CLOUD-BASED PLATFORMS AS RESOURCES FOR AUTO-METHODOLOGICAL TRAINING OF FUTURE EFL TEACHERS

MAMADJANOVA ZUKHRA BAKHROMDJANOVNA,
TEACHER OF ENGLISH LANGUAGE, NAMANGAN STATE PEDAGOGICAL INSTITUTE (zuxramamadjanova@7gmail.com);
XUJAMBERDIEVA UGILXON ,
THE STUDENT OF SECOND GRADE, NAMANGAN STATE PEDAGOGICAL INSTITUTE

Annotation: *This article examines the role of cloud-based platforms in the auto-methodological training of future teachers of English as a Foreign Language (EFL). It explores how tools such as Google Workspace, Microsoft 365, Moodle Cloud, Flipgrid, and Padlet can facilitate self-directed methodological development, digital competence, and reflective practice. The study presents a theoretical framework linking cloud technologies to autonomous teacher training, proposes a practical implementation model, and discusses benefits and challenges. The author argues that integrating cloud resources into EFL teacher education curricula enhances future educators' readiness for technology-driven teaching environments and promotes lifelong professional growth.*

Keywords: *cloud-based platforms, auto-methodological training, EFL teachers, teacher education, digital competence, reflective practice, technological pedagogical content knowledge (TPACK), self-directed learning.*

Аннотация: *В данной статье рассматривается роль облачных платформ в авто-методической подготовке будущих преподавателей английского языка как иностранного. Исследуется, как такие инструменты, как Google Workspace, Microsoft 365, Moodle Cloud, Flipgrid и Padlet, могут способствовать самостоятельному методическому развитию, цифровой компетентности и рефлексивной практике. В работе представлена*

теоретическая основа, связывающая облачные технологии с автономной подготовкой учителей, предложена практическая модель внедрения, а также обсуждаются преимущества и проблемы. Автор утверждает, что интеграция облачных ресурсов в учебные программы подготовки преподавателей английского языка повышает готовность будущих педагогов к работе в технологически насыщенной образовательной среде и способствует их непрерывному профессиональному росту.

Ключевые слова: *облачные платформы, авто-методическая подготовка, преподаватели английского языка как иностранного, педагогическое образование, цифровая компетентность, рефлексивная практика, технологически-педагогическое содержательное знание (TPACK), самонаправленное обучение.*

Annotatsiya: *Ushbu maqola kelajakda chet tili sifatida ingliz tilini o‘qituvchi o‘qituvchilarning avto-metodik tayyorlashida bulutli platformalarning rolini o‘rganadi. Google Workspace, Microsoft 365, Moodle Cloud, Flipgrid va Padlet kabi vositalar mustaqil metodik rivojlanish, raqamli kompetensiya va refleksiv amaliyotni qanday qo‘llab-quvvatlashi tadqiq qilinadi. Tadqiqotda bulutli texnologiyalarni mustaqil o‘qituvchi tayyorlash bilan bog‘lovchi nazariy asos yoritilgan, amaliy joriy etish modeli taklif etilgan, shuningdek afzalliklar va qiyinchiliklar muhokama qilingan. Muallifning ta‘kidlashicha, bulutli resurslarni EFL o‘qituvchi tayyorlash dasturlariga integratsiya qilish kelajakdagı o‘qituvchilarning texnologiyalar asosidagi o‘qitish muhtitiga tayyorligini oshiradi va ularning uzluksiz kasbiy o‘sishini rag‘batlantiradi.*

Kalit so‘zlar: *bulutli platformalar, avto-metodik tayyorlash, EFL o‘qituvchilari, o‘qituvchi tayyorlash, raqamli kompetensiya, refleksiv amaliyot, texnologik-pedagogik mazmuniy bilim (TPACK), mustaqil o‘rganish.*

Introduction

The 21st century has witnessed unprecedented digital transformation across all educational sectors, compelling teacher education programs to evolve

substantially. For future English as a Foreign Language (EFL) teachers, this transformation extends beyond mere technological literacy to encompass what researchers term "digital pedagogical competence"—the ability to effectively integrate technology into language teaching methodologies (Hockly, 2023). This article addresses a critical gap in current literature by examining how cloud-based platforms specifically facilitate what we define as "auto-methodological training": the self-directed, reflective process through which pre-service teachers develop, implement, and refine their teaching methodologies using digital resources.

The global shift toward blended and online learning environments, accelerated by recent worldwide events, has highlighted the urgent need for EFL teachers who are not only linguistically proficient but also methodologically autonomous in digital contexts (Kessler, 2018). Traditional teacher-centered training models are increasingly inadequate for preparing educators who must navigate diverse technological landscapes. Cloud-based platforms offer unique affordances for addressing these challenges through their accessibility, collaborative features, and scalability.

This article provides a comprehensive analysis of cloud platforms' role in EFL teacher preparation, structured as follows: Section 2 establishes the theoretical foundations; Section 3 examines specific cloud platforms and their applications; Section 4 presents an implementation framework; Section 5 analyzes benefits and challenges; Section 6 offers practical applications; Section 7 discusses future implications; and Section 8 concludes with recommendations for teacher education programs.

Theoretical Foundations. Auto-methodological training represents a paradigm shift from instructor-led professional development to self-directed methodological exploration. Rooted in constructivist learning theory (Vygotsky, 1978) and self-regulated learning frameworks (Zimmerman, 2002), this approach emphasizes the teacher-as-learner who actively constructs methodological knowledge through experience, reflection, and experimentation. In the EFL context,

this involves independent exploration of language teaching approaches (communicative, task-based, content-based), lesson planning strategies, material development, and assessment design.

The auto-methodological approach aligns with contemporary understanding of teacher expertise as dynamic and context-sensitive rather than static and prescriptive (Borg, 2015). It acknowledges that effective methodology emerges from the intersection of theoretical knowledge, practical experience, and reflective adaptation to specific teaching contexts—a process ideally supported by cloud technologies that enable documentation, sharing, and revision of methodological experiments.

Technological Pedagogical Content Knowledge (TPACK) Framework.

Mishra and Koehler's (2006) TPACK framework provides essential theoretical grounding for understanding how cloud platforms facilitate methodological development. The framework identifies three primary knowledge domains—technological, pedagogical, and content knowledge—and their intersections. For EFL teachers, this translates to:

· Content Knowledge (CK): English language systems (phonology, morphology, syntax, discourse)

· Pedagogical Knowledge (PK): Language teaching methods and classroom management

· Technological Knowledge (TK): Understanding of cloud platforms and digital tools

· Pedagogical Content Knowledge (PCK): How to teach English specifically

· Technological Content Knowledge (TCK): How technology represents language content

· Technological Pedagogical Knowledge (TPK): How technology changes teaching methods

· TPACK: The integrative knowledge required for effective technology-enhanced language teaching

Cloud platforms serve as ideal environments for developing TPACK because they allow pre-service teachers to experiment with how technology mediates both pedagogy and content simultaneously. The collaborative nature of many cloud tools further supports the social construction of TPACK through peer interaction and shared problem-solving (Voogt et al., 2013).

Zimmerman's (2002) model of self-regulated learning—comprising forethought, performance, and reflection phases—directly applies to auto-methodological training. Cloud platforms enhance each phase:

· Forethought Phase: Goal setting and strategic planning using cloud-based organizers and project management tools

· Performance Phase: Implementing teaching strategies with cloud-supported lesson delivery and real-time adaptation

· Reflection Phase: Analyzing teaching effectiveness through cloud-stored artifacts, peer feedback, and self-assessment tools

This theoretical alignment suggests that cloud platforms don't merely support but potentially enhance the quality of self-regulated professional development by providing structured yet flexible environments for methodological experimentation.

The cloud platform ecosystem for EFL teacher development can be categorized by primary function:

1. Collaborative Creation Platforms

· Google Workspace for Education: Provides integrated tools for collaborative lesson planning (Docs), curriculum mapping (Sheets), presentation development (Slides), and form creation for needs analysis (Forms). The version history and commenting features facilitate iterative methodological refinement.

· Microsoft 365 Education: Offers similar collaborative features with additional tools like Teams for virtual teaching practice and OneNote for digital teaching journals. The Immersive Reader tool provides specific applications for language teaching methodology.

· Notion: An emerging platform that allows pre-service teachers to create comprehensive teaching portfolios, methodology wikis, and interconnected resource databases.

2. Learning Management Systems (LMS)

· Moodle Cloud: As an open-source platform, it enables pre-service teachers to experience LMS administration while designing complete EFL courses. Trainees can toggle between instructor and student views to understand platform affordances from multiple perspectives.

· Canvas and Schoology: These commercial platforms offer sophisticated assessment tools and analytics that help future teachers understand data-driven methodological decisions.

· Google Classroom: Its simplicity makes it ideal for introducing basic LMS concepts, while its integration with other Google tools provides a seamless ecosystem for methodological experimentation.

3. Specialized Pedagogical Platforms

· Flipgrid: Facilitates micro-teaching practice with video responses, enabling methodological experimentation with speaking activities and peer teaching demonstrations.

· Padlet and Miro: Visual collaboration boards that support methodological brainstorming, lesson flow mapping, and material organization. These tools particularly benefit visual learners and help conceptualize abstract methodological concepts.

· Edmodo and Quizlet: Platform-specific methodologies emerge from using these tools—Edmodo for creating class communities and Quizlet for developing vocabulary acquisition strategies.

4. Portfolio and Reflection Platforms

· Google Sites and WordPress: Enable creation of professional teaching portfolios that document methodological evolution over time.

· Seesaw: Originally designed for K-12, its simplicity makes it accessible for documenting early teaching experiences with multimedia evidence.

· Mahara: An open-source e-portfolio platform specifically designed for education, supporting comprehensive documentation of methodological development.

Implementation Framework: A Four-Stage Developmental Model

Stage 1: Foundational Orientation (Weeks 1-4)

Objectives: Develop basic digital literacy and introduce cloud platforms' methodological affordances.

Activities:

· Platform exploration through guided digital scavenger hunts

· Creation of personal learning networks using cloud-based collaboration tools

· Initial documentation of teaching beliefs and methodological assumptions using cloud journals

· Comparative analysis of different platforms' methodological possibilities

Assessment: Digital literacy inventory and platform feature mapping assignment

Stage 2: Methodological Simulation (Weeks 5-12)

Objectives: Apply cloud tools to specific methodological challenges in EFL teaching.

Activities:

· Task-based lesson design using collaborative documents with peer feedback cycles

· Creation of multimedia teaching materials appropriate for different proficiency levels

· Development of digital assessments with automated feedback features

· Simulation of blended learning scenarios using LMS platforms

Assessment: Comprehensive lesson portfolio with integrated cloud resources

Stage 3: Collaborative Methodological Inquiry (Weeks 13-20)

Objectives: Engage in collaborative research-action cycles to solve authentic teaching problems.

Activities:

· Co-design of teaching materials and activities with international partner institutions

· Peer observation and feedback using video sharing platforms

· Methodological experimentation with data collection on student learning outcomes

· Development of shared resource banks and methodological repositories

Assessment: Collaborative research project addressing a specific methodological challenge

Stage 4: Reflective Consolidation (Weeks 21-30)

Objectives: Synthesize learning into coherent methodological approaches and professional identity.

Activities:

· Creation of comprehensive digital teaching portfolios

· Reflective blogging on methodological development journey

· Development of personal philosophy of technology-integrated language teaching

· Presentation of methodological innovations to professional communities

Assessment: Digital teaching portfolio with reflective commentary and future development plan

This developmental model respects the cognitive and affective dimensions of methodological learning while systematically building complexity. The cloud-based nature of activities ensures accessibility and continuity across the training program.

Research indicates that teachers who engage in cloud-supported methodological development demonstrate greater adaptability in diverse teaching contexts(Hubbard & Levy, 2006). The exposure to multiple digital tools and

approaches creates cognitive frameworks for methodological problem-solving that transfer across technological platforms and teaching situations.Cloud-based training moves beyond basic digital literacy to what Hockly(2023) terms "digital pedagogical competence"—the ability to make informed decisions about when, how, and why to integrate specific technologies into language teaching. This competence includes critical evaluation of digital tools' methodological appropriateness and awareness of technological limitations.

Case Study: Task-Based Language Teaching (TBLT) in Cloud Environments

A comprehensive assignment sequence demonstrates cloud platforms' methodological potential:

Assignment: "Design, implement, and refine a task-based language teaching sequence for intermediate EFL learners."

Cloud Platform Integration:

1. Needs Analysis Phase: Google Forms to survey learner interests and needs

2. Task Design Phase: Padlet for collaborative brainstorming of task ideas with international peers

3. Material Development Phase: Canva and Google Slides for creating authentic task materials

4. Implementation Phase: Flipgrid for asynchronous task performance and peer feedback

5. Assessment Phase: Google Sheets rubrics with automated calculations and visualizations

6. Reflection Phase: WordPress blog documenting methodological decisions and revisions

This sequence demonstrates how cloud platforms can support the complete methodological cycle from conception through refinement, with each tool selected for specific pedagogical purposes rather than technological novelty.Cloud platforms excel at creating and sustaining communities of practice—groups of educators

sharing methodological concerns and insights (Wenger, 1998). Teacher education programs can leverage this capacity through:

· Methodological Discussion Forums: Using platforms like Slack or Microsoft Teams for ongoing conversations about teaching approaches

· Shared Resource Repositories: Google Drive or Dropbox collections of lesson plans, materials, and activity ideas

· Virtual Observation Protocols: Secure video platforms for sharing teaching demonstrations with structured feedback frameworks

· Collaborative Research Projects: Cloud-based tools for conducting action research on methodological questions

These communities extend beyond individual courses or institutions, connecting pre-service teachers with global networks of EFL practitioners.

Scaffolding Methodological Decision-Making

A critical component of auto-methodological training is developing decision-making frameworks for technology integration. Cloud platforms can scaffold this development through:

· Decision Trees: Interactive guides helping pre-service teachers select appropriate tools for specific methodological goals

· Comparative Analysis Templates: Structured formats for evaluating multiple platforms' methodological affordances

· Implementation Journals: Digital notebooks documenting methodological choices and their outcomes

· Peer Consultation Protocols: Structured processes for seeking and providing methodological advice through cloud platforms

These scaffolds support the gradual internalization of decision-making processes that characterize expert teachers.

Several technological developments will further transform cloud-based methodological training:

Artificial Intelligence Integration: AI-powered features within cloud platforms will provide personalized methodological suggestions, automated material adaptation, and intelligent feedback systems. Future EFL teachers must develop critical AI literacy to leverage these tools effectively while maintaining pedagogical agency.

Immersive Learning Environments: Virtual and augmented reality platforms accessible through cloud services will create new methodological possibilities for teaching language in contextualized, simulated environments.

Learning Analytics Sophistication: Enhanced analytics within cloud platforms will offer deeper insights into teaching effectiveness, enabling more nuanced methodological refinement based on learner data.

Blockchain for Credentialing: Distributed ledger technologies may transform how methodological competence is documented and recognized across institutional and national boundaries.

Future research should address several critical questions:

1. Longitudinal Impact: How does cloud-based auto-methodological training affect teaching practices and student learning outcomes over extended careers?

2. Contextual Factors: How do cultural, institutional, and socioeconomic factors mediate the effectiveness of cloud-based methodological development?

3. Cognitive Processes: What specific cognitive and metacognitive processes are enhanced or hindered by cloud-based methodological training?

4. Equity Considerations: How can cloud-based training be designed to reduce rather than reproduce existing educational inequalities?

5. Sustainability Models: What institutional and economic models support sustainable integration of cloud platforms in teacher education programs?

Conclusion

This comprehensive analysis establishes cloud-based platforms as transformative resources for the auto-methodological training of future EFL teachers. Rather than viewing technology as an add-on to existing methodological training,

this article proposes a reconceptualization of methodological development as inherently technological in contemporary educational contexts. Cloud platforms provide not just tools but environments for methodological experimentation, reflection, and growth.

The auto-methodological approach supported by cloud technologies addresses fundamental challenges in preparing teachers for uncertain futures. By developing methodological agency—the capacity to design, adapt, and justify teaching approaches in diverse contexts—pre-service teachers gain resilience against rapid technological change. This agency is cultivated through structured engagement with cloud platforms that mirror the collaborative, iterative, and reflective nature of effective teaching practice.

The future of EFL teacher education lies in preparing educators who are not merely technologically literate but methodologically sophisticated in digital contexts. Cloud-based platforms, when integrated thoughtfully into comprehensive teacher development programs, offer unprecedented opportunities for cultivating this sophisticated methodological competence. As this article has demonstrated, these platforms support the development of reflective, adaptive, and innovative teachers prepared to navigate the complex intersection of language, pedagogy, and technology in 21st-century classrooms.

The transformation from passive consumers of methodological prescriptions to active producers of contextualized teaching approaches represents a fundamental shift in teacher identity. Cloud-based auto-methodological training facilitates this identity development by providing the tools, communities, and reflective spaces necessary for methodological self-authorship. As teacher education programs worldwide grapple with digital transformation, the framework presented here offers a roadmap for harnessing cloud technologies' potential while maintaining focus on the ultimate goal: preparing EFL teachers who can effectively facilitate language learning in increasingly digital worlds.

REFERENCES

1. Borg, S. (2015). Teacher cognition and language education: Research and practice. Bloomsbury.

2. Dörnyei, Z. (2014). Motivating learners, motivating teachers: Building vision in the language classroom. Cambridge University Press.

3. Hockly, N. (2023). Digital literacies (2nd ed.). Routledge.

4.Hubbard, P., & Levy, M. (Eds.). (2006). Teacher education in CALL. John Benjamins Publishing.

5. Kessler, G. (2018). Technology and the future of language teaching. Foreign Language Annals, 51(1), 205-218.

6. Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. Teachers College Record, 108(6), 1017-1054.

7. Schön, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.

8. Voogt, J., Fisser, P., Pareja Roblin, N., Tondeur, J., & van Braak, J. (2013). Technological pedagogical content knowledge—A review of the literature. Journal of Computer Assisted Learning, 29(2), 109-121.

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

10. Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge University Press.

11. Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. Theory into Practice, 41(2), 64-70.