



## SKILL-BASED LANGUAGE AND LITERATURE EDUCATION: A COMPREHENSIVE REVIEW OF PEDAGOGICAL STRATEGIES FOR 21ST-CENTURY LEARNING

**Dr. Muhammad Rafiq-uz-Zaman<sup>1\*</sup>, Dr. Muhammad Asif Nadeem<sup>2</sup>,  
Yi-Huang Shih<sup>3</sup>**

<sup>1</sup>*Ph.D. in Education, Department of Education, The Islamia University of  
Bahawalpur, Punjab, Pakistan*

*Email: [mrzmuslah@gmail.com](mailto:mrzmuslah@gmail.com)*

*ORCID ID: <https://orcid.org/0009-0002-4853-045X>*

<sup>2</sup>*Associate Professor, Department of Education, The Islamia University of  
Bahawalpur, Punjab, Pakistan*

*Email: [asif.nadeem@iub.edu.pk](mailto:asif.nadeem@iub.edu.pk)*

<sup>3</sup>*Associate Professor, Center of Teacher Education, Minghsin University of  
Science and Technology, Hsinchu, Taiwan*

*Email: [shih78465@gmail.com](mailto:shih78465@gmail.com) (Y.H.S.).*

**\*Corresponding Author Email: [mrzmuslah@gmail.com](mailto:mrzmuslah@gmail.com)**

### **Abstract**

*The application of skill-based models in the instruction of languages and literature is one of the paradigm shifts in curriculum-based teaching that focuses on the content to be taught to learners, towards student-centered, competency-based learning methods. This review is a comprehensive summary of the recent literature (2015-2025) focusing on the discussion of the pedagogical strategies that allow the development of 21st-century skills based on the teaching of languages and literature. This review, which is based on a narrative synthesis of 40+ peer-reviewed works, identifies the following important pedagogical frameworks: project-based learning, inquiry-based learning, collaborative learning, and authentic assessment practices that are effective in achieving critical thinking, communication, creativity, and digital literacy. The discussion shows that the combination of constructivist and social constructivist theoretical backgrounds and the modern digital tools would help to learn languages better and understand literature more thoroughly. Nevertheless, the implementation issues are still there, especially the issue of teacher training, curriculum orientation, and equal access to technology, especially in less developed countries. The review highlights how linguistics, literature, and education are interrelated towards promoting meta-skills and emotional intelligence that are needed by learners today. Important results point to the presence of critical differences in the ability of skill-based approaches to be more effective in the development of higher-order thinking and transferable competencies as compared to traditional ones. This review makes a practical implication on policymakers, educators, and curriculum designers to have systemic reforms based on skills development, teacher development, and culturally responsive pedagogies. The area of future research must be directed on longitudinal studies, context-based adaptations in the developing countries, and an integration framework of technology that guarantees equal access.*

**Keywords:** Skill-Based Education, Language Education, Literature Pedagogy, 21st-Century Skills, Project-Based Learning, Communicative Competence, Critical Thinking, Digital Literacy, Pedagogical Strategies, Learning Outcomes

## **1. Introduction**

### **1.1 The Global Educational Paradigm Shift**

There is an essential change in the terrain of education. The older models of education which were focused on knowledge transfer have since become less than sufficient as more societies enter the 21<sup>st</sup> century and are widely characterized by rapid technological advancement, globalization, and access to information as never before. The new school of thought among global educational organizations like UNESCO and World Economic Forum points out that traditional pedagogies involving the delivery of content that is based on particular subjects do not equip the learner with complex and dynamic futures. This imperative has triggered a profound shift in focus towards skills-based education, that is, an educational form that emphasizes the growth of transferable skills, the higher-order thinking process, and adaptive skills more than just rote memorization and standardized testing.

In this more general educational change, the education of language and literature holds a very special place. Language has continued to be the dominant means through which humans communicate, socialize, and build knowledge. The artistic form of the language, literature provides great prospects to cultivate critical thinking, the cultural perception, and emotional intelligence. Influenced by contemporary means of teaching and learning language and literature, the current generation of skills-based language and literature instruction moves beyond the habitual polarization of language skills (listening, speaking, reading, writing), and literary interpretation, and integrates linguistic skills, interpretive depth, communicative efficacy and metacognitive awareness into cohesive teaching schemes.

### **1.2 Problem Statement and Justification**

Although the issue of the necessity of skill-based education is widely acknowledged, there is still a major divide between the presumptions supported by theory and those put into practice. Lot of educational institutions especially in the developing countries are still in the traditional paradigms of: (1) focus on performance on standardized tests, as opposed to the real skills development; (2) lecture-based methods of teaching, that do not permit student agency and active collaboration; (3) the forbearing nature of curriculum design that separates language learning and instruction on content and cultural application; and (4) the lack of integration of digital technologies and modern

The situation is heightened by the geographical differences in access and quality of education within the region. Compared to all other countries, developing countries, particularly those in South Asia, like Pakistan, have to struggle with the particularly serious problems: the lack of resources to train teachers, underdeveloped infrastructure that inhibits the introduction of technology, and inflexible and not adaptable curriculum that cannot accommodate the modern skills needs. It has been shown that in the absence of conscious action that is based on research based pedagogical measures, then these inequalities would continue to generate inequities in education and constrain access to skill sets that can enable learners to compete globally.

### **1.3 Objectives and Scope**

The proposed systematic review will thoroughly investigate pedagogical interventions, theoretical models, and methods of implementation that can successfully form 21<sup>st</sup> century-skills of language and literature teaching. In particular, the review touches upon: (1) theoretical foundations of skill-based language and literature education; (2) supporting evidence-based pedagogical strategies proving their effectiveness in improving the skills of the students; (3) the role of technology and digital technology in modern language teaching; (4) cultural and

sociolinguistic factors related to different learning contexts; (5) implementation issues and obstacles in various settings including developing countries; and (6)

The literature review includes references on the works published in the last several years, mostly after 2015, focusing on the empirical research, systematic reviews, and theoretical studies. Although the reliance on the theoretical research completed in the preceding times (especially on constructivism, social constructivism, and communicative language teaching) is recognized, the emphasis is placed on the current practices and recent trends in competency-based pedagogy.

## **2. Theoretical Framework**

### **2.1 Constructivism and Social Constructivism**

Constructivist and social constructivist paradigms form the main theoretical underpinning of learning and teaching language and literature that is skill based. Constructivism is based on the idea that learning is an active process that learners build an own knowledge based on personal experience and reflections but not passively receiving the information conveyed by teachers. This philosophical movement essentially reinvents pedagogy: rather than being content-delivery systems, pedagogues are now facilitators of learning activities, and the environments in which they are facilitators will see the students construct meaningful problems and knowledge building. Social constructivism builds on constructivism by focusing more on the importance of social interaction, culture and meaning making in collaborations when learning. Based on the original work of Vygotsky, especially, the zone of proximal development (ZPD) concept, social constructivist pedagogy recommends guided learning experiences as students in a controlled collaboration with teachers and classmates gradually gain some autonomy and metacognition. In language education, this becomes a focus on communicative interaction, peer feedback, and collaborative problem-solving as the main learning mechanisms.

The latest examples of the constructivist theory usage in project-based learning show a high level of compatibility between the premises of the theoretical knowledge and practical pedagogical practice (Siregar et al., 2024). Students who are given a real-life project work, such as the requirement to design a solution to a real-life problem, are bound to build knowledge through investigation, collaborative effort, and retrospective practice. It is especially successful in the linguistic area since projects also require the need to make authentic communication, negotiate meanings together with others, and combine the linguistic competencies with the content knowledge.

### **2.2 Experiential Learning Theory**

The learning theory of experiential learning offered by David Kolb offers one more important theoretical background to skill-based language teaching. This model conceptualizes the learning process as a cyclic process that involves concrete experience, thoughtful observation, abstract conceptualization and an experimentation process. In this model, language acquisition is most expedient when learners find themselves in authentic communicative situations, contemplating over the communicative situations and subsequently theorizing language patterns and principles and later applying the newfound knowledge in new communicative situations.

The experience of learning to language education concerns more than theoretical beauty to the practical effectiveness of experiential learning. Experiential methods focus on authentic communication, real-world application, and learner agency, which is exactly the set of conditions under which the process of language acquisition becomes faster and skills transferability higher. Also, experience-based frameworks are amenable to a variety of learning styles and preferences

and enable the promotion of equity in learning processes and educational outcomes (Ifenatuora et al., 2022).

### **2.3 Communicative Language Teaching (CLT)**

Communicative Language Teaching is the intersection between the research in applied linguistics and communicative theories of language. CLT does not emphasize structural linguistic analysis, nor does it emphasize learning patterns by heart, but rather the communicative competence, which entails the proper and effective use of language in a real and effective communication situation in a wide variety of situations. The given approach focuses on the meaningful interaction, real-life communication activities, and creation of both strategic and sociolinguistic competence and grammatical accuracy.

Recent systematic reviews of CLT show a rather balanced image: although CLT helps learners to develop communicative competence, cultural awareness, learner autonomy, and critical thinking significantly, some researchers find loopholes in the teaching of explicit grammar and the system preparation of written texts (Qasserras, 2023). Such evidence creates the idea that the best language pedagogy will merge CLT focus on the authentic communicative ability with a strategic focus on linguistic structure, the formation of reading-writing and testing techniques that determine communicative competence instead of a narrow grammatical accuracy.

## **3. Concept of Skill-Based Education**

### **3.1 Definition and Dimensions**

Skill-based education is a philosophy of education and a system of practice aimed at cultivating skills of learners in various areas: cognitive, interpersonal, intrapersonal, and technical. In contrast to the old model of education that emphasized on content, knowledge replication, skills-based learning focus on transferable, adaptive competencies that are applicable in different situations and during the lifetime of learners.

The modern-day skill-based paradigm refers to several aspects. Cognitive skills are involved in critical thinking, analytical reasoning, problem-solving, and creative ideation, the mental processes that allow the learners to cope with complexity and uncertainty. The core skills of communication (listening, speaking, reading, writing, and multimodal expression) have always been and are becoming more and more collaborative and digital. Skills in interpersonal processes, such as collaboration, empathy, cultural competence, conflict resolution, are needed due to the growing implementation of workforces into distant, multicultural teams. Lifelong learning and adaptive expertise occurs with the help of meta-skills, the awareness and control of personal cognitive, emotional, and motivational processes (Mitsea et al., 2025).

### **3.2 The Skills Framework for 21st-Century Learning**

The 21st-century skill sets are outlined in international systems as the necessary skills to be successful in the contemporary era. The 4Cs theory (Communication, Collaboration, Critical Thinking, Creativity) is one of the popular conceptualizations. Communication is not a simple linguistic proficiency anymore, but articulation of complicated ideas, active listening, taking perspective, and adaptive expression in more than one modal and cultural circumstance. Collaboration does not only involve the working together with people, but true building of meaning and solutions by negotiation, contribution, and sharing of problem-solving. Critical thinking involves analytical approach, assessment of evidence, perspective and reasoned decision making. Creativity involves divergent (coming up with multiple possibilities) and convergent thinking (coming up with coherent solutions).

These capacities are especially effective, so far as language and literature education are concerned. The interpretation of a variety of texts, whether it is canonical literature, modern media, or multilingual literature, necessarily builds cultural competence and critical thinking. Discussion, debate, and creative response to texts create communication and interpersonal skills. Projects of writing and speaking require the combination of critical thinking and creativity. Digital literacy, which grows more and more critical, evolves due to the use of technology in writing, research, and the composition of multimedia (Almazroa and Alotaibi, 2023).

#### **4. Language Education and Skill Development**

##### **4.1 The Four Language Skills in 21st-Century Context**

Classical language teaching theory has theorized four discrete skills, which are Listening, Speaking, Reading, and Writing (LSRW) which are often perceived as being independent skills that can be trained using discrete exercises. Modern competency-based models redefine these skills as acculturated aspects of communicative competence, created in actual, productive engagement, as opposed to intensive practice.

Listening comprehension becomes a dynamic process moving beyond information importation to the meaning-construction that incorporates inference, evaluating intent of the speaker and referencing to pre-existing knowledge. Speaking progresses through pattern repetitions that are organized to real communicative expression which is full of fluency, precision, sociolinguistic aptness and strategic communication when confronted with communicational difficulties. Reading goes beyond shallow understanding of texts to the critical analysis of intent of the author, analysis of arguments, synthesis among texts and identification of cultural and ideological orientations within the texts. Writing turns out to be a meaningful communication that is addressed to real audiences and involves planning, revision, and reflection on the effectiveness of communication (Corpuz et al., 2024; Gali et al., 2025).

##### **4.2 Communicative Competence as an Organizing Principle**

Communicative competence: the composite skill of using language in a suitable, correct, and efficient way to achieve authentic communication is a synergising theme which structures language education based upon skills. This concept has grammatical competence (correctness), sociolinguistic competence (suitingness to context), discourse competence (consistency and unity during longer interactions), and strategic competence (filling in gaps in knowledge by use of communication patterns).

It has been shown that CLT strategies that are oriented towards communicative competence in an explicit way can significantly raise the effectiveness of the students regarding real-world communication in comparison with the traditional grammar-oriented approaches to the study process (Mahata, 2023). The most importantly, the development of communicative competence is especially effective when it is combined with content learning, project-based work, and intercommunication-conditions when the motivation to authentic communication is present, and instantaneous feedback helps to correct the misunderstandings (Song et al., 2024).

##### **4.3 Technology and Language Learning Integration**

The integration of technology and language learning is the fourth component of the lesson.

We are in an age where language learning is increasingly being transformed by the digital tools and technology platforms. New opportunities to personalized and on-demand language practice are provided by the virtual learning environment, language learning apps, and AI-based adaptive systems. Generative AI apps, such as advanced language models, provide chances of natural written communication, adaptive feedback and personalized learning journeys.

Nevertheless, studies point at the significant subtleties. The use of technology is most successful when it is introduced to facilitate real communication functions instead of alternative purposeful human communication (Yeh, 2024). When they enable collaborative learning, interaction with peers and teaching feedback instead of passively receiving content then virtual environments have the greatest pedagogical power. In addition, equal access to technology is a high priority issue, especially in systems with low resource situations, which may widen educational disparities in case of strategies of implementation fail to explicitly guide on this aspect and digital literacy creation (Vesna et al., 2025).

## **5. Literature Education and Critical Skills**

### **5.1 Literary Analysis and Critical Thinking Development**

Education in literature is one of the most fertile areas of development of critical thinking. Literary analysis requires various mental functions: extracting the patterns of the text, determining the intent of the author, identifying the narrative point of view, examining the motivation of the characters, and the generalizations. These critical thinking processes formulate transferable critical thinking skills that go much further than the reading of literature.

There is empirical evidence that instruction based on literature yields huge benefits in the areas of critical analysis and empathy, as well as in communication among the students (Zakaria et al., 2025). The experience of the interaction with the multitude of literary viewpoints, voices, and worldviews develops the psychological flexibility and perspective-taking ability--the skills that are progressively recognized as the key qualities of modern citizenship. More importantly, these results are most effectively manifested when literary work is studied in the form of active discussions, creativity, and applicability to the real-world context and not by passive confirmation of a certain understanding of the work or by memorizing facts about its author (Araujo et al., 2024).

### **5.2 Cultural Awareness and Emotional Intelligence**

It is only through literature education that cultural awareness and emotional intelligence-meta-skills that are now discussed as being at the heart of communication in multicultural societies and challenging interpersonal environments-are developed. The interaction with different voices, characters and cultural viewpoints facilitates the acknowledgement of cultural specificity, valuing and appreciation of difference as well as the insights into alternative ways of looking at the world. Personal care about character motivation, internal conflict and relationships formation, builds emotional recognition and the ability to identify with the characters.

Studies that directly investigate the contribution of literature in the formation of emotional intelligence show that literary reading is significantly correlated with the improvement of emotional control, interpersonal competencies, and prosocial conduct (Wang et al., 2024). In case literature teaching includes the explanation of the emotional situations, driving forces, and puzzles of the characters referring to the experiences of the students, emotional learning will become tacit and inbuilt.

### **5.3 Creative Expression and Language Development**

The learning of literature builds up creative language usage and the advanced linguistic expression at the same time. Creative writing, which involves coming up with original plots, poetry or character profiles, requires the use of previously learned literary knowledge and playing with language schemes and creating a personal voice. This is an inherent process that builds up of writing fluency, syntactic sophistication and rhetorical awareness.

The modern models focus on promoting oral and written creativity to language education (Liubashenko et al., 2025). Studies of the creative development of language indicate that direct teaching in creative thinking, together with genuine creativity of expression and feedback of peers, has a significant positive impact on the linguistic fluency of language as well as on cognitive flexibility. Creative possibilities also expand with the incorporation of multimodal composition, the combining of written text, and image, sound, and video. Multimodal composition has the potential to attract a wide range of learner preferences.

## **6. Pedagogical Strategies for 21st-Century Learning**

### **6.1 Project-Based Learning (PBL)**

Project-Based Learning is one of the most studied and empirically tested instructional methods of acquiring 21st century skills in the form of language and literature education. PBL involves the students in long-term collaboration and working on real-life projects or problems, involving the integration of knowledge, skills, and creative solutions.

The unique features of successful PBL in language education are: (1) authentic meaningful questions or problems to support the project; (2) student interdependence which is real; (3) project-long lasting intervention; (4) integration of several language skills (reading, writing, speaking, listening) and content learning; (5) presentation of the results of the project by real or authentic audience. The meta-analyses of PBL implementation in the various educational settings consistently show significant improvements in the areas of critical thinking, problem-solving, communication, and academic achievement (Song et al., 2024).

Project-based processes, in particular, are especially pertinent to language education, and communication in an authentic form is required in this case. The communication with the stakeholders has to be clear and convincing on projects that deal with the actual problems. Working collaboratively on a project requires negotiations of meaning, description of ideas and peer-reviewing of the communication behavior. The process of presenting project results involves synthesis and the logical structure of results, i.e. exactly the communicative difficulties that do give rise to authentic language proficiency (Saad and Zainudin, 2024).

### **6.2 Inquiry-Based Learning**

Inquiry-Based Learning (IBL) makes student-constructed questions and inquiries the learning focal point. The teachers do not provide students with pre-established knowledge, but with help, the students are encouraged to seek real intellectual issues by conducting inquiry, collecting evidence, and reasoning. Inquiry-based instructions may be used in literature education where there can be studies of literary devices in various texts, studies of cultures as they are reflected in literature, and studies of the influences of historical context on the meaning of literature.

The instructional force of inquiry is attributable to several forces, which include genuine intellectual motivation, foster research and analytical power, enhanced motivation by way of autonomy and reliability, and critical thinking complemented all along the learning process. Studies that explore IBL in the linguistic classroom specifically show that it results in a substantial improvement of communicative proficiency, the ability to learn on one's own, and critical textual analysis (Yeh, 2024). Furthermore, technology and digital research skills are inherently built into inquiry based methods of learning, where student research will always include online research, digital information and technology mediated communication.

### **6.3 Collaborative Learning Environments**

Collaborative learning is not just a surface level group work activity, but an organized and interdependent learning in which individual accomplishment is based on collective

accomplishment. The positive interdependence between the participants is highly needed to be achieved through effective collaboration learning; excellent pedagogical design is the necessary aspect of collaboration learning: it must be positively interdependent, each individual must be accountable, collaboration skills need to be explicitly taught, and the teacher should monitor and intervene in case of poor collaboration.

Collaborative learning is especially effective in language education. Interacting with peers offers real communicative activity, peer feedback on language production, and a chance at modified output, specifically the conditions of language acquisition recognized in the research (Liang and Kelsen, 2018). The natural integration of communication with meaningful activity is achieved through collaborative project work and group discussion, which motivate and engage more individuals than individual communication activities.

It has been shown that students who undergo systematic collaborative learning have a higher level of communication skills, understanding of the content, more complex problem-solving, and higher academic performance than traditional learning (Hindun et al., 2024). Moreover, interpersonal skills that are necessary in multicultural societies today, such as cultural competence and perspective-taking, are specifically provided in a collaborative learning setting.

#### **6.4 Problem-Based Learning (PBL) and Deep Learning**

Although quite different as to Project-Based Learning, Problem-Based Learning (PBL) has the pedagogical features of the authentic problem-based learning. PBL may be used in language learning contexts to involve students in the solving of communication problems (constructing workable persuasive arguments, translating difficult texts, figuring out the ambiguities of meanings across languages), linguistic problems (understanding language change, comparing language structure), or literary problems (understanding the ambiguities of texts, analyzing text reliability).

A study on the investigation of learning strategies in problem-based curricula indicates that there are severe differences between the deep and surface-based learning strategies. There is a high correlation between deep learning strategies, such as the active engagement with the material, building a connection with the previous knowledge, taking into account multiple perspectives, and trying to comprehend underlying principles, and high academic achievement. The learning strategies associated with surface, such as memorization of facts, passive reading, insignificant engagement, predict poor grades and low transfer of learning (Saqr et al., 2023).

Deep learning- pedagogical support in problem based contexts consists of: explicit metacognitive teaching, teacher scaffolding to allow the student to continue beyond surface approach, teacher-assessment methods that reward understanding over memorization, and collaborative organization that encourage meaning-negotiation. In case teachers purposefully encourage the use of deep learning strategies, learners have much better conceptualization and scholastic performance (Salsabila and Muqowim, 2024).

### **7. Digital Tools and Technology Integration**

#### **7.1 Learning Management Systems and Online Platforms**

LMS (Learning Management Systems) such as Moodle, Google Classroom, and language specific learning platforms, have established themselves as dominant factors in modern educational settings. These systems provide substantial affordance: asynchronous communication with an ability to flexibly learn, document management with the ability to organize courses, assessment functionalities with formative feedback, and possibly a better accessibility of learners with varied needs.

Research however shows that availability of technology does not guarantee pedagogical effectiveness. Systems with LMS whose major purpose is to deliver content and convenience of administration exhibit little learning advantages over the conventional strategies. Conversely, an implementation of LMS that is based on pedagogically advanced attributes, i.e., the use of the forum, as the means of genuine peer discussion, inclusion of collaborative tools, data analytics to personalize the feedback, and the multimedia resources, show significant increases in student engagement and learning outcome (Basatha et al., 2025).

### **7.2 Artificial Intelligence and Adaptive Learning Systems**

Use of generative AI systems, such as large language models such as ChatGPT, GPT-based systems, and other engines, provide new opportunities in language education. These tools have the potential to offer a customized writing feedback, create real-life communicative situations, flex interpretations of different levels of writing ability of the learners and develop the prospect of authentic written communication. Individualized learning engines that apply AI on the history of student performance can be used to tailor learning in response to student performance requirements, which benefits differentiation and enables individualized needs to be fulfilled.

But these opportunities do come with some serious issues. The content produced by AI is usually fluent, but it has slight mistakes or outdated cultural aspects. The excessive dependence on the feedback of AI tools can deter even actual peer communication and reduce the role of teachers in critical teaching situations. Academic integrity questions, data privacy, and algorithm bias should be thought carefully (Hao, 2024).

The most pedagogically viable AI implementation includes: considering AI as an auxiliary tool, not a substitute of the human interaction; showing how to critically evaluate AI-generated content; keeping the evaluation of meaningful communication to human consideration; and ensuring equal technological access. The current studies conducted on the use of generative AI in the educational sector show some advantages in relation to academic performance when technological implementation is carefully performed as a part of well-planned pedagogical systems, and dangers in situations where the implementation of technology is based on efficiency instead of the quality of learning.

### **7.3 Addressing the Digital Divide and Equity Concerns**

The implication of embedding technology entails equity. Lack of equal access to devices, internet connectivity, and technical service reproduces and even increases the existing educational disparities especially to students in low-income regions and developing countries. The digital divide goes beyond access to technology and includes also digital literacy, which is the ability to use technology effectively in the learning process.

These equity issues can only be addressed through multidimensional solutions: investing in technological infrastructure in underserved communities, making digital literacy building a part of curriculum at all levels, more thoroughly training teachers in technology-enhanced instruction and finding ways to create educational technologies that can be used offline. The findings of the international studies on the implementation of technology in developing educational settings highlight that a successful implementation of technologies requires the adaptation of the general principles to the local conditions, using the existing resources instead of importing a solution, and making the process of equity a core focus since its founding planning stages (Vesna et al., 2025).

## **8. Cultural and Sociolinguistic Perspectives**

### **8.1 Multilingual Classrooms and Language Identity**

The recent trends on education are characterized by the growing number of multilingual students as a result of global migration patterns and the growing tendency of multilingualism as a cultural norm. It is a pedagogical and ethical reality, which requires a shift in the perception of multilingualism as an asset and drawback to the understanding of multilingualism as a resource and strength of the mind. Multilingual classes offer the benefits of comparison of linguistic study, intercultural knowledge, and the enjoyment of language diversity.

According to the works of sociolinguistics, language preferences naturally rely on the identity, belonging, and power in the classroom structures. Home languages of the students tend to be culturally empowered and have ties with relations in the family and belonging to the community. The process of devaluing students home languages to use one dominant language has psychological and social effects other than just lingual ones (Mouboua et al., 2024).

More pedagogically advanced practices of multilingualism include: having explicit appreciation of linguistic resources of students; providing space where translanguaging can occur- strategic code-switching based on using linguistic repertoires; acknowledging that learning in a non-native language may impose extra cognitive load on students, though the students may have academic competence; and the integration of languages and cultures of students into the curriculum and not isolating them in different language- Studies reveal that these culturally maintaining practices lead to better academic performance and sense of belonging and academic identity in students (Cao, 2025).

### **8.2 Language and Power: Critical Sociolinguistic Perspectives**

Critical sociolinguistics questions the connection between language and power as well as social structures. Different varieties of a language have social connotations and meanings; some of them are associated with prestige and opportunities whereas others are stigmatized. Educational language policy, which decides which languages are taught, valued, assessed, etc., are by definition a subject that reinforces power structures of societies.

The opinion comes especially in handy in multilingual education and education in developing countries with an emphasis on language. Policies of English medium instructions, which are being promoted internationally in the name of global economic engagement, also establish local languages as inferior and less valuable at the same time (Sah, 2020). Although mastering English opens some real opportunity access, educational policies that seek the English development solely can disempower the multilingual competence and maintenance of the local languages.

The critical language pedagogy suggests building linguistic flexibility and code-switching control, conceptualizing the awareness of the social aspect of language and analyzing the reflection and reproduction of power relations in language selection, and developing linguistic flexibility and code-switching. According to this approach, language learners are viewed as actors who can perceive the social aspects of language and make informed linguistic decisions instead of uninformed receivers of ready-made rules of language (Haas et al., 2024).

### **8.3 Culturally Responsive Pedagogy in Language and Literature**

The culture responsive pedagogy is a direct relationship between the content and the methods used in teaching subjects and activities to the cultural background and the culture of the students. This is in the use of language and literature in teaching; such as: the choice of texts that reflect the work of various authors and various characters and viewpoints; the study of the cultural

backgrounds of literature; the discussion of the cultural aspects of language; and the verification of culture and cultural outlook of students in classroom discussion.

It has been found out that culturally responsive instruction on literature increases the level of engagement, motivation, sense of belonging and academic achievement among students especially those who belong to the historically marginalized communities. Through curriculum that incorporates literature by students and about the own cultural communities of students and other cultures, students gain higher order cultural knowledge and learners have higher academic achievement (Liubashenko et al., 2025).

## **9. Challenges in Implementation**

### **9.1 Teacher Professional Development and Readiness**

One of the issues that have persisted during the implementation of skill based language and literature education is the problem of teacher training and professional growth. Most teachers who were educated on the basis of traditional pedagogical models do not have the experience of working with student-centered, collaboration, project-based and technology integration. The shift towards the skill based pedagogy not only involves taking new strategies but also necessitates complete reconsideration of the role of teachers; as the bearers of knowledge they become the facilitator of learning with certain shifts in classroom management, assessment and the interaction patterns between teachers and students.

Teacher professional development helping to bridge this gap requires: continuing interaction (which often should take 50+ hours with support) not one-off workshops; the relationship with the current practice and issues of teachers; the possibility to gain experience and experiment; the involvement of peers and communities of practice; and the systemic support in the form of an opportunity to implement (Yang, 2023). According to research, the absence of professional development and the failure to ensure continuous support can be viewed as one of the main obstacles to the realization of innovative pedagogies on the sustainable basis.

### **9.2 Curriculum Rigidity and Assessment Constraints**

Most of the educational systems across the world especially those in the developing world have a fixed curriculum and assessment systems that favor the traditional test based evaluation instead of the authentic demonstration of skills. Standardized tests that focus on memorization and representation of individual talents are those forces that are hard to fight even by schools that otherwise should have better learning outcomes due to the alternatives in pedagogies. This systemic mismatch of skill-development strategies and high-stakes testing creates systemic obstacles to implementation.

Curriculum change in response to this dilemma must be systemic: alignment of curriculum models with skill demonstration needs, assessment models that highlight skill expression on authentic tasks, teacher development that helps teachers accommodate this change, and policy provisions that make this change practical even though the short-term outcomes will change. The experience of educational systems where comprehensive curriculum reform has been practiced shows that any initial change in the shape of the assessment scores is usually overcome as teachers acquire expertise in implementation (Verawati & Nisrina, 2025).

### **9.3 Resource Constraints and Infrastructure Limitations**

In developing countries and settings with limited resources, in particular, there are material restrictions to the implementation of modern skill-based pedagogies: a lack of access to digital technologies and the internet, a shortage of library and reference resources, large classes with

prohibition of individual attention and collaborative work, and low investment in professional education and instructional resources.

These limitations necessitate modified implementation policies as opposed to wholesale rejection of skill-based policies. The studies about effective pedagogy with the resources limitation recognize low-tech options to achieve pedagogical objects: peer teaching of peers, using community resources (professionals living locally, outdoor settings) to complement costly resources, using materials created by the instructor with the emphasis on highly impactful uses, and selecting the aspects of technology use based on their high impact. Solutions developed through educational innovation in the setting of scarcity can be creative enough to be implemented even in well-resourced settings (Hindun et al., 2024).

## **10. Implications for Policy and Practice**

### **10.1 Curriculum Reform and Policy Development**

Introducing skill-based language and literature education involves policy-level choices of both curriculum designs and learning standards as well as methods of assessment and distribution of resources. The international evidence indicates that there are several policy priorities: (1) reforming of curriculum frameworks to clearly express skill development goals and content learning; (2) national testing aligned with skill-based goals, replacing high-stakes standardized testing with authentic demonstration of skills; (3) teacher quality standards in ensuring preparation in a student-centered approach to the learning process and technology; (4) resource allocation to support a long-term professional growth, educational materials

In the case of policy reform particularly to developing countries, there is a need to strike a balance between the global best practices and adapting internationally. Importing practices that have worked in high-income nations often does not work in new cultural and resource environments on a wholesale basis. A good development of policies involves local teachers, policy makers and community stakeholders in determining local contexts of appropriate ways that do not contradict international evidence and principles proved through research (Shimizu et al., 2023).

### **10.2 Teacher Education and Continuous Professional Development**

Professional development of teachers becomes an important policy priority. The pre-service teacher education programs should equip educators with skill-based pedagogy, which focuses on constructivist theory, student centered approach, collaborative learning design, assessment to learn, and technological integration. Training of professional in-service should be able to equip existing teachers to shift over to these methods, and in most cases, it would demand a lot of time, experience on the job, and continuous guidance.

Evidence-based professional development models focus on: content knowledge of skill-based pedagogy, active learning opportunities through which teachers get to sample the practices that they will be teaching, collaboration among teachers that study practice in union, application of student data that informs an improvement, and systemic support that allows implementation. In the absence of this kind of support, innovation efforts will often end with only surface-level compliance, without any fundamental change to teaching practice (Yang, 2023).

### **10.3 Assessment System Reform**

Another policy implication that is critical is the assessment system reform. The conventional standardized testing that focuses on individual ability demonstration and recall of facts systematically disagrees with the skill-based learning goal that focuses on the ability to think

critically, be creative, work in teams, and transfer. This needs to be assessed through complex capacities with effective skill-based education.

Performance tasks, portfolio assessment, peer and self-assessment as well as project evaluation are authentic assessment methods that offer more accurate data on skill development. The process of scaling such methods of assessment, however, is a challenge, especially in large educational systems. The policy change to this challenge needs to invest in the capacity of teachers to design and implement authentic assessment, create rubrics and standards that help achieve consistent evaluation, and possibly use technology-enhanced assessment methods. Authentic assessment usually demands a lot of time and professional assistance after the standardized assessment is switched to (Pena et al., 2025).

## **11. Future Research Directions**

### **11.1 Longitudinal Studies and Transfer Outcomes**

Although the empirical evidence on short-term consequences of skill-oriented pedagogies is voluminous, there is little longitudinal research with regard to long-term effects. Future studies should follow the skill development of the students over a series of years, whether skills acquired by project based, inquiry based, and collaborative learning methods are maintained and applied in the next educational settings and practice. This type of research would demand an investment in the lengthy collection of data, which is taxing, yet it is necessary to determine the actual learning impact.

### **11.2 Context-Specific Implementation Research**

The majority of existing studies in the area of skill-based pedagogy are based on the situations in high-income and high-resource educational institutions. Implementation and effectiveness should be studied in the future in the variety of situations: developing countries, schools with limited resources, multilingual population, distance learning. This means conducting rigorous in-situ research, determining the way adjustments can preserve the pedagogical ideas, as well as to accommodate realities in contexts and come up with context-specific implementation frameworks.

### **11.3 Technology Integration and Digital Learning Ecosystems**

With the fast change in technologies, studies that investigate the role of technology in skill based language training must be updated continuously. Further studies ought to explore novel technologies (VR, AR, new language models) in the teaching and learning of language and literature, clarify the situations that maximize the pedagogical efficiency of technology, and resolve the lingering equity issue related to access to technology and digital literacy.

### **11.4 Metacognitive and Emotional Dimensions**

Although it is common to have a large amount of literature on cognitive skills in regard to their development, very little has been done about metacognitive and emotional aspects of skill learning. The research needs to be conducted in the future to investigate how learners grow their metacognitive awareness of their individual learning strategies, emotional regulation in demanding learning cases, and growth mindset beliefs which encourage resilience and persistence. The same research acknowledges that development of skills does not only involve cognitive abilities but also affective and control aspects to facilitate lifelong learning.

## **12. Conclusion**

Language and literature education based on skills is a validated research strategy as well as an ethical requirement of modern education systems. The overwhelming data show that student-based pedagogies such as project-based learning, inquiry-based learning, and collaborative

pedagogies significantly outscore the traditional transmission models in the development of 21st century skills that are critical to success in the contemporary world. Such methods do not simply produce better language skills and the ability to read and understand literature but also the ability to think critically, be creative, collaborate, and communicate far beyond the boundaries of language classroom use.

Coherent and powerful educational methods are formed as the constructivist and social constructivist theoretical frameworks are combined with evidence-based pedagogical practices. By being placed in the context of meaningful problem solving, actual communication situations and shared meaning-making, language and literature education is a place of all-encompassing skill development that considers cognitive, interpersonal, and intrapersonal aspects.

There are however, implementation challenges that are still very high especially in the developing countries that have limited resources, inflexible curriculum, and lack of teacher training. These problems will not be solved alone, but the concerted efforts of many levels of the system are necessary: curricular change to align frameworks with skills-based goals, assessment system change to evaluate real skills display, professional development sustained development to create educator capacity, and resource mobilization to facilitate change. Evidence provided internationally indicates that such system reform can be attained even in resource-bound situations by providing creative adjustment and emphasis on priorities.

Most importantly, perhaps, language and literature education should be based on skills and should be equity and cultural responsive. The teaching of language has far-reaching consequences on cultural identity and language rights, and social opportunity. Skill-based methods of pedagogy should be pedagogically exemplary and at the same time, nurture the global competencies and the appreciation of the local linguistic and cultural diversity, authenticate multilingualism, and oppose the replication of existing disparities by language policy. It involves paying direct attention to the sociolinguistic aspects of language education, culturally sensitive curriculum choice, and pedagogy that recognizes the cultural and linguistic assets of students.

The future of this development will be based on strict research into the application of the methodology to different settings, longitudinal research showing long-term effectiveness, and ongoing innovation to shape the pedagogical methods in accordance with the constantly changing technological and social conditions. Schools, governments and the global educational community should be determined to research, professional growth and systemic change that is needed to fulfill the transformational potential of skill based language and literature education.

#### **DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

The Authors hereby declare that generative AI technologies, such as Large Language Models, etc., have been used during the writing or editing of manuscripts. This explanation will include the name of the generative AI technology.

Details of the AI usage are given below:

1. Grammarly: To correct grammar

#### **Author Contributions**

**Rafiq-uz-Zaman**<sup>1\*</sup>: Conceptualization, study design, analysis, data collection, methodology, software, resources, visualization, writing original draft, writing review and editing. **Nadeem**<sup>2</sup>: writing review and editing, and supervision. **Shih**<sup>3</sup>: writing review and editing, and supervision. **All Authors** have equal contribution in different angles.

### Conflict of interest

The authors declare no conflicts of interest.

### Funding

No funding from any source

### References

- Akram, H., & Li, S. (2024). Understanding the Role of Teacher-Student Relationships in Students' Online Learning Engagement: Mediating Role of Academic Motivation. Perceptual and Motor Skills. <https://doi.org/10.1177/00315125241248709>
- Alali, R. (2024). ENHANCING 21ST CENTURY SKILLS THROUGH INTEGRATED STEM EDUCATION USING PROJECT-ORIENTED PROBLEM-BASED LEARNING. *Geo Journal of Tourism and Geosites*. <https://doi.org/10.30892/gtg.53205-1217>
- Almazroa, H., & Alotaibi, W. (2023). Teaching 21st Century Skills: Understanding the Depth and Width of the Challenges to Shape Proactive Teacher Education Programs. *Sustainability*. <https://doi.org/10.3390/su15097365>
- Araújo, B., Gomes, S. F., & Ribeiro, L. (2024). Critical thinking pedagogical practices in medical education: a systematic review. *Frontiers in Medicine*. <https://doi.org/10.3389/fmed.2024.1358444>
- Ateş, H., & Köroğlu, M. (2024). Online collaborative tools for science education: Boosting learning outcomes, motivation, and engagement. *Journal of Computer Assisted Learning*. <https://doi.org/10.1111/jcal.12931>
- Basatha, R., Prayoga, R. A. S., Akbar, M. S., Prayitno, E. D., Nikmah, M., Nusyura, F., Wirapraja, A., Ma'ady, M., & Fitriani, L. (2025). Systematic Literature Review of Game-Based Learning Management Systems through ClassDojo in Indonesian Education. *E3S Web of Conferences*. <https://doi.org/10.1051/e3sconf/202564506006>
- Bell, R., & Bell, H. (2020). Applying educational theory to develop a framework to support the delivery of experiential entrepreneurship education. <https://doi.org/10.1108/JSBED-01-2020-0012>
- Cao, X. (2025). A Sociolinguistic Examination of Multilingual Phenomena in Virtual Network Environments. *SHS Web of Conferences*. <https://doi.org/10.1051/shsconf/202522201019>
- Corpuz, J. M. M., Morales, A. N., Clarin, A. S., Dionio, B. B., & Cocolan, J. V. (2024). Students' Vocabulary Skills in Relation to their Reading Comprehension in Language. *International Journal of Research and Innovation in Social Science*. <https://doi.org/10.47772/ijriss.2024.8100183>
- Daniel, K., Msambwa, M. M., & Wen, Z. (2025). Can Generative AI Revolutionise Academic Skills Development in Higher Education? A Systematic Literature Review. *European Journal of Education*. <https://doi.org/10.1111/ejed.70036>
- Dunn, T. J., & Kennedy, M. (2019). Technology Enhanced Learning in higher education; motivations, engagement and academic achievement. *Comput. Educ.* <https://doi.org/10.1016/J.COMPEDU.2019.04.004>
- Gkintoni, E., Antonopoulou, H., Sortwell, A., & Halkiopoulou, C. (2025). Challenging cognitive load theory: The role of educational neuroscience and artificial intelligence in redefining learning efficacy. *Brain sciences*, 15(2), 203.
- Elmi, C. (2020). Integrating Social Emotional Learning Strategies in Higher Education. *European Journal of Investigation in Health, Psychology and Education*. <https://doi.org/10.3390/ejihpe10030061>

- Gali, C. R., Ramesh, G., Justin, J., & Lalitha, J. (2025). Effectiveness of creating awareness about English language skills and learning strategies to enhance listening comprehension of learners in rural government colleges in Tamil Nadu – A primary research study. *i-Manager's Journal on English Language Teaching*. <https://doi.org/10.26634/jelt.15.2>
- Haas, J., Walsh, D. D., & Marroquin, M. (2024). Enhancing Cultural Competence in Counselor Education through Sociolinguistic Awareness. *Teaching and Supervision in Counseling*. <https://doi.org/10.7290/tsc06vevm>
- Hao, Z. (2024). Digital Technology in Education: Navigating the Challenges and Opportunities for the 21st Century Learner. *Transactions on Comparative Education*. <https://doi.org/10.23977/trance.2024.060319>
- Hindun, I., Nurwidodo, N., Wahyuni, S., & Fauziah, N. (2024). Effectiveness of project-based learning in improving science literacy and collaborative skills of Muhammadiyah students. *JPBI (Jurnal Pendidikan Biologi Indonesia)*. <https://doi.org/10.22219/jpbi.v10i1.31628>
- Hu, X., & Wang, S. (2025). The Effects of VR Integration in Teaching English as a Foreign Language: Academic Achievement, Motivation, and Engagement among Middle School Learners. *International Journal of Research and Innovation in Social Science*. <https://doi.org/10.47772/ijriss.2025.908000153>
- Huseinović, L. (2023). The Effects of Gamification On Student Motivation And Achievement In Learning English As A Foreign Language In Higher Education. *MAP Education and Humanities*. <https://doi.org/10.53880/2744-2373.2023.4.10>
- Ifenatuora, G. P., Awoyemi, O., & Atobatele, F. A. (2022). A Conceptual Model for Designing Experiential Learning for Neurodiverse Secondary School Students. *International Journal of Social Science Exceptional Research*. <https://doi.org/10.54660/ijsser.2022.1.2.98-104>
- Ilma, A. Z., Wilujeng, I., Widowati, A., Nurtanto, M., & Kholifah, N. (2023). A Systematic Literature Review of STEM Education in Indonesia (2016-2021): Contribution to Improving Skills in 21st Century Learning. *Pegem Journal of Education and Instruction*. <https://doi.org/10.47750/pegegog.13.02.17>
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice-Hall.
- Liang, H.-Y., & Kelsen, B. (2018). Influence of personality and motivation on oral presentation performance. *Journal of Psycholinguistic Research*.
- Liubashenko, O., Zakhariia, A., & Perlovska, D. (2025). Fostering creative language skills within PISA standards: bridging secondary school and university. *ARS LINGUODIDACTICAE*. <https://doi.org/10.17721/2663-0303.2025.1.01>
- Mahata, M. P. K., & Pattnaik, P. (2024). Communicative Language Teaching Approach: Impact on Students' Speaking Skills of Rural ESL Learners of Secondary Schools in Jhargram District, West Bengal. *International Journal of English Learning & Teaching Skills (IJELTS)*, 6(1), 6. <https://doi.org/10.15864/ijelts.6111>
- Mitsea, E., Drigas, A., & Skianis, C. (2025). A Systematic Review of Serious Games in the Era of Artificial Intelligence, Immersive Technologies, the Metaverse, and Neurotechnologies: Transformation Through Meta-Skills Training. *Electronics*. <https://doi.org/10.3390/electronics14040649>

- Mouboua, P. D., Atobatele, F. A., & Akintayo, O. T. (2024). Language as a tool for intercultural understanding: Multilingual approaches in global citizenship education. *GSC Advanced Research and Reviews*. <https://doi.org/10.30574/msarr.2024.11.1.0071>
- Peña, H.-K. D., Galigao, R., & Gabutero, A. M. (2025). Assessment for learning: Balancing traditional and innovative evaluation approaches in education. *International Journal of Humanities and Social Sciences*. <https://doi.org/10.69651/pijhss0402147>
- Prananto, K., Cahyadi, S., Lubis, F. Y., & Hinduan, Z. (2025). Perceived teacher support and student engagement among higher education students – a systematic literature review. *BMC Psychology*. <https://doi.org/10.1186/s40359-025-02412-w>
- Qasserras, L. (2023). Systematic Review of Communicative Language Teaching (CLT) in Language Education: A Balanced Perspective. *European Journal of Education*. <https://doi.org/10.24018/ejedu.2023.4.6.763>
- Saad, A., & Zainudin, S. (2024). A review of teaching and learning approach in implementing Project-Based Learning (PBL) with Computational Thinking (CT). *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2024.2328280>
- Sah, P. K. (2020). English medium instruction in South Asia's multilingual schools: unpacking the dynamics of ideological orientations, policy/practices, and democratic access. *International Journal of Bilingual Education and Bilingualism*. <https://doi.org/10.1080/13670050.2020.1718591>
- Salinas-Navarro, D., Vilalta-Perdomo, E., Michel-Villarreal, R., & Montesinos, L. (2024). Using Generative Artificial Intelligence Tools to Explain and Enhance Experiential Learning for Authentic Assessment. *Education Sciences*. <https://doi.org/10.3390/educsci14010083>
- Salsabila, Y. R., & Muqowim, M. (2024). Korelasi antara Teori Belajar Konstruktivisme Lev Vygotsky dengan Model Pembelajaran Project Based Learning (PBL). *LEARNING: Jurnal Inovasi Penelitian Pendidikan Dan Pembelajaran*. <https://doi.org/10.51878/learning.v4i3.3185>
- Saqr, M., Matcha, W., Uzir, N. A., Jovanović, J., Gašević, D., & López-Pernas, S. (2023). Transferring effective learning strategies across learning contexts matters: A study in learning. *Australasian Journal of Educational Technology*. <https://doi.org/10.14742/ajet.8303>
- Shimizu, I., Kasai, H., Shikino, K., Araki, N., Takahashi, Z., Onodera, M., Kimura, Y., Tsukamoto, T., Yamauchi, K., Asahina, M., Ito, S., & Kawakami, E. (2023). Developing Medical Education Curriculum Reform Strategies to Address the Impact of Generative AI: Qualitative Study. *JMIR Medical Education*. <https://doi.org/10.2196/53466>
- Siregar, T. E., Luali, N., Vinalistyosari, R. C., Hanurawan, F., & Anggraini, A. (2024). Implementation of Vygotsky's Constructivism Learning Theory through Project in Elementary Science Education. *AI Qalam: Jurnal Ilmiah Keagamaan Dan Kemasyarakatan*. <https://doi.org/10.35931/aq.v18i4.3620>
- Song, X., Razali, A. B., Sulaiman, T., & Jeyaraj, J. J. (2024). Impact of Project-Based Learning on Critical Thinking Skills and Language Skills in EFL Context : A Review of Literature. *World Journal of English Language*. <https://doi.org/10.5430/wjel.v14n5p402>
- Suartama, I. K., Sudarma, I. K., Gde, I., Sudatha, W., Ilia, W., Sukmana, Y., & Susiani, K. (2024). Student engagement and academic achievement: the effect of gamification on case and project-based online learning. *Journal of Education and Learning (EduLearn)*. <https://doi.org/10.11591/edulearn.v18i3.21349>

- Sylvester, C. E. (2025). Gamification in Education: Enhancing Student Engagement and Learning Outcomes. *Journal of Informatics Education and Research*. <https://doi.org/10.52783/jier.v5i4.3920>
- UNESCO. (2015). *Rethinking education: Towards a global common good?* UNESCO Publishing.
- Verawati, N. N. S., & Nisrina, N. (2025). Reimagining Physics Education: Addressing Student Engagement, Curriculum Reform, and Technology Integration for Learning. *International Journal of Ethnoscience and Technology in Education*. <https://doi.org/10.33394/ijete.v2i1.14058>
- Vesna, Dr. L., Sawale, Priti. S., Kaul, Dr. P., Pal, S., Suv, B., & Murthy, R. (2025). Digital Divide in AI-Powered Education: Challenges and Solutions for Equitable Learning. *Journal of Information Systems Engineering & Management*. <https://doi.org/10.52783/jisem.v10i21s.3327>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wagino, W. (2024). Enhancing Academic Achievement and Critical Thinking through e-Learning: Exploring Motivation, Creativity, Participation, and Gadget Utilization in Higher Education. *International Journal of Information and Education Technology*. <https://doi.org/10.18178/ijiet.2024.14.12.2198>
- Wang, F. (2025). Exploiting Teacher-Mate Technology for College English Vocabulary Augmentation: A Cognitive-Constructivist Empirical Research. *International Journal of Information and Education Technology*. <https://doi.org/10.18178/ijiet.2025.15.5.2300>
- Wang, W., Rezaei, Y. M., & Izadpanah, S. (2024). Speaking accuracy and fluency among EFL learners: The role of creative thinking, emotional intelligence, and academic engagement. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e37620>
- World Economic Forum. (2020). *The future of jobs report 2020*. WEF.
- Yang, S. (2023). Research on Curriculum Reform in Teacher Education Courses Based on the Outcomes-Based Education (OBE) Philosophy. *Curriculum and Teaching Methodology*. <https://doi.org/10.23977/curtm.2023.061901>
- Yeh, H.-C. (2024). The synergy of generative AI and inquiry-based learning: transforming the landscape of English teaching and learning. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2024.2335491>
- Yu, H. (2024). Enhancing creative cognition through project-based learning: An in-depth scholarly exploration. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.e27706>
- Zakaria, S. F., Tazijan, F., Mat, N. H. C., Lin, N. M., & Manap, M. R. (2025). Exploring the Role of Literature in Enhancing Critical Thinking and Professional Development. *International Journal of Research and Innovation in Social Science*. <https://doi.org/10.47772/ijriss.2025.9020346>