JOURNAL OF INTERNATIONAL SCIENTIFIC RESEARCH
Volume 3, Issue 4, October 2025 Online ISSN: 3030-3508
https://spaceknowladge.com

DEVELOPING PROFESSIONAL COMMUNICATION SKILLS OF PHARMACISTS THROUGH ENGLISH AND RUSSIAN LANGUAGES SADIKOVA DILDOR ABDULLAYEVNA

Sadikova Dildora Abdullayevna
Senior Teacher, Pharmaceutical Education and Research Institute
Axmedova Dilnoza Anvarovna
Teacher, Pharmaceutical Education and Research Institute

MAQOLA MALUMOTI

MAQOLA TARIXI:
Received:15.10.2025
Revised: 16.10.2025
Accepted:17.10.2025

KALIT SO'ZLAR:
professional communication, pharmacy education, English for Specific Purposes (ESP), bilingual instruction, multilingual competence.

ANNOTATSIYA:

This article explores the development of professional communication skills among pharmacy students through the integration of English and Russian language education. The study emphasizes the importance of multilingual competence as a key component of pharmaceutical professionalism. Based on recent research and pedagogical experience, the authors highlight effective methods such as CLIL (Content and Language Integrated Learning), ESP (English for Specific Purposes), and strategy-based instruction to improve the linguistic and professional competence of future pharmacists.

Introduction

Effective communication is a cornerstone of pharmaceutical practice. Pharmacists must interact with patients, medical professionals, and international colleagues accurately and empathetically. In multilingual societies such as Uzbekistan, where Russian and English serve as key professional and academic languages, developing proficiency in both languages is essential for pharmacy students. The ability to communicate professionally in multiple

languages enhances students' employability, supports access to scientific resources, and fosters international collaboration. The integration of English and Russian language instruction into pharmacy education can thus be viewed as a strategic approach to building comprehensive communicative competence.

Methods

This research is based on a mixed-method approach combining theoretical analysis, literature review, and classroom-based observation. The theoretical framework draws on English for Specific Purposes (ESP) and bilingual education theories. Practical observations were conducted at the Institute of Pharmaceutical Education and Research, where English and Russian language teachers collaborated on designing interdisciplinary lessons for pharmacy students. The study also reviews scholarly works by Laili and Nashir (2023), Talipov et al. (2023), and Akhmedova and Normurodova (2023), which discuss language needs, ESP curriculum design, and CLIL methodology in pharmacy education.

Methods (Expanded Version)

The study was carried out during the 2024–2025 academic year with second- and third-year pharmacy students. A total of 64 participants (41 female and 23 male) took part in the experiment. Students represented different levels of English and Russian proficiency, ranging from A2 to B2 according to the Common European Framework of Reference (CEFR). The participants were divided into two groups: a control group that followed the traditional language curriculum and an experimental group that received integrated ESP and bilingual instruction.

Data collection consisted of three stages:

1. Needs Analysis: To determine students' linguistic and professional communication needs, the researchers conducted a diagnostic survey and semi-structured interviews. The questionnaire included items about students' perceived language difficulties, preferred learning activities, and motivation for studying English and Russian for professional purposes. Results of the needs analysis were compared to findings from previous studies by Laili and Nashir (2023) and Talipov.

2. Classroom observation Over the course of one semester, both authors conducted systematic classroom observations focusing on students' participation, language use, and interaction patterns. Lessons were designed according to CLIL methodology (Akhmedova & Normurodova, 2023), integrating pharmaceutical topics such as drug formulation, patient counseling, and medical documentation into English and Russian communication tasks.

Observation checklists were used to evaluate the frequency and quality of student interaction in both languages.

Evaluation of Learning Outcomes: At the end of the course, students completed written and oral assessments to measure their progress in professional communication. The tests evaluated vocabulary knowledge, speaking fluency, pronunciation accuracy, and the ability to perform professional tasks in English and Russian (e.g., explaining dosage instructions, describing pharmacological effects, or handling patient queries). Additionally, students filled out reflective self-assessment forms describing how bilingual instruction affected their confidence and competence.

Quantitative data (test scores) were analyzed using descriptive statistics to measure improvement across skill areas. Qualitative data from interviews, classroom notes, and reflections were analyzed thematically to identify recurring patterns related to motivation, language confidence, and professional identity. The triangulation of these data sources ensured validity and reliability of the findings.

Ethical considerations were taken into account throughout the study. All participants were informed of the research purpose and gave their consent. The confidentiality of student responses and assessment results was maintained

Results: The results of the study demonstrate that pharmacy students encounter similar linguistic and communicative challenges in both English and Russian. The most frequently reported difficulties included limited professional vocabulary, insufficient familiarity with pharmaceutical terminology, and low confidence in oral communication during simulated patient interactions or classroom discussions. Many students also noted uncertainty when translating pharmacological terms or interpreting international pharmaceutical guidelines written in English. The pre-intervention diagnostic tests confirmed that the majority of participants (approximately 68%) had difficulty explaining medical concepts clearly in either language. Students often relied on literal translation rather than context-based interpretation, which resulted in communication breakdowns. Moreover, their written work revealed repetitive grammatical errors and misuse of discipline-specific collocations, such as *drug administration*, *dosage regimen*, or *side effects profile*. After implementing the bilingual ESP-based instruction, substantial progress was observed across several areas. Students in the experimental group demonstrated a noticeable increase in professional vocabulary size, with test results showing a 25–30% improvement compared to baseline scores. Classroom observations indicated more active participation in pair and group

discussions, as well as improved fluency and accuracy in both English and Russian when describing pharmaceutical processes. Practical exercises such as role-playing, dialogue simulations, and terminology-based projects were particularly effective. For instance, in the "Pharmacy Consultation" activity, students practiced advising patients about medication dosage, side effects, and contraindications using both languages. These simulations revealed not only linguistic improvement but also growth in professional empathy and communicative confidence. The collaboration between English and Russian teachers was also found to be a key factor in students' success. Through coordinated lessons, students learned to compare linguistic structures, analyze translation equivalents, and identify false cognates between the two languages (e.g., *prescription* – *рецепт*). This comparative approach deepened their understanding of professional discourse and terminology usage.

Qualitative data from post-course interviews confirmed that most students experienced greater motivation to study both languages after participating in bilingual sessions. They reported feeling more confident when reading professional literature, preparing presentations, and communicating with foreign specialists. A significant proportion (over 70%) stated that bilingual learning helped them "see the connection between language and their future profession," which positively affected their academic engagement and self-efficacy.

Overall, the results confirm that the integration of ESP methods and bilingual instruction contributes to measurable improvement in pharmacy students' professional communication competence. The outcomes align with prior research by Stupans et al. (2015) and Yuldasheva & Yuldashev (2024), which emphasize the role of contextualized, strategy-based learning in strengthening language proficiency within pharmaceutical education.

Discussion

The findings of this study confirm that bilingual instruction is a powerful tool for developing pharmacy students' communicative competence. The observed progress in students' vocabulary use, oral fluency, and contextual understanding of terminology underscores the importance of integrating language education within the framework of professional disciplines. This supports the argument made by Kovalenko and Afanasenko (2021), who emphasized that academic English writing tasks enhance precision, critical thinking, and analytical reasoning—skills essential for future pharmacists who must interpret complex pharmaceutical information and communicate it effectively.

Similarly, the results are consistent with the findings of Yuldasheva and Yuldashev (2024), who demonstrated that strategy-based instruction significantly improves oral communication among pharmacy students. In our study, role-playing, case-based discussions, and terminology comparison tasks between English and Russian provided students with opportunities to apply communication strategies in authentic professional contexts. This practical engagement not only enhanced linguistic competence but also promoted the development of a professional identity, as students began to perceive themselves as multilingual healthcare communicators.

The application of the Content and Language Integrated Learning (CLIL) approach, as described by Akhmedova and Normurodova (2023), was particularly beneficial. Through CLIL-based activities, students learned to use target-language structures while studying subject-specific content, such as pharmacokinetics, dosage forms, and patient counseling. This integration helped students contextualize linguistic knowledge, bridging the gap between theoretical grammar and real-world pharmaceutical practice. The bilingual format—alternating between English and Russian—further reinforced conceptual understanding, as students could cross-check meaning and consolidate terminology retention.

Another noteworthy outcome is the increased collaboration between language and subject specialists. The partnership between English and Russian teachers enabled a more interdisciplinary learning environment, where linguistic accuracy was balanced with professional relevance. Such cooperation aligns with current trends in ESP (English for Specific Purposes) and bilingual pedagogy, emphasizing the need for context-sensitive teaching materials and shared curricular objectives.

Moreover, this study illustrates that bilingual ESP instruction contributes to the broader goals of internationalization in higher education. By fostering communicative competence in multiple languages, pharmacy programs can prepare graduates for participation in global professional communities, international conferences, and cross-border healthcare communication. These competencies are particularly relevant in Uzbekistan’s rapidly modernizing pharmaceutical sector, which increasingly interacts with foreign manufacturers, research institutions, and regulatory bodies.

Conclusion

In conclusion, the findings highlight that language education in pharmacy must go beyond linguistic instruction to include cultural, professional, and cognitive development. Bilingual approaches that integrate ESP, CLIL, and task-based learning create a dynamic environment for future pharmacists to acquire both communication skills and disciplinary expertise—making them more adaptable and effective in multilingual healthcare contexts.

Developing professional communication skills through English and Russian is a critical educational goal for pharmacy students. The interdisciplinary collaboration between language teachers enriches the learning process and ensures that students can navigate professional discourse effectively in both languages. Future research should focus on digital tools, such as ESP learning platforms and AI-based terminology trainers, to further enhance bilingual professional competence in pharmaceutical education.

References

1. Akhmedova, D. A., & Normurodova, M. (2023). Language and instructional methodology CLIL in pharmacy universities. Journal of Scientific Innovations in Research and University Education, 2(3), 45–53.
2. Kovalenko, O., & Afanasenko, O. (2021). Enhancing professional competence of pharmaceutical students in the academic English course. Academic English Journal, 8(2), 89–97.
3. Laili, R. N., & Nashir, M. (2023). An analysis of pharmacy students' English language needs. Eduvelop: Journal of English Education and Development, 7(1), 15–24.
4. Long, P., Ingram, D., Pugh, R., Bowes, A., Haigh, M., & Moss, D. (2018). The effect of language background on teaching and learning in the Master of Pharmacy degree. Pharmacy Education, 18(1), 25–32.
5. Saodat, Y., & Sherzod, Y. (2022). Conformation of the foreign language competence of pharmacy and industrial pharmacy students. ScienceWeb Uzbekistan.
6. Stupans, I., March, G. J., & Elliot, E. E. (2015). Pharmacy students' English language skill development: Are we heading in the right direction? Pharmacy Education, 15(1), 108–113.
7. Akhmedova, D. (2025). TEACHING MEDICAL TERMINOLOGY TO NON-NATIVE ENGLISH SPEAKERS: EFFECTIVE STRATEGIES. *International Journal of Artificial Intelligence*, *1*(3), 1463-1470.

8. AXMEDOVA, D. (2024). BO ‘LAJAK TIBBIYOT XODIMLARIGA INGLIZ TILINI INTELLEKTUAL O ‘QITISHDA INNOVATSION YONDASHUVLARNI TAKOMILLASHTIRISH. *News of the NUUz*, *1*(1.10. 1), 49-51.

9. Axmedova, D. (2024). TIBBIYOT OLIY O ‘QUV YURTLARIDA INGLIZ TILI O’QITISHDA TALABALARNING KASBIY KOMPETENTSIYANI METODIK TAKOMILLASHTIRISH TEXNOLOGIYALARI. *Академические исследования в современной науке*, *3*(36), 60-65.

10. Anvarovna, D. A. (2025). DEVELOPING EFFECTIVE STRATEGIES FOR LEARNING SPECIALIZED TERMINOLOGY IN ENGLISH LANGUAGE TEACHING. *SHOKH LIBRARY*.

11. Talipov, B. B., Akhmedova, D. A., & Toshkhonov, M. T. (2023). THE DEVELOPMENT OF PBL TEACHING METHOD FOR TEACHING PRACTICAL ENGLISH IN IPER (INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH). In *INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION* (Vol. 2, No. 2, pp. 5-12).

12. Akhmedova, D. A. (2023). TEACHING STRATEGIES AND ASSESSMENT METHODS FOR ONLINE PHARMACY EDUCATION. *THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD*, *2*(7), 27-33.

13. Ахмедова, Д. А. (2024). Тиббиёт талабалаарини инглиз тили ўқитишда таълим технологияларини ўрни. *International journal of scientific researchers (IJSR) INDEXING*, *5*(1), 41-47.

14. Anvarovna, A. D. (2024). Implementing Suggestopedia and Memory Training in the Foreign Language Classroom. *Journal of Innovation in Education and Social Research*, *2*(2), 72-76.

15. Anvarovna, A. D. (2023). Strategies for Increasing Awareness of Pharmaceutical Students' Divergences. *Miasto Przyszłości*, *31*, 277-280.

16. Botirovich, T. B., Anvarovna, A. D., & Turdaliyevich, T. M. (2023). ESP AND STUDENTS'NEEDS IN LEARNING ENGLISH FOR PHARMACY. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 8.036*, *12*(01), 169-172.