S.H. Kylyshpayeva^{1*}, M.H. Kylyshpayeva²

¹L.N.Gumilyov Eurasian National University, Astana, Kazakhstan ²Zhetysu University, Taldykorgan, Kazakhstan (E-mail: *sarbi_barbie@mail.ru, madina_6709@mail.ru)

Linguistic persona development of a philologist in the digital environment of the university

Abstract. The aim of this research is to illuminate the efficacy of scaffolding as a distinctive modality of pedagogical enhancement within the digital educational landscapes of universities. This article elucidates the core essence, multifaceted functions, and diverse techniques of scaffolding, alongside avenues for deeply engaging students in the learning of foreign languages. It delves into the intricacies of an e-learning course centered on foreign language acquisition, intricately woven with the scaffolding principles unique to the digital realm. The study rigorously assesses the impact of integrating these principles on the development of students' foreign language communicative competence, exemplified through the FutureLearn e-learning courses.

The scholarly significance of this investigation emerges from delineating three primary forms of scaffolding: individual scaffolding, partnership scaffolding, and person-computer-based scaffolding. In conclusion, this endeavor not only yields the creation of FutureLearn—e-learning courses that embody scaffolding ideals—but also paves a path for enriched educational practices that elevate foreign language learning in a digitally interconnected world.

Keywords: linguistic persona of a philologist, scaffolding, pedagogical immersing, digital learning environment of higher education.

DOI: https://doi org/10.32523/2616-678X-2024-149-4-239-246

Received: 07.10.2024; Revised: 29.11.2024; Accepted: 19.12.2024; Available online: 28.12.2024

Introduction

The vigorous advancement of online education, witnessed in recent decades, unavoidably brings forth critical questions regarding the quality and effectiveness of its offerings, particularly concerning the ultimate outcomes of such learning. Learning management systems (LMS) have solidified their esteemed position as pivotal innovations in university education, adeptly enabling the orchestration of learning within the digital realm. The tumultuous landscape of education during the pandemic further validated the efficacy of this transformative approach, underscoring its indispensable role in adapting to unforeseen challenges. As institutions navigate this uncharted territory, the potential of LMS to enhance educational experiences and optimize learning pathways becomes increasingly evident, shaping a future where digital and traditional methodologies intertwine harmoniously. In this era of rapid transformation, the quest for excellence in online education necessitates an unwavering commitment to fostering not only knowledge acquisition but also the holistic development of learners, empowering them to thrive in an ever-evolving world. Thus, the journey toward creating a robust and effective online educational framework continues, driven by innovation and an enduring dedication to quality. Despite the virtually unlimited possibilities of learning in e-learning environments, the results of numerous studies [1], [2], [3], [4] represent low levels of learner engagement in online learning and often low quality of such learning. Also students note such problems as procrastination, lack of motivation, feeling of isolation and alienation, insufficiently formed skills of organization of working time.

The deployment of scaffolding within the electronic educational milieu of higher education emerges as a promising avenue for enhancing the quality of foreign language instruction. This innovative approach facilitates the transference of the successful scaffolding techniques found in face-to-face interactions into the digital realm of universities. By leveraging the strengths of multimedia and ensuring accessibility, this pedagogical strategy not only bolsters the learning experience but also expands the horizons of pedagogical potential. In harnessing such dynamic educational tools, educators can foster an enriched environment where students are invited to engage actively with the language, cultivating their skills in ways that were once tethered to traditional methods. The integration of technology in this manner paves the way for a more immersive and interactive learning journey, allowing the nuances of foreign languages to be explored in depth while accommodating diverse learning styles and needs. Ultimately, the synthesis of scaffolding with digital platforms heralds a transformative shift in language education, promising profound effects on both teaching effectiveness and student engagement. An analysis of the academic literature [2], [4], [5] has shown that currently, despite a significant amount of research on the application of scaffolding in teaching, relatively few research papers have been published on the application of this technology in online language teaching. It is, therefore, both pertinent and illuminating to explore the employment of scaffolding principles within the realm of foreign language acquisition amid the digital landscape of academia.

Research objectives:

- to reveal the essence of scaffolding as a special type of pedagogical immersing for students learning a foreign language in the digital environment of university;

- on the basis of the principles of scaffolding to develop an e-learning course on foreign language in the digital environment of university;

- to assess the efficacy of integrating the principles of scaffolding within the educational framework aimed at fostering the communicative competence in foreign languages among students on the example of FutureLearn e-learning courses in the digital environment of university. The foundation of this research rests upon a rich tapestry of scientific articles and methodological literature, primarily within the realms of psychology and pedagogy, crafted by luminaries such as L.S. Vygotsky and A.R. Luria. Their profound explorations into the development of children's cognitive processes lay the groundwork for understanding the intricacies of learning. Additionally, the inquiry draws upon contemporary works that delve into the application of scaffolding within modern educational practices. Esteemed scholars including D. Wood, J.S. Bruner, G. Ross, B.R. Belland, A. Walker, M.W. Olsen, and H. Leary contribute invaluable insights that illuminate the pathways through which learners navigate the complexities of knowledge acquisition. Together, these theoretical resources create a robust framework for examining the vital interplay between cognitive development and pedagogical methods, fostering an enriched understanding of educational dynamics in the ever-evolving landscape of instruction.

Research methodology

The article employs a suite of scientific methodologies in its inquiry: meticulous research and analysis of scholarly works pertaining to the chosen issue, rigorous experimental investigations, and keen observations. The practical significance of this endeavor resides in its potential to harness and apply refined scientific insights regarding contemporary scaffolding principles and tools within the digital learning landscape of university education. This exploration promises to enrich the development of electronic educational resources and enhance foreign language training courses. Through this synthesis of theory and practice, the work aspires to elevate pedagogical approaches, melding innovation with accessibility, and ultimately forging pathways for more effective learning experiences. In navigating the complexities of this digital age, the findings aim to illuminate the profound interplay between educational methodologies and technological advancement, fostering environments where knowledge can flourish in dynamic and interactive forms.

Discussion and results

When contemplating the implementation of scaffolding, educators grapple with several pivotal questions: Which assignments necessitate such support for students? In what ways can scaffolding be seamlessly integrated into the learning experience? And at what juncture should this support be gracefully withdrawn? M. Hannafin, S. Land, and K. Oliver elucidate four distinct categories of scaffolding that illuminate its application:

1) Conceptual scaffolding aids learners in discerning the central themes of their assignments and the interconnected knowledge that underpins them;

2) Metacognitive scaffolding empowers students to track and reflect upon their own learning journeys;

3) Strategic scaffolding offers varied approaches to engaging with tasks, fostering adaptability;

4) Procedural scaffolding encourages students to harness learning resources and tools effectively, guiding them in understanding the systemic functions of tasks and their inherent characteristics.

Through these nuanced types of scaffolding, educators can skillfully navigate the delicate balance between support and independence, fostering a rich, engaging learning environment that nurtures growth and self-efficacy.

Scaffolding, as an effective pedagogical technology, has been the focus of much research in recent decades as it helps learners to actively participate in the learning process and improves learning outcomes [2].

In this realm often unfold in a seemingly disordered fashion, yielding results that at times stand in stark contradiction to one another. For instance, D. Gašević, O. Adesope, S. Joksimović, and V. Kovanović illuminate the notion that scaffolding exerts a beneficial influence on asynchronous online discussions within the context of foreign language instruction at the university level [10]. In contrast, S. Barzilai and I. Blau contend that scaffolding appears to exert minimal, if any, impact on students' learning outcomes [1]. Adding another layer to the conversation, Q.N. Nguyen delineates a model for the application of scaffolding within digital environments for teaching foreign languages as a second tongue, identifying seven distinct functions of this pedagogical technology [11].Cognitive support, linguistic support, affective support, metacognitive support, sociocultural support, technical support, content support. As the most important scaffolding strategies for foreign language teaching, the author points out establishing contact with learners, high quality of teaching materials used, repetition of tasks (for accurate understanding), providing clues, questioning students, getting feedback, discussions, negotiations and debates.

The cognitive function of scaffolding involves cognitive structuring, reducing learners' freedom, identifying the main features of the task, repeating and clarifying tasks, providing models, clues, and guidelines.

Affective function of scaffolding includes control of learners' frustration and unforeseen circumstances in the learning process, encouragement through positive feedback, reward system, attentiveness to the manifestation of negative emotions, preparatory tasks.

The metacognitive function of scaffolding involves explicitly managing the learners' activities, emphasizing metacognition, providing a model of reasoning, finding non-standard solutions, and thinking aloud.

BECTHИК Евразийского национального университета имени Л.Н. Гумилева. Серия Филология № 4(149)/2024 241 BULLETIN of L.N. Gumilyov Eurasian National University. PHILOLOGY Series 241 The sociocultural function of scaffolding includes supporting team spirit in a group of learners, encouraging cultural integration and exchange, building rapport with learners before and after class, collaborating on a variety of assignments, and using authentic materials.

The technical function of scaffolding means highlights the technical characteristics of the learning process to improve the effectiveness of learning in the ELE, ensuring the convenience and ease of use of the ELE, providing visual cues, forms for student feedback, asking for help from the instructor or administrator.

The content support function includes activating interdisciplinary knowledge, organizing previously acquired knowledge for successful completion of assignments, developing effective content, brainstorming, lesson mapping, and collaborative presentation of lesson content.

The linguistic function of scaffolding involves maximizing learners' interaction with the language being studied, supporting the development of productive skills, developing skills in paraphrasing and changing speech forms, reflection after lessons, and providing templates for development.

Methodology and technology of professional education oral and written speech, relaxed communication on topics of interest to learners, sharing experience of learning and using a foreign language, providing hints and guiding questions, switching to the native language if necessary, focusing learners' attention on complex language forms, repetition of complex material, etc., etc. Some scholars distinguish the main types of scaffolding such as immediate and planned [4]. Immediate scaffolding requires additional explanation to the task at hand in reading instruction and utilizes the following techniques:

- explanation: the need to clarify content in the learners' mother tongue;

- brainstorming: generalization of knowledge on the topic studied;

- to enhance students' comprehension of foreign-language texts, consider these guiding principles:

- tocondense sentences: Focus on the core elements to fortify clarity.

- to emphasize key phrases: This aids students in grasping the essence of the narrative.

- to rephrase thoughtfully: Employ synonymous structures to enrich understanding.

- to assess comprehension levels: Evaluate how well students grasp the meanings embedded within sentences.

- to pose guiding questions: Encourage exploration of the text's significance and the task at hand.

By intertwining these strategies, educators can illuminate the learning journey, fostering a more profound engagement with the foreign language. This approach not only cultivates a keen understanding of the material but also inspires curiosity and critical thinking. Through a careful synthesis of clarity and inquiry, students can navigate the complexities of language, unraveling meaning and connecting with the text on a deeper level. Embrace these techniques as stepping stones toward linguistic mastery, transforming the process into a vibrant exploration of words and ideas.- non-verbal communication: understanding the content of the read material by means of non-verbal communication (gestures, facial expressions, eye contact).

Scaffolding involves technology that the instructor plans before class. As examples of scaffolding, the teacher offers templates of constructions for constructing a monologic utterance, which need to be completed independently [4]. The following techniques of planned scaffolding in teaching monologic speech in an e-learning course are highlighted:

- visualization: diagrams, mind maps, video playback, searching and highlighting keywords in video and audio content;

- collaboration: performing the task in groups or pairs;

- physical activity: linking movement to a particular concept or word, such as finding the right word;

- repetitive actions that are reproduced on a regular basis;

- classroom environment: using the environment in such a way that learners are in daily contact with the foreign language, e.g., including a template with phrases for communicating

in certain speech situations in monologic speech instruction. Thus, in this paper we consider scaffolding as a pedagogical process of interaction between a teacher and learners in the form of instruction when performing tasks in the electronic educational environment of the university for the purpose of solving learning tasks at the same time. Based on the theoretical basis of scaffolding, the authors of the article developed an electronic training course in the digital environment FutureLearn for the organization of independent work of full-time and part-time students of different areas of training. The aim of the course is to form the ability and readiness for intercultural communication, taking into account the individual educational trajectories of students. The result of mastering this course is the achievement of a high level of development of communicative competence, which is understood as the ability to relate language means in foreign language training to the goals, situations and tasks of speech communication in the professional sphere. When developing the FutureLearn e-learning course, the universal principles of scaffolding D. Wood, J.S. Bruner, G. Ross were used [12]: attracting attention, limiting the time limit for completing tasks, focusing attention on the goal, highlighting the main elements, lack of frustration of the learner, and creating a model for imitation. Attention attraction is realized by the following tools: Attention attraction is realized by the following tools:

- Introduction - an introductory part of each section in a foreign language, presented by a video of the instructors-developers of the course, a description of the purpose, structure and specifics of the course.

- Announcements - A section of announcements about conferences or other events scheduled during the semester that the instructor posts publicly available to learners.

- Glossary of the English Terminology: this course tool separately presents lexical correspondences of foreign language terminology in the discipline studied.

- Roll Book: the possibilities of this element are to build an information environment of the university, automate the monitoring of attendance of classroom and distance learning classes in Moodle by discipline, control the implementation of thematic planning and implementation of semester programs by teachers, the formation of reports on attendance for any period in real time, as well as the ability to print or upload report data.

- Consult a Teacher - a tool that allows learners to ask questions in the Forum module to the teacher who implements the e-learning course and to discuss group assignments. A Q and A Forum element is present where learners can ask questions of each other when completing individual assignments. The deadline for completing tasks is limited. The architects of the e-learning course instituted their own deadlines for distinct tasks and individual topics, a strategy that kindles a sense of urgency within learners, compelling them to complete the course before the semester's end. This surge in motivation is underscored by the Feedback element interwoven throughout the course, notably at the conclusion of each module and at the journey's end. Within this Feedback element lies a thoughtful questionnaire featuring the pivotal question: "Do the deadlines motivate you to complete the e-learning course?" Of the 105 students surveyed, an impressive 75% affirmed their motivation, responding with a resounding "Yes." Meanwhile, 10% expressed indifference, answering "No," and a delving 15% found themselves in a state of uncertainty. This inspiring revelation underscores the potency of structured goals in fostering engagement and ambition, illuminating the pathway toward academic achievement.

It should be emphasized that the FutureLearn e-learning course is non-linear, so the motivation of learners is facilitated by performing assignments from level A2 to B2. The system of tasks was developed taking into account the variability of achieving a certain level of English language proficiency or based on the results of the learner's fulfillment of the previous assignment.

The teacher should draw the attention of the learners to the realization of the main elements of the e-learning course. Clear instructions on how to complete the assignment with number of attempts, time and due dates are posted in each section assignment. The absence of frustration of the student. It should be more comfortable to work on assignments when accompanied by a teacher. At the same time, the risk of dependence on the constant supervision of the teacher should be avoided. The course provides a chat with the teacher, students can contact in person for any questions they have in the electronic training course. Creating a simulation model. The teacher should show an example so that the student understands the specifics of the expected answers. The teacher may ask the student to explain how the tasks are seen and try to implement it. This principle is also realized in the Feedback element where a questionnaire was placed that included the question, "What tasks did you have the most difficulty with?". Methodology and technology of professional education Based on the above, the following conclusions can be drawn: - In the developed e-course the language (linguistic) scaffolding function is focused on lexical content, dictionary work, embedding links to additional sources into the e-learning course, explaining complex terms, repeating nouns multiple times instead of using pronouns (dictionary of synonyms, grammar guide), shortening sentences and paragraphs, using synonyms, providing explanations of key lexical units and expressions.

- Content function of scaffolding is focused on the development of learners' skills of monological and dialogic speech, activation of personal experience with life situations, use of schemes, subheadings, templates, learners' answers.

- Scaffolding for learning skills involves having the e-learning course provide templates for the correct answer at the beginning of a task, providing examples of completed work at a high level, providing a sample of completed work at a low level to avoid errors, and planning and grading learner responses.

- The technology of pedagogical scaffolding is aimed at successful performance of tasks related to the content of the e-learning course, which is adapted to the learners' foreign language proficiency level (A1-A2, B1-B2).

Thus, scaffolding is a powerful linguistic, pedagogical and interactive type of pedagogical support for foreign language learning, particularly in e-learning environments, which enables learners to achieve deep and meaningful learning by providing them with timely and meaningful support.

Given the focus of language teaching, scaffolding strategies should be widely used to increase learners' independence and confidence in using a foreign language as a means of communication. Positive influence on the development of foreign language competencies of students in higher education is provided through the use of a variety of scaffolding strategies such as: feedback in the e-course, the use of templates (models) of statements, group discussion, analysis, providing prompts, surveying students, negotiations and debates, etc. Scaffolding in the conditions of electronic educational environment provides a wide range of opportunities to provide pedagogical support to students, as it has no time and space limitations and is available to any number of students. With the help of LMS analytical tools, it is possible to monitor and customize scaffolding tools to improve the efficiency of teacher-student interaction. Based on the principles of scaffolding, the FutureLearn e-learning course was developed and implemented. The analysis of the results of students' mastering of this course showed positive dynamics in the formation of foreign language communicative competence of university students, which was confirmed in the process of pedagogical experiment. We see the prospects for further research of the problem in a more detailed study of strategies and tools of scaffolding in ELE to develop all four foreign language skills, as well as personalization of scaffolding depending on the type of intelligence of learners.

Conclusion

Professional competence of a modern graduate of a technical university includes knowledge in the field of professional communication, including intercultural communication, which is necessary for effective work in multicultural conditions. New realities require the training of active technical students who are able to think creatively, independently analyze and critically evaluate new information, make informed choice of decisions in a competitive environment. Methodologically competent foreign language environment can contribute to the development of student's linguistic personality in a non-language university. Despite the presence of a significant number of studies on the problem of language personality, the problem of comprehension of the student's language personality development considering the specifics of engineering activity and relevant features of thinking and communicative strategies of a technical university graduate, which should be formalized in the form of an appropriate teaching methodology, is topical today. This opens a field for research. We believe that one of the promising directions is to identify ways of organizing the teaching process from the point of view of forming the necessary components of students' readiness to carry out complex, multidimensional foreign-language professionally directed speech activity. Our further works will be devoted to the solution of this issue.

Conflict of interest

The article contains no conflict of interest.

Contribution of authors. Sarbinaz Kylyshpayeva as a main author generalized core ideas, anylized results of research. Madina Kylyshpayeva systemized materials, learned wide sources of references.

References

1. Barzilai S., Blau I. Scaffolding game-based learning: Impact on learning achievements, perceived learning, and game experiences, Computers and Education, 70, 65-79 (2014).

2. Belland B.R., Walker A., Olsen M.W. Leary H. A pilot meta-analysis of computer-based scaffolding in STEM education, Educational Technology & Society, 18(1), 183-197 (2015).

3. Dale L., Van der es W., Tanner R. CLIL skills (Haarlem: European Platform, 2011, 272 p.).

5. Vygotskiy L. S. Sobraniye sochineniy [Collected works] (Pedagogika, Moscow, 1982, 486 p.) [In Russian].

6. Vygotskiy L. S. Sobraniye sochineniy [Collected works] (Pedagogika, Moscow, 1984, 400p) [In Russian].

7. Vygotskiy L. S. Myshleniye i rech' [Thinking and speech] (Labirint, Moscow, 1999, 352p) [In Russian].

8. Hannafin M., Land S., Oliver K. Open learning environments: Foundations, methods, and models, Instructionaldesign theories and models (Mahwah – London, 1999, 27 p.).

9. Gašević D., Adesope O., Joksimović S., Kovanović V. Externally-facilitated regulation scaffolding and role assignment to develop cognitive presence in asynchronous online discussions, The Internet and Higher Education, 24(3), 53-65 (2015). https://doi.org/10.1016/j. iheduc.2014.09.006

10. Nguyen Q. N. Teachers' scaffolding strategies in Internet-based ELT classes, TESL-EJ, 26(1), 109-122 (2022).

11. Wood D., Bruner J. S., Ross G. The role of tutoring in problem solving, Journal of Child Psychology and Psychiatry, 17(2), 89-100 (1976).

С.Х. Кылышпаева¹, М.Х. Кылышпаева²

¹Л.Н. Гумилев атындагы Еуразия ұлттық университеті, Астана, Қазақстан ²І.Жансүгіров атындағы Жетісу университеті, Талдықорған, Қазақстан (E-mail: *sarbi_barbie@mail.ru, madina_6709@mail.ru)

Университеттің цифрлық ортасында филологтың тілдік тұлғасын дамыту

Аңдатпа. Зерттеудің мақсаты – скаффолдингті ЖОО-ның электрондық білім беру ортасында педагогикалық қолдаудың ерекше түрі ретінде қолдануды негіздеу. Мақалада шет тілін үйрену кезінде студенттерді педагогикалық қолдаудың мәні, функциялары мен әдістері, сондай-ақ нысандары ашылады; электрондық білім беру ортасындағы скаффолдинг принциптері негізінде шет тілі бойынша электрондық оқу курсының ерекшеліктері қарастырылады; FutureLearn электрондық оқу курсының мысалында студенттердің шет тіліндегі коммуникативтік құзыреттілігін дамыту үшін білім беру процесіне скаффолдинг принциптерін енгізудің тиімділігі тексеріледі. Зерттеудің ғылыми жаңалығы жеке скаффолдинг, серіктестік скаффолдинг және компьютерлік скаффолдинг сияқты скаффолдингтің үш негізгі түрін анықтау болып табылады. Нәтижесінде скаффолдинг принциптеріне негізделген FutureLearn электрондық шет тілі курсы әзірленді және енгізілді.

Түйін сөздер: филологтың тілдік тұлғасы, скаффолдинг, педагогикалық қолдау, жоғары оқу орында электрондық білім беру.

С.Х. Кылышпаева^{*1}, М.Х. Кылышпаева²

¹Евразийский национальный университет им. Л.Н. Гумилева, Астана, Казахстан ²Жетысуский университет им. И.Жансугурова, Талдыкорган, Казахстан (E-mail: *sarbi_barbie@mail.ru, madina_6709@mail.ru)

Развитие языковой личности филолога в цифровой среде университета

Аннотация. Цель исследования – обосновать применение скаффолдинга как особого вида погружения в цифровую образовательную среду вуза. В статье раскрываются сущность, функции и приемы, а также формы погружения студентов при изучении иностранного языка; рассматриваются особенности электронного учебного курса по иностранному языку на основе принципов скаффолдинга в электронной образовательной среде; проверяется эффективность внедрения принципов скаффолдинга в образовательный процесс для развития иноязычной коммуникативной компетенции студентов на примере электронного учебного курса FutureLearn. Научная новизна исследования заключается в определении трех основных форм скаффолдинга, таких, как индивидуальный скаффолдинг, партнерский скаффолдинг и компьютерный скаффолдинг. В результате был разработан и внедрен электронный курс иностранного языка FutureLearn, основанный на принципах скаффолдинга.

Ключевые слова: языковая личность филолога, скаффолдинг, педагогическое погружение, цифровая образовательная среда высшего образования.

Сведения об авторах:

Кылышпаева С.Х. – эксперт Департамента науки, Евразийский национальный университет имени Л.Н.Гумилева, Астана, Казахстан. E-mail: sarbi_barbie@mail.ru, ORCID: 0000-0002-4912-5010

Кылышпаева М.Х. – преподаватель-лектор, Жетысуский университет имени И.Жансугурова, Талдыкорган, Казахстан. E-mail: madina_6709@mail.ru, ORCID: 0009-0004-0141-6910.

Кылышпаева С.Х. – ғылым департаментінің сарапшысы, Л.Н. Гумилев атындағы Еуразия ұлттық университеті, Астана, Қазақстан. E-mail: sarbi_barbie@mail.ru, ORCID: 0000-0002-4912-5010.

Кылышпаева М.Х. – оқытушы-дәріскер, І.Жансүгіров атындағы Жетісу университеті, Талдықорған, Қазақстан. Е-mail: madina_6709@mail.ru, ORCID: 0009-0004-0141-6910.

Kylyshpayeva S. – Expert of Science Department, L.N. Gumilyov Eurasian National University, Astana, Kazakhstan. E-mail: sarbi_barbie@mail.ru, ORCID: 0000-0002-4912-5010.

Kylyshpayeva M. - Teacher-lecturer, Zhetysu University named after I. Zhansugurov, Taldykorgan, Kazakhstan. E-mail: madina_6709@mail.ru, ORCID: 0009-0004-0141-6910.



Copyright: © 2024 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY NC) license (https://creativecommons.org/licenses/by-nc/4.0/).