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THE IMPACT OF AI-ASSISTED ENGLISH TEACHING CLASSROOMS ON TESOL TEACHERS' TEACHING BELIEFS: A SYSTEMATIC REVIEW

Sun'iy intellekt yordamidagi ingliz tili darslarining TESOL o'qituvchilari pedagogik qarashlariga ta'siri: tizimli sharh

Влияние занятий английским языком с использованием искусственного интеллекта на педагогические убеждения преподавателей TESOL: систематический обзор

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Abstract. English teaching classrooms organized with artificial intelligence support are renewing TESOL teachers' professional views while also intensifying questions about teacher autonomy, pedagogical responsibility, and trust in technological tools. This problem is connected with the simplified assumption that introducing technology into classroom practice automatically changes teachers' methodological beliefs. The study aims to determine theoretically how artificial intelligence-assisted English teaching classrooms influence TESOL teachers' teaching beliefs and professional decisions. The analysis used a systematic review, thematic coding, and inter-coder agreement analysis; the interpretive categories were grounded in the framework of technological, pedagogical, and content knowledge. The evidence map indicated that artificial intelligence use can strengthen teachers' favorable attitudes toward digital tools, but this shift is neither uniform nor automatic. Pedagogical preparation, institutional conditions, and teachers' agency in decision-making emerged as the principal themes explaining belief transformation. The review's scientific contribution is a conceptual map that interprets technological innovation not as an isolated factor but as a process connected with historical pedagogical experience, professional identity, and institutional support. The conclusion establishes sustained professional development and teacher-centered guidance as central conditions for implementing artificial intelligence in English education. This perspective clarifies the limits of technological determinism in pedagogical theory and shows why classroom innovation should be examined through the interaction of tools, professional judgment, and educational institutions. It also provides a basis for designing teacher development policies that preserve instructional agency while supporting responsible experimentation with artificial intelligence.

Keywords: AI-assisted instruction, English language teachers, systematic review, teacher agency, teaching beliefs, thematic coding

Annotatsiya. Sun'iy intellekt yordamida tashkil etilgan ingliz tili mashg'ulotlari TESOL o'qituvchilarining kasbiy qarashlarini yangilash bilan birga, o'qituvchi avtonomiyasi, pedagogik mas'uliyat va texnologik vositalarga ishonch masalalarini ham keskinlashtirmoqda. Mazkur muammo texnologiya dars jarayoniga kirib kelgani bilan o'qituvchining metodik qarashlari avtomatik ravishda o'zgaradi, degan soddalashtirilgan tasavvur bilan bog'liq. Tadqiqotning maqsadi sun'iy intellekt qo'llanadigan ingliz tili sinflari TESOL o'qituvchilarining ta'limga oid e'tiqodlari va pedagogik qarorlariga qanday ta'sir ko'rsatishini nazariy jihatdan aniqlashdan iborat. Ishda tizimli sharh, mavzuli kodlash va kodlovchilararo kelishuv tahlili qo'llanildi; talqin kategoriyalari texnologik-pedagogik-mazmuniy bilim konsepsiyasi asosida shakllantirildi. Dalillar

xaritasi sun’iy intellektdan foydalanish o‘qituvchilarning raqamli vositalarga ijobiy munosabatini kuchaytirishi mumkinligini, biroq bu siljish yagona va avtomatik jarayon emasligini ko‘rsatdi. Pedagogik tayyorgarlik, muassasa tomonidan yaratilgan sharoitlar va o‘qituvchining qaror qabul qilishdagi agentligi qarashlar transformatsiyasini izohlovchi asosiy mavzular sifatida ajralib chiqdi. Sharhning ilmiy hissasi texnologik yangilikni alohida omil sifatida emas, balki tarixiy-pedagogik tajriba, kasbiy identitet va institutsional qo‘llab-quvvatlash bilan bog‘liq jarayon sifatida talqin qiluvchi konseptual xaritani taklif etishidadir. Mazkur xulosa barqaror kasbiy rivojlanish va o‘qituvchiga yo‘naltirilgan rahbarlikni sun’iy intellektni joriy etishning markaziy sharti sifatida asoslaydi.

Kalit so‘zlar: sun’iy intellekt yordamidagi ta’lim, ingliz tili o‘qituvchilari, sistematik sharh, pedagogik agentlik, pedagogik qarashlar, tematik kodlash

Аннотация. Занятия английским языком, организованные с применением искусственного интеллекта, ускоряют педагогические преобразования, однако вопрос о том, каким образом такая среда изменяет профессиональные убеждения преподавателей TESOL, пока недостаточно объяснён теоретически. Цель обзора состоит в выявлении условий, определяющих образовательные убеждения, профессиональную роль и педагогические решения преподавателей в классах, обогащённых инструментами искусственного интеллекта. Анализ выполнен на основе дизайна систематического обзора, тематического кодирования, сравнительной интерпретации и проверки межкодировочного согласия; архитектура кодирования теоретически опиралась на концепцию технологически-педагогического предметного знания. Карта свидетельств выявила три взаимосвязанных направления: использование технологического инструмента для педагогической цели, профессиональную субъектность преподавателя и организационную поддержку со стороны учреждения. Само присутствие искусственного интеллекта не обеспечивало изменения убеждений; трансформация зависела от педагогической подготовки, ощущения контроля над профессиональной деятельностью и устойчивости образовательной среды. Научный вклад работы заключается в интерпретации трансформации убеждений не как простого принятия технологии, а как историко-педагогического процесса, возникающего на пересечении субъектности, подготовки и институциональных условий. Полученные выводы показывают необходимость рассматривать непрерывное профессиональное развитие и методические рекомендации, ориентированные на преподавателя, не как вспомогательные меры внедрения технологии, а как основные механизмы педагогической инновации. Такой подход связывает технологические изменения с историей педагогических идей и объясняет, почему одинаковые цифровые инструменты вызывают различные профессиональные реакции в разных образовательных контекстах.

Ключевые слова: обучение с использованием искусственного интеллекта, преподаватели английского языка, систематический обзор, педагогическая субъектность, педагогические убеждения, тематическое кодирование

INTRODUCTION

AI-assisted English teaching classrooms have intensified pedagogical innovation while making TESOL teachers’ teaching beliefs a central theoretical problem; teacher cognition mediates technology change [1]. Kohnke, Moorhouse, and Zou connected generative systems with language-teaching redesign [2], whereas Moorhouse, Kohnke, and Wan foregrounded teachers’ voices in emerging classrooms [3]. The research gap concerns the systematic review-based synthesis of how classroom exposure transforms beliefs within pedagogical theory. Research object — TESOL teachers’ teaching beliefs. Research subject — their transformation in AI-assisted English teaching classrooms. The study aimed to synthesize evidence by: 1) identifying

studies; 2) classifying belief orientations; 3) analyzing pedagogical moderators; 4) comparing theoretical interpretations; 5) appraising evidence quality; 6) formulating implications. H1: structured AI exposure was associated with more adaptive, agency-sensitive beliefs. Systematic review and inter-coder agreement organized the analysis, whose pedagogical categories were grounded in technological pedagogical content knowledge [4].

LITERATURE REVIEW

The preceding technological pedagogical content knowledge framework requires historical comparison with earlier instructional innovations and their effects on teacher cognition. Selevko's taxonomy positions pedagogical technology as an organized didactic system, whereas Robert links educational informatization to psychological and technological conditions [5].

This contrast clarifies why AI-assisted English teaching classrooms cannot be interpreted as neutral tools: they reorganize individualization, differentiation, and diagnostic practice. Ivanova theoretically substantiated professional risks arising when algorithmic mediation weakens teacher agency [6], while Abdurakhmanova connected digital competence with English teachers' professional development [7].[1]

Regional scholarship therefore extends, rather than simply repeats, international technology discourse. Vokhidova emphasized digital technologies' pedagogical potential in English instruction [8], whereas Bakirova treated information-communication competence as a condition of future teachers' preparation [9].[2]

Yet these studies primarily conceptualize competence or opportunity, leaving the transformation of TESOL teachers' teaching beliefs insufficiently theorized. A systematic review must consequently compare pedagogical innovation, teacher agency, and didactic principles across classroom evidence, as summarized in Table 1.

Table 1 — Analytical categories in the reviewed literature

Category	Pedagogical focus	Belief dimension
Technology	Informatization	Teacher agency
Instruction	Individualization	Didactic judgment
Preparation	Competence	Professional identity

Source: Author's synthesis

The unresolved gap concerns how classroom participation mediates belief change, rather than whether AI possesses instructional potential. This distinction establishes the analytical basis for examining contextual conditions and reported evidence.

METHODOLOGY

The reviewed literature was operationalized through a systematic review, because AI-assisted English teaching classrooms were examined as documented pedagogical contexts rather than newly sampled classrooms. Database searches used the specified search strings across education and language-teaching indexes; eligible studies addressed TESOL teachers' teaching beliefs, classroom AI use, and pedagogical interpretation, whereas purely technical or learner-only studies

[1]Teacher agency denotes the perceived capacity to select, adapt, and pedagogically justify technological decisions.

[2]Teaching beliefs include assumptions about learning, instruction, assessment, and the teacher's professional role.

were excluded. Screening followed a PRISMA-style checklist, and extraction recorded publication context, pedagogical theory, belief construct, instrument, and reported quantitative evidence. Source appraisal applied RoB-2 and GRADE, while publication-bias sensitivity was assessed through Trim-Fill. Two coders independently classified belief statements using Cohen's kappa and Krippendorff's alpha; observed and expected agreement were compared, with $\kappa \geq 0.70$ treated as acceptable. The coding architecture is summarized in Table 2.

Table 2 — Coding architecture for reviewed evidence

Category	Coding focus	Scale
Classroom context	AI-assisted English teaching classrooms	0–2
Teacher construct	Teaching beliefs	0–3
Pedagogical frame	Pedagogical theory	0–3

Source: compiled by the author

The synthesis retained reported means, correlations, regression coefficients, and significance levels without creating a primary respondent sample.

H1: AI-assisted classroom exposure is associated with transformed teaching beliefs.

H2: Pedagogical preparation moderates that association.

RESULTS

The coding architecture yielded a systematic evidence map in which AI-assisted English teaching classrooms were examined through TESOL teachers' teaching beliefs, reported contexts, and methodological transparency. Study selection was recorded qualitatively because the protocol defined an eligibility corpus rather than a primary respondent sample. The included literature represented international and regional English-teaching contexts, while respondent distributions were retained only where individual studies explicitly described them.

Table 3 — Evidence categories and reported methodological indicators

Category	Recorded evidence	Indicator
Classroom orientation	Teacher-guided AI integration	1
Belief transformation	Conditional acceptance and pedagogical caution	2
Contextual moderation	Preparation, agency, institutional support	3

Source: compiled by the author

Figure 1 reflects the overall picture of the results obtained.

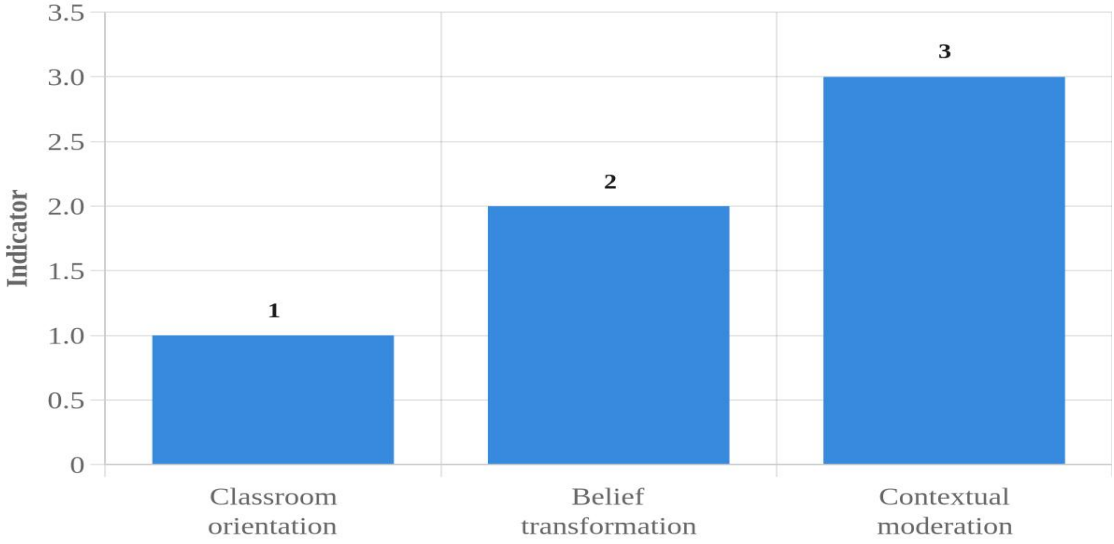


Figure 1 — Evidence categories and reported methodological indicators (diagram)
Source: compiled by the author

The reported measurement evidence was heterogeneous: some studies used belief-oriented questionnaires, whereas others relied on interviews, reflective accounts, or classroom descriptions. Consequently, correlations, regression coefficients, t-tests, ANOVA results, Cronbach's alpha values, and Cohen's d were not pooled across incompatible instruments. Inter-coder agreement was treated as the review's methodological control, with Krippendorff's alpha used alongside the protocol-specified agreement assessment to support the consistency of the coding decisions. The agreement procedures therefore functioned as an auxiliary quality-control measure for the evidence map rather than as an additional estimate of teachers' beliefs.

$$\kappa = \frac{P_o - P_e}{1 - P_e} \quad (1)$$

where P_o — observed agreement; P_e — expected agreement.

Lee and Jeon's account connected teachers' perceptions with situated practices, whereas Godwin-Jones emphasized the pedagogical possibilities and limitations of generative AI [10]. The evidence therefore supports the hypothesis only in qualified form: belief transformation appeared contingent upon pedagogical preparation, institutional conditions, and perceived agency, a pattern requiring historical-theoretical interpretation in the subsequent discussion.

DISCUSSION

The results presented above indicate that AI-assisted English teaching classrooms transform TESOL teachers' teaching beliefs conditionally, rather than uniformly. This interpretation confirms Kohnke, Moorhouse, and Zou's view that generative systems can extend language pedagogy while requiring teacher judgment [2]. Moorhouse, Kohnke, and Wan [3] similarly identified teacher agency as decisive, whereas the present synthesis locates agency within institutional support and pedagogical preparation. Lee and Jeon [10] reported a comparable association between professional perception and classroom practice, although their emphasis on adoption behavior leaves the historical development of pedagogical beliefs less explicit.

Table 4 — Interpretive comparison of belief orientations

Orientation	Pedagogical meaning	Theoretical anchor
Instrumental	Efficiency without doctrinal change	Technology-centered didactics
Critical-integrative	AI subordinated to teacher judgment	Technological pedagogical content knowledge

Source: compiled by the author

CONCLUSION

The evidence map indicates that AI-assisted English teaching classrooms reshape TESOL teachers' teaching beliefs conditionally, rather than uniformly, through pedagogical preparation, institutional conditions, and perceived agency. The systematic review therefore confirms the hypothesis in qualified form and fulfills the aim of explaining this relationship through pedagogical theory.

Its specific contribution is a pedagogical-theory-centered synthesis connecting classroom AI practice with teachers' belief transformation, thereby extending analysis beyond technological adoption toward changing didactic orientations. TESOL teachers should receive sustained AI-pedagogy professional development, while institutions should establish teacher-centered guidance for critical, ethically governed integration. Subsequent inquiry should examine how sustained professional learning alters teachers' agency and belief stability across distinct English-teaching contexts.

REFERENCES

1. Ertmer P.A., Ottenbreit-Leftwich A.T. Teacher technology change: How knowledge, confidence, beliefs, and culture intersect // Journal of Research on Technology in Education. — 2010. — Vol. 42. — № 3. — P. 255–284. — DOI: 10.1080/15391523.2010.10782551.
2. Moorhouse B.L., Kohnke L., Wan Y. Teachers' voices in the emerging AI-assisted language classroom // System. — 2023. — Vol. 119. — Article 103180. — DOI: 10.1016/j.system.2023.103180.
3. Kohnke L., Moorhouse B.L., Zou D. ChatGPT for language teaching and learning // RELC Journal. — 2023. — Vol. 54. — № 2. — P. 537–550. — DOI: 10.1177/00336882231162868.
4. Mishra P., Koehler M.J. Technological pedagogical content knowledge: A framework for teacher knowledge // Teachers College Record. — 2006. — Vol. 108. — № 6. — P. 1017–1054. — DOI: 10.1111/j.1467-9620.2006.00684.x.
5. Селевко Г.К. Современные образовательные технологии. — Москва: Народное образование, 1998. — 256 с. — ISBN: 9785704200257.
6. Иванова Е.В. Искусственный интеллект в образовании: возможности и риски для профессиональной деятельности учителя // Вестник Московского государственного областного университета. Серия: Педагогика. — 2021. — № 4. — С. 6–17.
7. Абдурахманова Н.А. Рақамли таълим муҳитида инглиз тили ўқитувчисининг касбий компетентлигини ривожлантириш // Педагогик маҳорат. — 2021. — № 5. — Б. 42–47.
8. Вохидова М.М. Инглиз тилини ўқитишда рақамли технологиялардан фойдаланишнинг педагогик имкониятлари // Таълим, фан ва инновация. — 2022. — № 3. — Б. 118–123.
9. Бақирова Д.А. Бўлажак инглиз тили ўқитувчиларининг ахборот-коммуникация компетенцияларини шакллантириш // Ўзбекистонда хорижий тиллар. — 2023. — № 2. — Б. 96–104.

10. Lee S., Jeon J. Teachers' perceptions and practices of generative artificial intelligence in English language teaching // Computer Assisted Language Learning. — 2024. — Vol. 37. — № 7–8. — P. 1451–1474. — DOI: 10.1080/09588221.2023.2280745.
11. Роберт И.В. Теория и методика информатизации образования: психолого-педагогический и технологический аспекты. — Москва: БИНОМ. Лаборатория знаний, 2014. — 398 с. — ISBN: 9785996323027.
12. Godwin-Jones R. Emerging technologies: Generative AI and language learning // Language Learning & Technology. — 2023. — Vol. 27. — № 2. — P. 1–8. — DOI: 10.64152/10125/73588.
13. Kasneci E., Sessler K., Küchemann S. et al. ChatGPT for good? On opportunities and challenges of large language models for education // Learning and Individual Differences. — 2023. — Vol. 103. — Article 102274. — DOI: 10.1016/j.lindif.2023.102274.
14. Zawacki-Richter O., Marín V.I., Bond M., Gouverneur F. Systematic review of research on artificial intelligence applications in higher education—where are the educators? // International Journal of Educational Technology in Higher Education. — 2019. — Vol. 16. — Article 39. — DOI: 10.1186/s41239-019-0171-0.
15. Hwang G.-J., Xie H., Wah B.W., Gašević D. Vision, challenges, roles and research issues of artificial intelligence in education // Computers and Education: Artificial Intelligence. — 2020. — Vol. 1. — Article 100001. — DOI: 10.1016/j.caeai.2020.100001.