, and digitally social, economic and politically mediated communication, reflecting contemporary sociolinguistic realities of positions of languages world-wide and their speakers, with some attention to media technologies. To some extent, the understanding of multilingualism—and the many roles of different languages in different contexts around the world where English is learned—has meant that TESOL professionals now need to consider, when teaching English, how the speakers, as students who adopt roles and engage in daily functions of all the other languages used in their communities. In language education TESOL cannot stand alone.

Taken together, these developments illustrate the field's evolution from a relatively narrow pedagogical endeavour to a theoretically informed, socially engaged, and problem-driven discipline. Applied linguistics is now more complex, with greater diversity but more specialization, and more roles, in inter-connected communities world-wide—because language is everywhere, used by everybody directly or indirectly for practically everything.

## 3. Applied Linguistics: The Case of TESOL

### *3.1. TESOL as a Profession*

TESOL, an acronym for Teaching English to Speakers of Other Languages, has been used for over a century to denote the professional practice of English language teaching in both second and foreign language contexts, thus catering to a remarkable range of differing purposes of teaching and learning English at different levels in different institutions internationally Teaching English has a global reach: in state educational systems; in private schools and institutions; in international relations, sciences and commerce; and how the business of English has itself become a commercial enterprise with chains of language schools and profitable English textbook sales. Unsurprisingly, there is need for establishing organizations to consider coordinating professional practices and disseminating research and teacher development around the world.

While applied linguistics has expanded into a constellation of subfields addressing diverse language-related issues, TESOL has remained one of its most visible, professionally organized, and widely published domains, supported by a robust international infrastructure (Liu & Berger, 2015). This has meant that for some years English teaching (and associated research, methods, and materials developments) has retained the position of being a precedent and innovative model for the teaching of many other languages around the world. This is often evident in the design and spread of published materials for other target languages (Jin & Cortazzi, 2011).

As a profession, TESOL refers to the community of skilled practitioners engaged in the teaching of English as an additional language, as well as those who directly shape pedagogical decision-making in instructional contexts (Liu & Berger, 2015). This professional community extends beyond classroom teachers to include learners, researchers, curriculum designers, materials developers, teacher educators, test developers, tutors, and educational administrators, and sometimes other stakeholders, such as teachers' assistants and parents and care givers of school children. Together, these actors contribute to the knowledge base, ethical standards, and institutional practices that define the profession and, of course, the dissemination and uses of English is so many contexts.

Importantly, TESOL professionalism is not a static construct. Lorimer and Schulte (2011) characterize it as a *shifting and negotiated identity*, continually shaped by the collective practices and values of its members. Judd (2006) argues that a profession is distinguished by a recognized body of knowledge, systems of certification or licensure, a shared code of ethics, professional autonomy, and a commitment to public service. Building on this framework, Liu and Berger (2015) emphasize that TESOL professionalism is inherently multidimensional, encompassing disciplinary knowledge, pedagogical expertise, ethical awareness, contextual sensitivity, and reflective practice. From this perspective, professionalism in TESOL is best understood as an ongoing process rather than a

fixed status—one that requires continual adaptation to changing learner needs, institutional demands, and socio-political conditions. This point about professionalism is important because conceptualization of the nature of professions is changing, so that what counts as 'professionalism' is seen differently.at different times and in different contexts It may now include ideas about wider responsibilities in ethical practice and standards of service delivery, communicational transparency, and public accountability. This means that guidelines for professional practice and codes of ethics regarding many issues should be extensively known and practised. For this, TESOL can take up the precedents from applied linguistics developed through research considerations over recent years (Kubanyova, 2008; De Costa, 2016; Egido, 2020). Ethical principles involve a sense of responsibility and integrity to do the right thing. Some are obvious: such as responsibility to students, colleagues, researchers, institutions or sponsors and partnerships; others may at first be less obvious, like responsibility to the public and to applied linguistics or TESOL as a profession (for reputational integrity and, basically, enacting professional behaviour) (BAAL, 2021).

In part, these changes in profession mean that English teachers may have less autonomy for curricula and classroom procedures within larger institutions and educational systems in which the nature of TESOL may not be widely appreciated by colleagues in other disciplines This is complex because the nature of TESOL has always been international, so professionalism for TESOL is not just local but global, with many social and cultural implications, e.g., regarding professional collegiality or the ethics and responsibilities) of what it means to be a good teacher.

### *3.2. TESOL as a Field of Study*

TESOL as a field of study encompasses research and scholarship aimed at informing decisions about the teaching and learning of English as a foreign, second or additional language (Liu & Berger, 2015). As an applied domain, TESOL draws on a wide range of disciplines, including linguistics (e.g., sociolinguistics, psycholinguistics, corpus linguistics), education, psychology, sociology, anthropology, intercultural communication, SLA, and language policy and planning (Howatt & Widdowson, 2004). This interdisciplinary foundation reflects both the complexity of language learning processes and the contextual diversity in which English is taught worldwide. It means that increasingly there are complex strands of diverse specialization within TESOL, with implications for professional development and careers. TESOL professionals, like those in applied linguistics, have evolved more varied and increasingly complex answers to apparently basic questions: What is language, how is it used and how is it learned and developed? What kinds of language do we teach, to whom, how, why, where and under what circumstances. How—and why and where—is teaching changing under the impact of technologies? Because English is learned and used by so many people in so many ways, for so many purposes in different contexts, TESOL seems (as some linguists had defined language in the last century) increasingly like 'a system of systems', ever evolving in complexities at different levels.

A defining characteristic of TESOL research is its strong orientation toward pedagogical relevance. Yet for many specialists engaged in TESOL over the years, it took decades for them to conceive of TESOL as educational development, involving more than language skills but also thinking and social skills, besides emotional and maturational development or acquiring intercultural dispositions. At least in primary or secondary schools it is increasingly clear that TESOL professionals teach more than language—as all schoolteachers teach more than their discipline or special subjects.

While much SLA research has traditionally prioritized experimental designs and theory testing (Ellis, 2008), TESOL scholarship often foregrounds classroom-based inquiry, action research, and practitioner-led studies. These approaches generate context-sensitive insights into teaching practices and learner experiences, particularly in settings where controlled experimental conditions are difficult to achieve. After, all, the classroom is not a laboratory. It is notoriously difficult to conduct recognized experimental research in classroom contexts because of the huge number of variables involved and difficulties of the feasibility to validly compare classroom, methods, teachers, and learners in different contexts or to isolate English learning from other informal out-of-class or other institutional learning.

Liu and Berger (2015) identify seven defining characteristics of TESOL research: It is classroom-based or classroom-oriented; conducted by or with teachers; outcome-driven; flexible in design; context- and case-sensitive; reflective; and empowering for practitioners (pp. 98–101). Collectively, these features underscore the field's commitment to linking theory and practice. Rather than privileging methodological purity alone, TESOL research evaluates rigor in relation to ecological validity and pedagogical impact. As such, scholarship in this field contributes in different directions, not only to theoretical advancement but also to the improvement of teaching quality and learner outcomes across diverse educational contexts. Often the balance between these tensions of directions shifts in both applied linguistics and in TESOL.

This implies that theory-practice relations are not simply bi-directional but have reciprocal relations with contexts and ideas about the nature of language, what teaching is for, the purposes of learning or the purposes of education—but these are shifting concepts in different cultures. Thus theory-practice relations are more like networks of complexes of interlocking wider systems. However, this is shifting ground because conceptions of the roles of theory and practice are changing and in the

educational contexts of TESOL it is noticeable that worldwide notions of the functions and purposes of education and ways of learning are changing, for instance in relation to technologies, uses of languages, ethical responsibilities for TESOL practitioners, among other features.

### *3.3. TESOL as an International Association*

TESOL International Association (originally TESOL, Inc., Alexandria, VA, USA) was founded in 1966 and has played a central role in shaping both the profession and the field of TESOL. Dr. James E. Alatis served as the association's first Executive Secretary (now Executive Director), and Professor Harold B. Allen was its founding President. Together with the Executive Committee and early members, they established organizational policies and professional norms that laid the foundation for the association's rapid growth and international influence.

The shared name of the association and the field is not coincidental. While *TESOL* as an association refers to *Teachers of English to Speakers of Other Languages*, *TESOL* as a field of study denotes Teaching English to Speakers of Other Languages. The dynamic interaction between these two meanings—professional practice and scholarly inquiry—has been instrumental in consolidating TESOL's status within applied linguistics.

Over the past six decades, TESOL International Association has expanded into a global organization with more than 100 affiliates worldwide. Its flagship journal, *TESOL Quarterly*, has become one of the most influential publication venues in applied linguistics, disseminating cutting-edge research that informs theory, policy, and classroom practice. At its peak, the annual TESOL convention attracted over 10,000 participants, serving as a major forum for professional development and scholarly exchange.

In addition to conferences and publications, TESOL International has periodically articulated research agendas for the field and maintained democratic governance through annual presidential elections and oversight by a Board of Directors. Supported by its Central Office, the association has functioned not only as a professional network but also as a symbolic and institutional anchor for TESOL worldwide. In this sense, TESOL International Association stands as a defining pillar of applied linguistics, exemplifying the integration of scholarship, pedagogy, and professional practice. In some ways, TESOL International can still stand, as it has done over the years, as a model through which to develop other English teaching or applied linguistics associations in many countries outside the obvious English-speaking states.

## 4. TESOL: Some Contributions in Research

### *4.1. Second Language Acquisition*

Some theories proposed in the last century in the field of second language acquisition (SLA) have continued to have a significant impact on research and practice in the wider field of applied linguistics (Ellis, 2008). For instance, Gardner's (1985) socio-educational model has provided theoretical foundations for many recent studies (Lai, 2009; Kim & Shin, 2021; Wang, Wang, & Wei, 2025; Wei et al., 2025). This is understandable because it links language learning motivation, achievement and success with social and educational variables.

In SLA research, Gardner and Lambert first introduced the notion of integrative motivation in the late 1950s (Lamb, 2004). Gardner and Lambert's (1972) seminal distinction between integrative versus instrumental motivation remains fundamental for understanding learner orientations. Integrative motivation reflects intrinsic desires, where learners pursue language acquisition to establish personal connections with target language communities or cultures. In English as a Foreign Language (EFL) context, students may want to emulate someone they admire (e.g., "I remember as a child that my uncle could read English; I was so impressed.") or may be interested in the cultures related to English and want to learn it for that reason. These are instances where "instrumental motivation is at issue" (Liu & Berger, 2015, p. 264). In contrast, instrumental motivation occurs when language learning serves as a means to achieve extrinsic goals, such as career advancement (e.g., English for tourism employment) or academic requirements (e.g., reading discipline-specific literature). More recently, Kim and Shin (2021), citing Gardner's (2010) work, observe that the more recent definition of integrative motivation embraces broader concepts than those originally defined. Integrative motivation now involves "not only the orientation but also the motivation (i.e., attitudes toward learning the language, plus desire plus motivation intensity) and a number of other attitude variables involving the other language community, out-groups in general, and the language learning context" (Gardner, 1985, p. 54). Integrative motivation also "reflects a genuine interest in learning the second language in order to come closer to the other language community" (Gardner, 2001, p. 5). Such developments, with later research, may provide important clues for teachers about changing some learners' reluctance or resistance to learning English in school settings in some places.

As observed by Liu and Berger (2015, p. 130), there are "numerous alternative theories to motivation." Accordingly, definitions of motivation may range from as simple as what makes students "take up language learning" (Wei, Wang, & Wang, 2024, p. 2) to much more complex theorizations (e.g., Dörnyei, 2020). Some critics of Gardner's work have even proposed different conceptualizations. For instance, the concept of "investment," coined by Norton (1995) and based on Bourdieu's work on identity, is "meant to improve upon Gardner and Lambert's classification of integrative and instrumental motivation" (Liu & Berger, 2015, p. 262), which Norton deems inadequate. Because much of Gardner and colleagues' research

has been conducted in second language learning contexts in Canada (with English-speaking Canadians learning French and French-speaking Canadians learning English), many critics claim that their findings may not apply to other countries or foreign language learning contexts (cf. Lamb, 2004). To determine the applicability of his research to other countries, Gardner initiated a project to examine the learning of English as a foreign language in six countries: Brazil, Croatia, Japan, Poland, Romania, and Spain. Based on an analysis of the empirical evidence from the Spanish EFL context, Gardner (2007, p. 19, emphasis added) clarified that "… we often talk about an integrative motive in second language learning. This was never meant to imply that you needed an integrative motive to learn a second language".

Newer developments regarding motivation include the concept of different 'selves' for language learning, such as an 'ought-to' self-related to required duties and perceived obigations to learn English, and an 'ideal self', a visualized future self which uses the language in contexts—teachers can help students articulate and sustain such visions, thus motivating learners through a shared vision (Dörnyei, 2020; Dörnyei & Ushioda, 2021).

Another influential theory proposed in the last century is Krashen's (1982) SLA theory, which comprises five important hypotheses: (1) the Acquisition-Learning Distinction, (2) the Natural Order Hypothesis, (3) the Monitor Hypothesis, (4) the Input Hypothesis, and (5) the Affective Filter Hypothesis. These were widely promoted in North America and elsewhere through accessible books, and English teachers' conferences, besides films and television programs which were used in teacher training programs. Due to space constraints, we focus on Hypothesis (4) here. A term coined by Krashen (1982, 1985) in the formulation of his Input Hypothesis, "comprehensible input" refers to the idea that natural language development occurs through exposure to language that is understandable to the learner. Comprehensible input is defined as language input that is just one level beyond the learner's current ability in the second language, commonly referred to as $i + 1$. This echoes Vygotskian ideas about the 'zone of proximal development' and 'scaffolding' connected to teacher talk in classroom interaction, and pair and group-work. If the input is too simple (at the learner's level, consisting of forms they have already acquired) or too complex (such as $i + 2$), it will not effectively facilitate language acquisition.

Like other theories from the field of SLA, the Input Hypothesis has faced criticisms for its vagueness and circularity (see also Gregg, 1984; Swain, 1985; White, 1987). On the one hand, there is no operational definition of $i$ or the levels above it. In other words, this theoretical hypothesis fails to establish measurable parameters for either baseline competence ($i$) or progression increments ($i + n$), rendering this hypothesis empirically unverifiable. On the other hand, the hypothesis posits that language develops from comprehensible input, yet the input is considered comprehensible only when language acquisition has occurred. This logical fallacy largely undermines the credibility of the Input Hypothesis, as input is posited as both the cause and the outcome of language acquisition. Despite these criticisms, Krashen's Input Hypothesis remains a key driving force behind the Natural Approach to language teaching as well as Task-Based Language Teaching (TBLT). For instance, many teachers who have received training on the application of this hypothesis have been made cognizant of the importance of providing "as much comprehensible input as possible" and making input "interesting" enough to create "a relaxed classroom atmosphere" (Richards & Rodgers, 2014, p. 267). The Output Hypothesis counter-balances Input with the idea that language production in meaningful communication helps the learners to identify gaps in what they know and can do with effective accuracy (Swain, 2000). This might imply developing learner motivation and confidence through active engagements in, say, role plays and collaborative writing tasks and other peer interaction with teacher feedback.

A third influential theoretical concept proposed in the last century is the so-called critical period hypothesis, which continues to be influential not only in theory and research but also in language teaching. The critical period hypothesis is a biological theory that suggests certain cognitive developments need to be attained before some skills can be learned (this was part of the influential Piagetian theory of developmental stages which was widely used in teacher training) and, more interestingly, that if a language is not learned early in childhood then it may not be fully developed, at least in pronunciation and some elements of grammar. Lenneberg (1967) argued that language acquisition must happen before puberty for typical language development. However, confirming this idea is challenging.

The most frequently understood "critical period" is reflected in Scovel's (1988, p. 2) definition: "In brief, the critical period hypothesis is the notion that language is best learned during the early years of childhood, and that after about the first dozen years of life, everyone faces certain constraints in the ability to pick up a new language." This is, of course, a popular reason why English for young learners as a foreign language is often popular in kindergartens or early primary education. This hypothesis posits that native-like proficiency is harder to attain post-adolescence, though adult learners can achieve high competence through tailored strategies. However, different researchers have also used terms like "optimal" (e.g., Asher & Garcia, 1969) and "sensitive" (e.g., Patkowski, 1980) as alternatives to "critical" in the title of this hypothesis, reflecting "an air of uncertainty" (Ottó & Nikolov, 2012, p. 34) in the literature about its validity. The concept of the critical period remains highly controversial within the field of SLA, largely because most of the relevant research

has been conducted in second language education settings (e.g., English as a Second Language [ESL] settings, rather than in English as a Foreign Language [EFL] environments). In ESL contexts, learners are fully immersed in the target language; in contrast, in EFL settings, learners typically have minimal exposure to the target language outside the classroom. Consequently, they may benefit more from early first language (L1) literacy training, with L2 language instruction introduced at a later stage in their educational journey (Liu, 2007a, 2007b). Furthermore, studies conducted in the past 15 years in EFL contexts consistently show that starting language instruction a couple of years earlier or later during elementary or middle school does not result in significant differences in the levels of target language proficiency attained years later (cf. Ortega, 2023). One reason for successful later learning is that learners have more maturity and bring more developed mental and emotional skills to English learning, if sufficient time is available. Easy to find examples of such older adult earning counter the critical age position (except for pronunciation where habitual phonological settings may make pronunciation learning more difficult).

The controversy surrounding the critical period hypothesis persists. The primary issue, or what Ortega (2023, p. 33) refers to as the "culprit," appears to be the limited exposure to the target language in foreign language education settings, which often consists of only two to three hours per week in many school systems. This issue will be revisited when we discuss English-medium instruction (EMI).

### *4.2. Language Teaching Methodology*

Debates surrounding language teaching methodology have occupied a central place in TESOL scholarship, particularly in relation to the viability of method-based instruction in increasingly diverse, and international, educational contexts. At the turn of the twenty-first century, Liu and Richards (2001) posed a pivotal question: *Do methods still matter in contemporary language teaching*? To address this issue, they conducted a large-scale international survey involving 448 TESOL professionals drawn from a global sample.

Findings from this survey revealed that Communicative Language Teaching (CLT) and eclectic approaches were the most widely recognized, preferred, and implemented pedagogical orientations. However, when contextual variables—such as instructional setting, learner proficiency, class size, teacher experience, and linguistic background—were considered, patterns of method use became far more nuanced. Notably, Grammar Translation remained prevalent in EFL contexts characterized by large class sizes and lower learner proficiency, despite teachers' expressed preference for communicative approaches (Jin & Cortazzi, 2011). This discrepancy between stated beliefs and classroom practices highlighted the limitations of prescriptive method labels.

Based on these findings, Liu and Richards (2001) proposed a reconceptualization of language teaching methods, anticipating what later came to be described as the *post-method* condition. Rather than advocating for the abandonment of methods altogether, their framework emphasized principled flexibility, contextual responsiveness, and teacher agency. A quarter of a century later, many of these conclusions remain strikingly relevant. The persistence of contextual constraints, coupled with growing recognition of teacher cognition and local pedagogical knowledge, suggests that TESOL has largely moved beyond rigid methodological orthodoxies toward adaptive, context-sensitive practice. This resonates with Spolsky's (1989) conception of conditions for second language learnings, revealed by combining many SLA studies known at that time, and Widdowson's highlighting how principles, influenced by theory, may be the significant factor for practical teaching, rather than a theory *per se* (see Cook & Seidlhofer, 1995). As such, the methods debate has evolved from a question of *which method* to one of *how pedagogical principles are enacted under real-world constraints*.

### *4.3. Individual Differences of the Learner*

Learner individual differences (IDs) constitute a major research domain within applied linguistics and TESOL, reflecting sustained interest in understanding variability in language learning outcomes. Taxonomies of IDs range from relatively simple dichotomies—such as linguistic versus non-linguistic outcomes (Gardner, 1985) or cognitive versus non-cognitive factors (Shen & Wei, 2025; Wei, 2023)—to more comprehensive classification systems. Liu (2002), for example, proposed a five-category framework encompassing cognitive, pedagogical, affective, sociocultural, and linguistic factors, underscoring the multidimensional nature of learner variability.

Among psychological IDs, *tolerance of ambiguity* (TA) has attracted increasing attention in recent years. Originally defined as "the tendency to perceive ambiguous situations as desirable" (Budner, 1962), TA is particularly relevant to second and additional language learning, which inherently involves uncertainty, indeterminacy, and evolving meaning systems (van Compernolle, 2017). Empirical research has increasingly examined TA in relation to multilingualism, drawing on validated measurement instruments such as Herman et al.'s (2010) scale.

Recent studies have demonstrated the cross-cultural robustness of a core TA dimension. Dewaele and Li (2013) identified a three-item "TA core", hypothesized to function consistently across linguistic and cultural contexts. Subsequent research in EFL settings has confirmed this structure. Wei and Hu (2019) validated the TA core in Chinese contexts, and Wei, Kang, and Wang (2022) further

examined its relationship with multilingualism among 302 English-knowing multilinguals in China. Using factor analysis and hierarchical regression (cf. Wei, Liu, & Wang, 2020), these studies identified multilingualism, age, educational attainment, and English proficiency as significant predictors of TA, with effect sizes indicating modest and meaningful associations.

Importantly, these findings invite caution against simplistic causal interpretations. Although regression analyses are often misconstrued as evidence of causality, the relationships between multilingualism and psychological traits such as TA are likely reciprocal. As Dewaele and Li (2013) argue, multilingualism may both shape and be shaped by learners' psychological profiles. Higher proficiency in additional languages may foster adaptive traits such as ambiguity tolerance, while individuals predisposed to such traits may be more inclined to pursue and sustain multilingual learning trajectories. This bidirectional perspective aligns with contemporary views of learner IDs as dynamic, context-sensitive, and developmentally contingent rather than fixed attributes.

### *4.4. Teacher Research*

Parallel to the shift in TESOL towards learner-centred pedagogies, which gave prominence to learner's needs and individual learner differences, there has been a complementary shift centring on teachers. This has focused on teachers in two ways: the study of language teacher cognition and the study of teachers doing research. Teacher cognition has focussed on the theme that what teachers do (e.g., how they plan and make decisions) is influenced by how teachers think (e.g., their thought processes, not as machines but as people and professionals). Research has examined the changing thinking, professional knowledge, beliefs, assumptions and values of pre-service and novice teachers, and of more experienced veterans, e.g., in teaching grammar or reading (Woods, 1996; Borg, 2010). Research methods include combinations of analysing self-report questionnaires and the rating of scenarios, teachers' verbal commentaries on scenarios and critical incidents in interviews, classroom observation and reflective writing in teacher journals (Barnard & Burns, 2012). Some teacher research in this direction takes an 'ecological approach' (Kramsch, 2002; Van Lier, 2004) or analysing 'systems of complexity' (sets of elements related or interacting to form an organic whole) (Larsen-Freeman & Cameron, 2008) to reveal inter-connections and reciprocal relations between teacher beliefs, classroom contexts, and practices (e.g., Zheng, 2015, examines teachers in China).

A second direction of teacher research is the research carried out by language teachers which builds on long traditions of action research in numerous fields of education. Mainly this involves teachers carrying our research projects in their own classrooms but sometimes language teachers are co-participants with a researcher from outside. Apart from interesting local outcomes of such a project, an indirect aims is to raise knowledge and skills, and appreciation of research processes (thus this process as research training is sometimes built into Masters programs in TESOL) (Burns, 2009). This teacher research is, as all applied linguistics research, systematic in attempts to conduct investigations consciously and reflectively to achieve real-world impact related to issues of language and language teaching and is made public. Impact might be related to teachers or to students (in both cases: their knowledge, attitudes, values and skills). This kind of teacher research has its own complexities of being situated in local contexts but as case studies they can be of interest internationally (Borg & Snachez, 2015).

### *4.5. Multilingualism*

Today, increasing global interconnectedness—driven by globalization, transnational migration, commerce, and technological advances—has led to greater recognition of the ability of individuals and societies to use multiple languages for diverse purposes, often daily (Liu & Berger, 2015). This reality has resulted in heightened attention to multilingualism in education as well as in other domains of social and everyday life. Indeed, multilingualism is now regarded as "a powerful fact of life in many parts of the world" (Wei et al., 2021, p. 291). Within applied linguistics, multilingualism has attracted research in different perspectives (e.g., Jaumont, 2022).

Regarding some key terms, it is important to note that researchers use the terms *bilingual/bilingualism*, *trilingual/trilingualism*, and *multilingual/multilingualism* in different ways, depending on their analytical perspectives and areas of specialization (Liu & Berger, 2015; Wright & Baker, 2025). A useful starting point for addressing definitional issues is the following concise description of individual-level multilingualism: Multilingualism refers to "at least partial mastery in a number of languages" (Dewaele & Li, 2013, p. 231). This flexible definition has been widely adopted in recent research (van Compernolle, 2017; Wang & Wei, 2024; Wei & Hu, 2019; Wei et al., 2021). At the same time, some scholars emphasize distinctions between bilingualism and multilingualism, arguing that the mechanisms of "multilingual acquisition" (Cenoz, 1997, p. 278) involving three or more languages are more diverse and complex than those underlying bilingual acquisition (see also Jessner, 2006; Pfenninger, 2014).

At its core, multilingualism is a complex and multidisciplinary phenomenon that can be examined from a range of perspectives (Liu & Berger, 2015). There are comprehensive guides to this field from applied linguistic viewpoints, which together provide excellent overviews of this complex area (De Houwer & Orega, 2018; Aronin, 2022; McKinney et al., 2023).

The material presented in this section is not intended to represent the full scope of multilingualism research. Rather, we highlight Wei, Chen, and Wang's (2024) research synthesis on emergent multilinguals to illustrate the richness of contemporary scholarship. Their synthesis addresses a critical gap in applied linguistics by examining late-life additional language (Lx) learning among adults aged 50 and above. As van der Ploeg et al. (2020) observed, this domain remains "a relatively new and unexplored territory" (p. 103).

Wei et al.'s (2024) synthesis pursued three overarching aims: (a) systematically reviewing empirical evidence on late-life Lx learning, (b) advocating for policy interventions (e.g., Lx courses in Universities of the Third Age [U3As]), and (c) proposing a psychological bilingual advantage hypothesis, which suggests that bilingualism may enhance psychological skills, states, and/or traits (e.g., tolerance of ambiguity and well-being).

The synthesis drew on 47 peer-reviewed studies published between 1900 and 2022, identified through systematic screening of Web of Science databases using 33 keyword combinations (e.g., "language learning AND older adult"). Methodologically, the authors adopted Lambert's (1974) bilingualism typology to classify findings into additive (Lx learning without L1 loss) and subtractive (Lx replacing L1) contexts. The coding process achieved 91.5% intercoder agreement, exceeding the recommended benchmark of 85–90% (Miles et al., 2014).

Three dominant themes emerged from research conducted in additive bilingual contexts (37 studies). First, learner-internal factors, such as neural connectivity, significantly predicted Lx accuracy ($\beta = 0.23$, $p = 0.02$; Kliesch et al., 2022), while external factors, including phonetic instruction, enhanced phonological awareness (Felker et al., 2021). Second, findings on cognitive outcomes were mixed: Klimova et al. (2020) reported no significant improvement, whereas Wong et al. (2019) identified medium-sized effects ($d = -0.61$) in delaying cognitive decline. Third, noncognitive benefits were salient, particularly in emotional well-being, with survey data indicating that "foreign language enjoyment was more frequently reported than foreign language classroom anxiety" (Geng & Jin, 2023a, p. 18), both of which are related to their motivation of English learning (Geng & Jin, 2023b). The authors cautioned against overreliance on Cohen's effect size benchmarks, noting that such metrics "do not have absolute meaning" (Wei et al., 2024, p. 21) without appropriate contextual interpretation.

In subtractive bilingual contexts (10 studies), research highlighted systemic barriers faced by older immigrants, including restrictive language policies and ageism (Al Ajlan, 2021). Nevertheless, Lx proficiency was strongly associated with social integration and mental health outcomes (odds ratio = 1.82 for well-being; Lee et al., 2022). The synthesis emphasized the need to address underserved populations, aligning research equity with Dewaele's (2023) call for "social justice in society" (p. 5).

Overall, Wei et al. (2024) underscored the role of Lx learning in promoting active aging and advocated for policy reform and methodological refinement. The authors prioritized effect size reporting over sole reliance on *p* values (cf. Shen & Wei, 2025; Wei et al., 2019) and recommended integrating self-report data with more objective measures (e.g., neuroimaging and standardized tests). Their forward-looking research agenda included empirical testing of the psychological bilingual advantage hypothesis and incorporating non-English-language studies to diversify the evidence base. As they concluded, inclusive research "contributes to a more socially just society" (Wei et al., 2024, p. 25), a vision that resonates across applied linguistics.

### *4.6. Teaching English to Young Learners*

Worldwide, billions of children are beginning to learn English at increasingly younger ages (Liu & Berger, 2015). In China, for example, English has been introduced nationwide at Grade Three (approximately age nine) in nearly all primary schools since 2001 (Kong & Wei, 2019; Liu, 2007c) and in many cities' parents send their children to kindergartens which popularly teach English (Jin & Cortazzi, 2019). Advocates of compulsory early English education often cite the critical period hypothesis in second language acquisition (SLA), despite its controversial status. Yet many parents believe that early starting to learn English as a second or foreign language gives their children not only linguistic but also cognitive and social advantages for later education. However, implementing early English education in foreign language contexts presents substantial challenges.

Despite ongoing debates regarding the effectiveness of early English instruction and critiques of the critical period hypothesis, it would be "irresponsible" (Liu & Berger, 2015, p. 23) for applied linguistics researchers, practitioners, and policymakers to disregard the potential of young learners and the importance of research-informed pedagogical approaches (Pinter, 2017; Garton & Copland, 2019). Given that young learners' motivation, attitudes, anxiety, and other affective variables are particularly sensitive to contextual factors, policymakers must carefully consider issues such as the availability of learning facilities at home and school, societal attitudes toward English, learners' socioeconomic status, teaching quality, class size, and access to supplementary tutoring services (Liu, 2007).

### *4.7. English-Medium Instruction (EMI)*

English-medium instruction (EMI), which originated from content-based instruction (teaching a foreign language mainly through teaching specific subject content, rather than concentrating directly on the language) refers

to the teaching of academic subjects through English in both STEM (science, technology, engineering, and mathematics) and non-STEM disciplines (e.g., humanities, social sciences, and the arts). Pedagogical methodologies in these domains differ substantially. In STEM education, instruction typically emphasizes structured, quantitative data (e.g., protein-folding simulations or astronomical measurements), prioritizing precision, prediction, and optimization (e.g., disease diagnosis or traffic-flow modelling) (Pun & Jia, 2026). In contrast, non-STEM instruction focuses on interpreting unstructured, qualitative data, such as literary texts, emotional expressions, and social behaviours, where nuance and interpretability are central (Liu, 2025).

Criteria for instructional success also diverge across disciplines. STEM education prioritizes empirical validation, including accuracy, reproducibility, and efficiency, whereas non-STEM education often relies on ethical, cultural, and creative frameworks. For example, historical narratives and philosophical inquiry are evaluated for depth, contextual sensitivity, and interpretive insight rather than technical correctness alone. Teaching creativity in non-STEM fields may involve reconstructing lost cultural artifacts or interrogating biases in data, underscoring the humanistic dimensions of inquiry (Liu, 2025). EMI is notably of wide current interest for international perspectives and from the widening ranges of appropriate research methods (Pun & Curle, 2021, 2024). This is noticeable in higher education where EMI programmes have developed rapidly in many countries outside traditional English-speaking areas (McKinley, 2012; Lasagerbaster & Doiz, 2021; Bolton et al., 2024; Costa & Marotti, 2024) specific examples among many relate to EMI in Italy (Guarda, 2021), South Asia (Giri et al., 2023), and Hong Kong (Pun & Jia, 2026).

### *4.8. AI and Its Impact on English Language Education*

Language teaching histories have long been mediated by simpler or more complex technologies, such as audio and visual recordings and then computer-assisted language learning (CALL) which refers to "a subgroup of foreign language teaching … that works to integrate computers to facilitate the processes of learning and teaching language" (Liu & Berger, 2015, p. 249). Typical CALL applications include computer-mediated communication (e.g., email or voice chat) with other language learners or native speakers, as well as the use of digital tools to create multimedia portfolios or conduct cultural research using online dictionaries and translation tools.

Similarly, AI-augmented language learning can be understood as a subgroup of Lx teaching and learning that integrates artificial intelligence tools (e.g., ChatGPT, DeepSeek, Scopus AI) to enhance instructional and learning processes. With rapid technological advances, AI has the potential to benefit applied linguistics and related disciplines through efficient information retrieval, data analysis, problem-solving, and text generation. Machine learning and deep learning models further enhance these capabilities through improved algorithms and prompt design. In certain contexts, AI performance may rival or exceed human efficiency, such as in medical imaging analysis to assist diagnostic decision-making.

At the same time, the impact of AI varies across disciplines, and interdisciplinary contributions are essential. Scholars in sociology, psychology, and anthropology can shed light on AI's effects on social attitudes, family life, employment practices, leisure activities, risk perception, and cognitive processing. Linguists, literary scholars, and philosophers can contribute to understanding AI's influence on communication, translation, genre, literacy practices, creativity, and ethical reasoning, as well as broader questions concerning human identity, knowledge, and truth.

From a humanities perspective, ethical considerations surrounding AI extend beyond updating regulations and legal frameworks—important though these are. Humanities disciplines offer critical tools for addressing fundamental questions: What are the aims and purposes of AI applications? What are their intended and unintended consequences for individuals, societies, and the environment? Who benefits, and who may be disadvantaged? How do AI technologies affect professional practice, social welfare, and global cooperation? To what extent are these technologies within human control, and how can ethical awareness help prevent misuse and harm? These are the questions language educators often ask and yet they are difficult to answer because of the complexities and ambiguities in different contexts.

## 5. Conclusions

This paper has traced the historical foundations, contemporary developments, and future directions of applying linguistics within the context of TESOL. A consistent pattern emerges: The discipline's resilience and adaptability are grounded in its enduring commitment to addressing practical linguistic challenges in diverse and evolving contexts. Historically, applied linguistics developed in response to socio-political demands, such as wartime and postwar language training. Sometimes apparent innovations are repetitions of past traditions, say, in tensions between teaching language forms or language functions, or swings between teacher-centredness and learner-centredness. In the present era, the field demonstrates increasing sophistication in its understanding of learner psychology, multilingualism, and technological innovation. Much of the process of applying linguistics is finding and accounting for complexities of systems, language ecologies, and variations of practices.

Looking ahead, applying linguistics faces both significant challenges and promising opportunities, particularly

in relation to artificial intelligence, big data analytics, and expanding educational paradigms such as English-medium instruction. The task for linguists, educators, and policymakers is clear: to remain methodologically agile, foster interdisciplinary collaboration, and uphold commitments to inclusivity and equity in language education. Ultimately, the vitality of the field will depend on sustaining a productive dialogue between rigorous theoretical inquiry and practical application, ensuring that applied linguistics continues to address the linguistic complexities of an increasingly interconnected world. This interconnectedness has further implications: applied linguistics will be seen as relevant for its insights and practical implications in many or most professions (since most or all use language to mediate their practices and development). Such interdisciplinarity affects TESOL, too, as besides the ever-continuing foundational school and college courses, English teaching also focuses on increasingly specialist and more advanced uses of English for an even wider range of academic, professional, business and commercial developments. Even further, language—and often specifically English—is vital for mediating coordinated local, national and international solutions for world issues, such as attaining the United Nations Sustainable Development Goals. These truly global issues—and of course their solutions—affect all humanity, so in this way applied linguistics (and TESOL) indirectly affect all on earth.

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J.L.: conceptualization, methodology, writing—original draft preparation, supervision, and writing—reviewing and editing; R.W.: conceptualization, writing—original draft preparation, and writing—reviewing and editing. All authors have read and agreed to the published version of the manuscript.

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