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REFLECTIVE NARRATIVE REVIEW OF PRONUNCIATION PEDAGOGY IN ADULT ENGLISH LANGUAGE TEACHING FROM 2010 TO 2026

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Abstract

Pronunciation has gained prominence in adult English language teaching, but research on its goals, instructional focus, technology, teacher knowledge, models, and assessment is often discussed separately. This article presents a reflective narrative review of pronunciation pedagogy in adult ESL/EFL education. Guided by the Intelligibility Principle and informed by English as a lingua franca and World Englishes, the review addresses research published from 2010 to September 2026 alongside foundational studies. The reflection is based on 86 scholarly works: 67 published from 2010 to 2026 and 19 earlier foundational works. Sources were selected purposively through iterative Google Scholar searches and citation chaining, then examined through thematic coding and cross-study comparison. The field has moved from native-like accent targets toward intelligibility and comprehensibility; segmental and suprasegmental instruction is most useful when integrated around learner needs; computer-assisted pronunciation training (CAPT) and automatic speech recognition (ASR) expand practice but require teacher mediation; many teachers remain underprepared; native-speaker norms continue despite English as a lingua franca and World Englishes perspectives; and assessment increasingly values communicative success while facing rater and algorithmic bias. The review contributes an integrated account of these connected developments and proposes practical priorities for teacher education, technology use, classroom assessment, and future research.

Keywords: adult ESL/EFL education, intelligibility, narrative review, pronunciation pedagogy, technology-enhanced pronunciation teaching

Introduction

Pronunciation affects whether adult second language (L2) speakers can make themselves understood, participate confidently, and respond to listeners in academic, workplace, and everyday communication. It has gained greater attention in English language teaching (ELT) since 2010 because English is increasingly used among multilingual speakers across local and international settings. Earlier teaching often treated reduction of a foreign accent as the main goal. Current work gives more weight to intelligibility, which concerns whether listeners understand

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the message, and comprehensibility, which concerns how easy the speech is to understand (Derwing & Munro, 2005, 2015; Levis, 2005, 2018, 2020; Munro & Derwing, 1995). This change connects pronunciation with communicative competence, learner identity, and participation rather than imitation of one native-speaker model.

However, agreement on intelligibility as a broad goal does not settle what teachers should teach. Segmental features, such as consonants and vowels, can cause communication problems when a contrast carries a high functional load. Suprasegmental features, including stress, rhythm, intonation, and pausing, also shape comprehensibility (Celce-Murcia et al., 2010; Kang, 2010; Saito, 2013; Wang, 2022; Zielinski, 2015). Current research therefore supports an integrated approach instead of a fixed choice between sounds and prosody. Teachers still need guidance on how to set priorities for learners with different first languages, proficiency levels, and communication needs.

Technology has also changed how learners practise pronunciation. Computer-assisted pronunciation training (CAPT), automatic speech recognition (ASR), mobile applications, corpora, and visual feedback can provide repeated practice beyond class (Fouz-González, 2025; Inceoglu et al., 2024; Mahmood, 2024a, 2024b; McCrocklin, 2019a, 2019b; Ngo et al., 2024). Yet access to practice does not ensure useful learning. Feedback may be inaccurate, difficult to interpret, or based on narrow speech models, and learners differ in how they use it (Choi, 2026; Huang & Pan, 2026; McCrocklin & Levis, 2026). Technology is therefore most useful when teachers connect automated feedback to explicit instruction and meaningful communication.

Teacher cognition is another part of this problem. Many teachers value pronunciation but report limited training, low confidence, uncertainty about instructional priorities, and difficulty assessing progress (Bai & Yuan, 2019; Couper, 2021; Foote et al., 2011; Nguyen et al., 2021; Tsunemoto et al., 2023). Learners may also fear judgment of their accents or prefer native-speaker models because of examinations, employment, or social status. Three gaps follow from this literature. First, work on intelligibility, instructional content, technology, teacher cognition, models, and assessment is often reviewed in separate discussions. Second, broad research findings are not always translated into decisions that adult ESL/EFL teachers can use. Third, reviews rarely make clear how the researcher's position and analytic framework shape the synthesis.

This article addresses these gaps through a reflective narrative review of pronunciation pedagogy in adult ELT. Its main evidence base covers research published from 2010 to September 2026, while earlier foundational studies are used to explain the historical movement from nativeness toward intelligibility. The review brings together six connected areas: instructional goals, segmental and suprasegmental teaching, technology, teacher cognition and training, pronunciation models, and assessment. Its contribution is to show how decisions in one area affect the others and to identify practical implications for teaching, teacher education, and research. The review addresses the following questions:

1. How has adult pronunciation research from 2010 to 2026 redefined the goals and content of instruction?
2. What patterns appear across technology use, teacher cognition and training, pronunciation models, and assessment?

3. What theoretical, pedagogical, and research implications follow from these connected patterns?

Conceptual framework

The Intelligibility Principle is the central framework for the review. It distinguishes successful understanding from the Nativeness Principle, which treats approximation to a native accent as the main goal (Levis, 2005, 2018, 2020). This distinction requires attention to three related constructs. Accentedness concerns how different speech sounds from a listener's expected model. Comprehensibility concerns the effort required to understand speech. Intelligibility concerns whether the message is actually understood (Derwing & Munro, 2005, 2015; Munro & Derwing, 1995). A speaker can therefore be strongly accented but still highly intelligible.

English as a lingua franca (ELF) and World Englishes provide the sociolinguistic part of the framework. They question the use of one native-speaker variety as the only legitimate target and direct attention to multilingual communication, diverse speech models, identity, and listener responsibility (Jenkins, 2000, 2007; Seidlhofer, 2011; Walker, 2021). Jenkins's Lingua Franca Core adds a pedagogical proposal by identifying pronunciation features that often support mutual intelligibility in international interaction (Jenkins, 2002; Jenkins & Leung, 2013).

These ideas guided the analysis of pronunciation studies. Each source was examined for its target construct, the segmental or suprasegmental features studied, the listeners and tasks used to judge outcomes, the model of English assumed, and the role given to teachers and technology. A study was interpreted as aligned with the framework when its goals and measures addressed understanding in a stated context rather than treating reduced accent as the only evidence of improvement.

Method

Design

This study uses a reflective narrative review with a critical and thematic orientation. This design is appropriate because the aim is to trace conceptual and pedagogical change across studies that use different methods, settings, participants, and outcomes. Unlike a systematic review that seeks exhaustive coverage or a meta-analysis that combines comparable effect sizes, a narrative-critical review can relate empirical findings to theory and classroom practice while retaining contextual differences (Grant & Booth, 2009; Norris & Ortega, 2006). The author’s position as a PhD researcher in second language pronunciation pedagogy, technology-supported teaching, and corrective feedback (CF) informed the questions asked of the literature. To make this position visible, interpretations were recorded in analytic memos and checked against the claims and limits reported in the reviewed sources (Boud et al., 2013; Maxwell, 2012; Tracy, 2010).

Source identification and selection

Sources were gathered through iterative searches in Google Scholar and through backward and forward citation chaining from major reviews and frequently cited studies. The search was last updated in September 2026. Search terms combined pronunciation teaching or pronunciation instruction with intelligibility,

comprehensibility, segmental, suprasegmental, CAPT, ASR, teacher cognition, ELF, World Englishes, and pronunciation assessment. The main publication period was January 2010 to September 2026. Earlier sources were retained only when they established a concept or historical comparison needed to interpret later work. The final source set contains 86 scholarly works: 67 from 2010 to 2026 and 19 earlier foundational works. Sampling was purposive and criterion-based rather than random or exhaustive. Sources were included when they addressed adult ESL/EFL pronunciation pedagogy or provided a directly relevant theoretical, review, technology, teacher-education, or assessment perspective. Studies limited to speech therapy, first-language phonological development, child-only instruction, or technical speech recognition without a clear language-teaching link were excluded.

Sources

The unit of analysis was published scholarship, not human participants. The source set covers adult learners, teachers, listeners, curricula, technologies, and assessments across ESL and EFL settings. Empirical studies used surveys, interviews, classroom interventions, speech ratings, corpus or acoustic analysis, and technology-supported practice. Reviews, theoretical works, and research-based books were included when they helped compare findings or define the conceptual framework. Evidence from different contexts was not treated as interchangeable; setting, learner background, listener group, task, and outcome measure were considered during interpretation.

Data extraction and analysis

For each source, analytic notes recorded publication year, setting, participants or data source, pronunciation focus, instructional or assessment approach, outcome measure, main finding, stated limitation, and pedagogical implication. First-cycle coding grouped sources by the six areas identified in the research questions. A second comparison examined agreement, difference, and change across foundational work before 2010 and studies published in 2010-2015, 2016-2020, and 2021-2026. The conceptual framework was then applied by comparing whether studies used accentedness, comprehensibility, intelligibility, or another outcome and by examining the speech model, listener, task, and instructional role involved. The final synthesis reports recurring patterns and important qualifications. No statistical tests or effect-size aggregation were conducted because the studies and outcomes were too varied for that purpose.

Findings and Discussion

Findings

Six themes recurred across the source set. Table 1 summarizes the main pattern in each theme and the direct implication for adult pronunciation teaching.

Table 1. Cross-theme synthesis of the reviewed literature

Theme	Synthesis across studies	Pedagogical implication
Instructional goal	Research increasingly favors intelligibility and comprehensibility over accent removal (Derwing & Munro, 2005, 2015; Levis, 2005, 2018, 2020).	Set targets around successful understanding in the learner's likely communication settings.
Instructional content	Segmental and suprasegmental features both affect understanding; their value depends on functional load, learner background, task, and listener (Kang, 2010; Saito, 2013; Wang, 2022; Zielinski, 2015).	Combine sound and prosody work after diagnosing learner needs.
Technology	CAPT, ASR, mobile tools, and visual feedback increase practice and feedback, but their effects depend on feedback quality and instructional support (Inceoglu et al., 2024; McCrocklin, 2019a, 2019b; Ngo et al., 2024).	Use automated feedback as one source of evidence and discuss it with learners.
Teacher cognition	Teachers value pronunciation but often report limited preparation, uncertainty, and concern about their own accents (Bai & Yuan, 2019; Foote et al., 2011; Nguyen et al., 2021; Tsunemoto et al., 2023).	Include practical pronunciation diagnosis, feedback, and lesson design in teacher education.
Pronunciation models	ELF and World Englishes support diverse models, while learners and institutions may still prefer British or American norms (Walker, 2021; Wang & Jenkins, 2016; Wang & Wen, 2023).	Use intelligibility as the shared goal while respecting informed learner choices.
Assessment	Assessment is moving toward communicative criteria, but listener effects, broad rating scales, and automated bias remain concerns (Choi, 2026; Isaacs & Harding, 2017; Isaacs & Thomson, 2013; Kang & Hirschi, 2023).	Use clear feature-based rubrics, trained raters, and more than one source of evidence.

Discussion

From nativeness to intelligibility and evolving goals

The literature shows a broad shift from the Nativeness Principle toward the Intelligibility Principle. Levis (2005) named this contrast, and later work placed successful understanding above removal of a foreign accent (Derwing & Munro, 2015; Levis, 2018, 2020; Pennington & Rogerson-Revell, 2019a; Wang & Jenkins, 2016). Earlier research had already separated accentedness from intelligibility: speech can sound strongly accented and still be understood (Munro & Derwing, 1995). Studies of adult L2 speech also show that native-like attainment is uncommon and is not required for effective communication (Derwing & Munro,

2005; Flege et al., 1995; Wagner & Toth, 2017). The practical goal is therefore not accent elimination but comfortable intelligibility across listeners and settings.

This shift is not uniform across contexts. Teacher and learner beliefs are shaped by examination policies, teacher preparation, institutional models, and social attitudes toward accents (Bai & Yuan, 2019; Henderson, 2013; Wang & Wen, 2023; Waniek-Klimczak, 2013). Studies in European and Asian settings show that teachers and learners may accept intelligibility in principle while still treating British or American pronunciation as a sign of authority or proficiency. These findings indicate that pronunciation goals are locally negotiated rather than universal.

Evidence from China illustrates this tension. National syllabi have gradually given more attention to English as a lingua franca and intelligibility, but many learners and institutions still prefer native-speaker models (Wang & Jenkins, 2016; Wang & Wen, 2023). Earlier work also showed that learners may connect native-like speech with identity, social mobility, or educational success (Li, 2009; Wen, 2012). The two goals are not always treated as opposites: a learner may choose a native-speaker model as a personal aim while using intelligibility as the minimum communicative standard.

Across foundational studies, later reviews, and recent curriculum research, the strongest shared conclusion is that pronunciation teaching should reduce communication breakdown rather than erase accent (Derwing & Munro, 2005, 2015; Levis, 2005, 2018, 2020; Pennington & Rogerson-Revell, 2019a; Wang & Wen, 2023). This position fits communicative language teaching because it links pronunciation to listeners, tasks, and purposes. It also requires teachers to consider who will listen to the learner and in which settings, rather than using one accent model for every class.

The shift also has an important social dimension. Learners may be fully intelligible and still experience accent-based judgment, while pressure to sound native can increase anxiety and weaken confidence (Jenkins, 2007; Li, 2009; Szyszka, 2017; Wang & Wen, 2023). At the same time, some learners freely choose a British, American, or another established model because it supports a personal or professional goal. The finding is not that native-speaker models must disappear. It is that teachers should distinguish a learner's chosen accent goal from the shared requirement for understandable speech. This distinction places identity and learner agency within the Intelligibility Principle.

Segmental and suprasegmental focus in instruction

Before 2010, broad approaches to pronunciation teaching increasingly highlighted prosody because stress, rhythm, intonation, and pausing strongly affect how speech is processed (Derwing et al., 1998; Morley, 1991; Tanner & Landon, 2009). Kang (2010) later showed that temporal and prosodic measures were related to listeners' judgments of comprehensibility and accentedness. Research since 2010 has developed this line of work but has not established a universal rule that suprasegmentals should always come first. Reviews and pedagogical analyses instead show that the relative value of a feature depends on the learner, task, listener, and communication problem (Gordon & Darcy, 2024; Wang, 2022; Zielinski, 2015).

Segmental accuracy remains important when an error changes a high-frequency or high-functional-load contrast. Jenkins (2002) identified several consonant, consonant-cluster, and vowel-length features that can affect intelligibility in international communication. Experimental work also shows that explicit, focused instruction can improve difficult L2 consonants and vowels (Saito, 2013). Later reviews therefore do not reject segmental teaching; they place it within a needs-based sequence (Gordon & Darcy, 2024; Wang, 2022). For example, a repeated /r/-/l/ contrast problem may deserve focused work when it causes misunderstanding for a particular group.

The main development is an integrated view of pronunciation. Segmental and prosodic features interact in connected speech, so a communication problem cannot always be assigned to only one level (Wang, 2022; Zielinski, 2015). A vowel insertion may change syllable structure and rhythm, while misplaced stress may make otherwise accurate segments difficult to recognize. Teaching priorities should therefore follow diagnosis. A class sharing one first language may need focused work on a common segmental contrast; a multilingual class may benefit more from stress, pausing, and communication strategies that apply across learners. An integrated sequence can move from perception and controlled production to communicative use, with both sounds and prosody serving intelligibility.

Technology-enhanced pronunciation teaching

From 2010 to 2026, pronunciation technology expanded from specialized CAPT programs to ASR dictation, mobile applications, web corpora, visual displays, and generative AI feedback. Across reviews and empirical studies, these tools offer more practice, immediate responses, recording and replay, and access to varied speech models (Fouz-González, 2025; Mahmood, 2024a, 2024b; McCrocklin, 2019a, 2019b; Pennington & Rogerson-Revell, 2019b; Topal, 2023). ASR is especially useful when learners compare what they intended to say with what the system recognized. Visual feedback can also draw attention to timing, pitch, or a target sound. These benefits concern opportunities for learning; they do not by themselves show that every tool improves every aspect of pronunciation.

The meta-analysis by Ngo et al. (2024) reported a medium overall effect size for ASR-supported pronunciation training for ESL/EFL learners (Hed*ges's g = 0.69*). Effects were stronger when systems supplied explicit information about errors, and gains were clearer for segmental features than for suprasegmental features. Intervention length and learning arrangement also affected outcomes. These results support ASR as a useful part of instruction, particularly for repeated segmental practice, but they also show why teachers must match a tool's feedback to the intended learning outcome.

The main constraints are access, teacher knowledge, feedback quality, and curricular fit. Learners do not respond to automated feedback in the same way. Some repeat and repair an utterance after an ASR mismatch, while others become frustrated or doubt the system's accuracy (Inceoglu et al., 2024; McCrocklin, 2019b; McCrocklin & Levis, 2026). Recent work on AI-based feedback also shows that reliability, scoring bias, and the learner's interpretation of feedback affect its value (Choi, 2026; Huang & Pan, 2026). Automated results should therefore be treated as estimates that require interpretation, not as objective diagnoses.

The reviewed literature identifies four common uses of technology in pronunciation instruction. First, specialized CAPT and visual-feedback programs display waveforms, spectrograms, or pitch tracks so that learners can compare aspects of their speech with a model. Such displays can help learners notice timing, stress, and intonation when the teacher explains what the visual pattern means (Liakin et al., 2015; Mahmood, 2024b). Second, ASR practice asks learners to speak into a dictation program, voice assistant, or pronunciation application and examine the transcription or score. A mismatch can prompt another attempt, but successful recognition should be checked against human understanding and the lesson goal (Inceoglu et al., 2024; McCrocklin, 2019a, 2019b). Third, mobile applications can provide short exercises on sound contrasts, word stress, fluency, recording, and replay. Their portability supports frequent practice, but scores and model voices should be examined carefully, especially when an application gives little explanation of an error (Sholekhah & Fakhrurriana, 2023). Fourth, web resources and speech corpora, such as YouGlish, allow learners to hear a word or phrase across many naturally occurring examples. This exposure can support perception, variation awareness, and learner autonomy when it is paired with a focused task (Mahmood, 2024a; Topal, 2023). Fifth, multimodal and conversational tools include voice-enabled chatbots and generative AI systems. Early studies suggest that they can create additional speaking practice and feedback, but evidence is still developing and results depend on task design, feedback quality, and learner response (Shafiee Rad & Roohani, 2025; Sonsaat-Hegelheimer & Kurt, 2024).

All in all, empirical studies support cautious use of technology rather than reliance on a single program. Video shadowing, ASR activities, and automated feedback have produced gains or useful practice under particular conditions (Martinsen et al., 2017; McCrocklin, 2019a; Ngo et al., 2024). However, teachers often face too many tools and too little guidance about validity or fit (Fouz-González, 2025; Pennington & Rogerson-Revell, 2019b). A further concern is bias: systems trained around narrow speech models may score understandable accented speech unfairly or reward closeness to a native model (Choi, 2026; Isaacs, 2016; McCrocklin & Levis, 2026). Teacher mediation is therefore central. Teachers need to explain what a score can and cannot show, compare automated feedback with human listening, and connect practice to an intelligibility goal.

The evidence supports an instructional sequence in which technology supplements teacher-guided learning. Learners first notice or practise a target, receive automated and human feedback, try the feature in meaningful speech, and reflect on whether listeners understood them. Future tools should provide clearer explanations, better support for suprasegmental features, and fairer treatment of diverse accents. Research should also compare technology-supported learning across settings rather than treating the successful use of one tool as a general result.

Teacher cognition beliefs and training in pronunciation

Research across settings shows a repeated gap between the value teachers place on pronunciation and their confidence in teaching it. Bai and Yuan (2019), for example, interviewed 16 EFL teachers in Hong Kong and found that participants considered pronunciation important but often felt unprepared. In a Canadian survey of 159 adult ESL instructors, Foote and colleagues (2011) found that about two-thirds had no formal preparation in pronunciation teaching. These studies used

different contexts and methods but point to the same problem: teachers may avoid systematic correction or rely on familiar activities when training is limited.

Teacher-cognition studies help explain how this gap shapes practice. Baker (2014) found that experienced ESL teachers used controlled techniques, such as repetition and phonetic explanation, more readily than communicative or integrated work. Couper (2016, 2021), Macdonald (2002), and Thomson (2013) likewise reported uncertainty about which features to teach, how to assess progress, and how to judge available methods. Without a clear curriculum or evidence base, pronunciation may appear only in occasional activities. Some teachers also retain assumptions that sounds must always be taught separately or that only native speakers can provide a suitable model.

Training can improve confidence and expand practice. Darcy and colleagues (2012) described a practical pronunciation toolbox that helped teachers include short pronunciation work across lessons. Surveys and teacher studies in Europe, Asia, and other contexts show demand for usable strategies, current research summaries, and clearer assessment guidance (Henderson, 2013; Nguyen et al., 2021; Tsunemoto et al., 2023). Barriers remain, including limited syllabus time, lack of suitable materials, and anxiety among teachers who judge their own accents against a native-speaker norm. An intelligibility goal can reduce this pressure because a teacher can model clear communication without claiming accent perfection.

The combined evidence supports a stronger place for pronunciation in TESOL preparation and professional development (Bai & Yuan, 2019; Couper, 2021; Derwing, 2008; Foote et al., 2011; Murphy, 2014; Tsunemoto et al., 2023). Preparation should connect basic phonetic knowledge with diagnosis, perception work, corrective feedback, communicative practice, technology use, and classroom assessment. Microteaching and reflection can help teachers test these decisions in context. The aim is not to turn every teacher into a phonetician. It is to give teachers enough knowledge and practical experience to select a target, explain it clearly, observe change, and relate the work to intelligibility.

Pronunciation models across native norms English as a lingua franca and world Englishes

Pronunciation teaching has long used an Inner Circle variety, usually Received Pronunciation or General American English, as the target. ELF and World Englishes scholarship challenged the assumption that one native-speaker variety should define correct speech for all learners (Jenkins, 2000, 2007; Seidlhofer, 2011; Widdowson, 2012). Later pedagogical work extended this argument by emphasizing communication among speakers with varied linguistic backgrounds (Jenkins & Leung, 2013; Walker, 2021). The central issue is therefore not simply which accent to copy, but which features and listening abilities support communication in the learner's likely contexts.

Jenkins's Lingua Franca Core (LFC) provides one influential account of features linked to mutual intelligibility among multilingual speakers (Jenkins, 2000, 2002, 2007; Jenkins & Leung, 2013). It gives priority to most consonants, consonant clusters, vowel-length contrasts, and nuclear stress while giving less weight to some native-variety details, such as the dental fricatives /θ/ and /ð/ or exact vowel quality (Dauer, 2005). The LFC does not provide a complete syllabus

for every setting, but it changes the basis for selection: teachers consider the communicative cost of a feature rather than its distance from one prestige accent.

Classroom use of ELF and World Englishes perspectives remains difficult. Learners, teachers, institutions, and examinations may still treat British or American speech as prestigious. Studies in China and Poland show that positive discussion of intelligibility can coexist with a strong preference for native-speaker norms (Janicka et al., 2005; Wang & Jenkins, 2016; Wang & Wen, 2023; Waniek-Klimczak, 2013). Learners may also fear discrimination or believe that a native-like accent signals higher proficiency. These concerns should be discussed rather than dismissed because accent goals are connected to identity, opportunity, and local expectations.

A practical response is to use intelligibility as the shared instructional goal while respecting informed learner choice (Pennington & Rogerson-Revell, 2019a; Walker, 2021). Learners can be exposed to several English accents so that they develop flexible listening and accommodation skills. A learner who chooses a particular native-speaker model may pursue it as a personal goal, but the model should not be imposed as the only acceptable voice. Communication also depends on listeners adapting to variation, not only on speakers changing their accents.

World Englishes research adds that established regional varieties can express identity and local legitimacy (Chen, 2022; Clyne, 1992; Yunhua & Budiman, 2024; Zhang & Gonzales, 2024). Differences in rhythm or vowel quality are not automatically errors when they work within a community. Some settings, however, may require a more standardized model for a particular professional, educational, or testing purpose. Teachers should make that requirement explicit and avoid presenting one local need as a universal standard.

By 2026, the literature supports plural pronunciation models more strongly than classroom practice does. Curriculum evidence from China, for example, shows attempts to balance native norms with intelligibility and ELF perspectives (Wang & Wen, 2023). The continuing tension is best handled through clear priorities: prevent communication breakdown, build understanding of diverse accents, and discuss learners' own goals. This approach treats pronunciation competence as clear and adaptable speech rather than conformity to one accent (Derwing & Munro, 2015; Levis, 2018, 2020; Walker, 2021).

Assessment of pronunciation practices and criteria

Pronunciation assessment received less focused attention than other areas of language testing, but the evidence base has grown (Chun, 2006; Harding, 2012; Isaacs, 2014; Isaacs & Harding, 2017; Purpura, 2016). The central question mirrors the change in teaching: should a speaker be judged by closeness to a native model or by communicative success? Current work generally treats comprehensibility and intelligibility as more defensible outcomes than accent reduction (Isaacs & Harding, 2017; Kang & Hirschi, 2023; Munro & Derwing, 1995). Isaacs and Thomson (2013) also showed that rater experience and scale design affect judgments, which means that the construct must be defined carefully.

Rating scales increasingly describe pronunciation in relation to ease of understanding and interference with communication. Research linking speech features to listener judgments supports attention to stress, rhythm, pausing, fluency, and segmental clarity rather than a single global accent score (Crowther et al.,

2015a, 2015b; Kang et al., 2010; Saito et al., 2016). Yet high-stakes and classroom ratings remain vulnerable to listener familiarity, expectations, and bias. Clear descriptors, rater training, and speech samples from diverse speakers can improve consistency, but they cannot remove every listener effect.

Automatic pronunciation assessment introduces a related validity problem. Automated systems can score speech quickly and consistently, but consistency is not the same as fair measurement. Systems may give greater weight to closeness to the speech used in their training data and may handle spontaneous speech, prosody, or unfamiliar accents poorly (Choi, 2026; Isaacs, 2016; Isaacs & Harding, 2017; McCrocklin & Levis, 2026). Recent comparisons of human and generative AI scoring also report reliability and bias questions (Choi, 2026). Automated scores should therefore support, rather than replace, human judgment and evidence from communicative tasks.

Classroom assessment needs criteria that teachers and learners can use. Studies of linguistic correlates of comprehensibility identify several useful areas, including consonant and vowel clarity, word stress, rhythm, intonation, pausing, and fluency (Crowther et al., 2015a, 2015b; Saito et al., 2016). A teacher can separate these areas in a short rubric and add an overall judgment of how easily the message was understood. This is more informative than labels such as good or needs work and can guide the next lesson. The criteria should remain selective so that assessment supports learning rather than becoming a list of every possible feature.

ELF perspectives raise a further question about who should judge intelligibility. A Kurdish speaker may be understood differently by British, American, and other multilingual listeners because listener experience affects perception (Crowther et al., 2015b; Harding, 2012; Isaacs & Trofimovich, 2016). Where possible, assessment should therefore draw on more than one listener or task and should state the intended communication context. This approach treats intelligibility as a relationship among speaker, listener, message, and setting rather than a fixed property of the speaker.

All in all, pronunciation assessment from 2010 to 2026 moved toward functional and communicative criteria, although implementation remains uneven. Intelligibility and comprehensibility now provide a stronger basis for assessment than nativelikeness alone (Isaacs & Harding, 2017; Kang & Hirschi, 2023). The next step is to align classroom rubrics, rater training, and automated systems with the same construct while monitoring human and algorithmic bias.

Conclusion

The reviewed literature shows six connected developments in adult pronunciation pedagogy. Instructional goals have moved toward intelligibility and comprehensibility; segmental and suprasegmental features are increasingly taught as an integrated system; technology has widened access to practice but has not reduced the need for teachers; teacher preparation remains uneven; ELF and World Englishes have challenged one-model teaching; and assessment is becoming more communicative while still facing listener and algorithmic bias. These findings support the central framework of the review: pronunciation quality depends on successful communication among a speaker, a listener, a task, and a context, not only on similarity to a native accent.

For teaching, the main implication is to begin with a needs-based diagnosis and set a small number of intelligibility targets. Teachers can combine perception, focused production, communicative practice, and feedback across both sounds and prosody. Technology should add practice and evidence, while teachers help learners interpret scores and decide what to change. Teacher-education programs should include pronunciation diagnosis, feedback, technology evaluation, diverse speech models, and practical assessment. At the theoretical level, the review links the Intelligibility Principle with ELF and World Englishes by treating learner identity and listener adaptation as parts of communicative success.

This review has several limits. Its purposive narrative sampling does not claim to include every publication, and the search did not use a registered systematic review protocol. The synthesis relies mainly on English language scholarship and gives uneven coverage to regions because the available evidence is uneven. It also does not rate study quality formally or combine effect sizes. Finally, the author's research background shaped the selection and interpretation of themes, although analytic memos and explicit criteria were used to make that position visible. The findings should therefore be read as a critical synthesis, not as a complete map of effectiveness.

Future work should include systematic reviews and meta-analyses where outcomes are comparable, along with longitudinal and multi-site studies of adult learners in underrepresented contexts. Studies should test how integrated segmental and suprasegmental teaching transfers to real communication, how teacher education changes classroom practice over time, and how learners negotiate accent goals and identity. Technology research should compare human and automated feedback, include diverse accents and listener groups, report errors and bias, and examine learning beyond short interventions. Assessment research should test intelligibility-based rubrics in classrooms and large-scale tests with several listener backgrounds.

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