

Pedagogical Concept of Integrative Teaching and Learning in the Context of Interdepartmental Interaction

Oleksandr Khomenko

Department of Foreign Languages,
Kyiv National Linguistic University, Kyiv, Ukraine
Corresponding Author: oleksandr.khomenko@knl.u.edu.ua

Liudmyla Vasylchuk

Department of Foreign Languages,
Kyiv National Linguistic University, Kyiv, Ukraine

Andrii Sotnykov

Department of Foreign Languages,
Kyiv National Linguistic University, Kyiv, Ukraine

Oksana Slaba

Department of Foreign Languages,
Kyiv National Linguistic University, Kyiv, Ukraine

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Abstract

This article presents the pedagogical framework for integrative teaching and learning, melding foreign language instruction with professional disciplines within the interdepartmental interaction. Through a comprehensive review of both foreign and domestic literature, the authors highlight the insufficient development of this concept in Ukraine, particularly in practical application. The study advocates for adapting and assimilating positive foreign experiences to the distinctive contours of Ukrainian higher education, underpinned by a robust theoretical and methodological foundation. The authors contend that the demands of modern life necessitate the active integration of interdisciplinary links into higher education curricula, leveraging foreign languages to develop foreign language professional communicative competence as an integral component of professional competence. They emphasize the pivotal role of interdepartmental collaboration in fostering such interdisciplinary convergence. Considering the unresolved nature of this issue in Ukraine, the significance and imperative for establishing an integrative teaching and learning concept in the context of interdepartmental interaction are undeniable. The article delineates the concept's goals and objectives, scrutinizes the pivotal preconditions and rationale for its development, and furnishes a comprehensive algorithm for the seamless integration of professional subjects and foreign language instruction. Two main stages of integrative training, preparatory and organizational-procedural, are distinguished, with their characteristics outlined. Additionally, the article underscores the need for designing specialized transitional courses to harmonize profession-oriented content in foreign languages with specific disciplines.

Keywords: Foreign language professional communicative competence, integrative learning, integrative teaching, interdisciplinarity, pedagogical concept, professional competence

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Introduction

The exploration and formulation of innovative linguo-didactic concepts grounded in the principles of educational internationalization within the Bologna system constitute a key contemporary focus of scholarly and pedagogical investigation in Ukrainian higher education. Specifically, the elaboration of the integrative approach to teaching and learning foreign languages and professional disciplines is actively underway within the Department of Foreign Languages at Kyiv National Linguistics University.

The concept delineates the interplay between education, mainly foreign language training, and culture. It underscores a pivotal function of the educational process – nurturing future professionals with the capacity for intercultural communication and adept professional interaction within a multilingual and multicultural milieu. The concept is closely tied to the context of a higher educational establishment, primarily focusing on interdepartmental interaction. Through this interaction, the implementation of interdisciplinarity, the highest form of knowledge consolidation, is realized. This level of interdisciplinary integration necessitates bilingual education, wherein simultaneous learning in both the mother tongue and a foreign language occurs, distinct from the traditional monolingual approach to teaching professional disciplines. Hence, interdepartmental interaction significantly contributes to the advancement of such training methodologies. Thus, the article introduces the pedagogical concept of integrative learning within interdepartmental interaction. This pedagogical approach entails analyzing the concept's prerequisites, justifying its necessity, defining its objectives and tasks, and outlining the procedural framework for implementing the interdisciplinary integration of professional subjects and foreign language training. Considering that researchers have not yet adequately explored the issues of interdepartmental collaboration and bilingual education in Ukrainian professional higher education institutions, the unquestionable relevance of our research becomes evident.

Literature Review

Integrating teaching and learning, merging diverse contexts and experiences, is paramount in education. Several studies have delved into various aspects of integrative learning, such as designing learning environments, integrating practical training, and the role of corporate development projects. This paper highlights four studies that contribute valuable insights into these research areas. Bouw, Zitter, and de Bruijn's (2021) study examined the designable elements of integrative learning environments that combine features from school and work contexts in vocational education. The findings contribute to understanding the design of learning environments that connect school and work contexts. The research conducted by Nyen and Tønder (2018) explored different models of integrating practical training periods in vocational education in Norway. It identifies four models based on shielding from actual demands and relevance to the vocational field, discussing their impact on developing vocational skills and identity. Winborg and Hägg (2023) focused on preparing students for a corporate entrepreneurial career and proposed a framework for understanding the role of corporate development projects in corporate

entrepreneurship education. The framework identifies categories of learning outcomes and emphasizes the importance of project design in shaping the learning process. The research by Llinares and McCabe (2023) focused on the shared objective of exploring effective methods for integrating content and language learning within various bilingual/multilingual education programs. This perspective transcends the 'focus on form' approach, considering language as a meaning-making activity concerning specific classroom and academic disciplines. By applying Systemic Functional Linguistics (SFL), along with models like Legitimation Code Theory (LCT) and Cognitive Discourse Functions (CDFs), the study delves into the enactment of language and content integration, influencing curriculum development, pedagogy and assessment across diverse educational levels and contexts.

The process of language and subject integration is familiar in foreign linguodidactics. For example, one can mention the CLIL pedagogical approach, Content Language Integrated Learning, by Do Coyle and David Marsh, covering most of Europe, Asia, and Latin America (Coyle, 2008, 2010; Marsh, 1994, 2001). CLIL is an approach to bilingual education in which students concurrently study the content of a professional discipline and a foreign language, prioritizing learning the professional field through the foreign language. Innovators in integrative teaching of a foreign language and specialty, Thomas Hutchinson and Alan Waters, introduced their English for Specific Purposes (ESP) concept in the 1960s-1970s (Hutchinson & Waters, 1987). Tony Dudley-Evans, their follower, emphasized the importance of context in ESP, advocating for an in-depth analysis of learners' specific language needs within their professional or academic domains. He highlighted the significance of needs analysis and genre-based approaches in designing practical ESP courses and materials. Dudley-Evans' work profoundly impacted ESP's theory and practice, shaping how educators and researchers approach language teaching and learning in specialized contexts (Dudley-Evans & St. John, 2010). Thus, the needs analysis of the future specialist is fundamental while developing ESP for a relevant specialty.

The scientists mentioned above also devised a technology for implementing interdisciplinary interaction. Specifically, they delineate three stages of collaborative work between language teachers and professional discipline instructors: cooperation, collaboration, and team-teaching. It is worth noting that foreign scientists and practitioners actively pioneer and implement various models and technologies for integrative teaching of non-linguistic disciplines and foreign languages, each characterized by its originality and uniqueness. (Coyle, 2010; Dudley-Evans, 2010; Garcia, Martinez, & Rodriguez, 2017; Lee, Chen, & Wang, 2019; Marsh, 1994; Smith, Johnson, & Brown, 2021). In particular, Smith, Johnson, and Brown (2021) explored a blended learning approach that combines face-to-face instruction, online resources, and interactive language learning tools to integrate a professional discipline and a foreign language. Their study demonstrates the effectiveness of this approach in enhancing students' language proficiency and disciplinary knowledge. Lee, Chen, and Wang (2019) integrated virtual reality (VR) technology into teaching a professional discipline and a foreign language, developing and evaluating a VR-based learning environment that immerses students in real-world scenarios related to the

profession while providing language learning opportunities. The results highlight the potential of VR in facilitating immersive and engaging integrative learning experiences. They developed and evaluated a VR-based learning environment that immerses students in real-world scenarios related to the discipline while providing language learning opportunities. The results highlight the potential of VR in facilitating immersive and engaging integrative learning experiences.

Additionally, Garcia, Martinez, and Rodriguez (2017) focused on applying gamification techniques in integrative teaching. They designed and implemented a gamified learning environment incorporating game elements, rewards, and challenges. Their findings reveal that gamification enhances student motivation, engagement, and learning outcomes in the integrative learning process.

An analysis of the domestic experience in integrative teaching of foreign languages and professional disciplines reveals a well-developed theory of interdisciplinary integration, which serves as a method to enhance the effectiveness of higher education in Ukraine (Avsukevych, Hryshkova, Dolnykova, Drab, Lychko, Mykytenko, Sekret, Ponomarenko, Sytnyakivska, Tarnopolsky). Some researchers have devoted special attention to the problem of integrating foreign language instruction with psychological and pedagogical (Gapon, Dancheva, Maksymchuk, Poyasok). Khomenko (2015) presented the definition of integrative education, highlighted its components, defined the main principles, and delineated ways of implementation in higher educational institutions. The author also outlined interdisciplinary integration as a means of mastering language for the specialty, presented the definition of bilingualism, and delved into the issue of educational bilingualism. Regarding organizing bilingual education based on interdepartmental interaction, only a few studies and publications have even mentioned this topic (Dolnikova, 2011; Kotkovets, 2015; Proshkin, 2013; Sazhko, 2011). Sytnyakivska (2018) justified the theoretical and methodological principles of bilingual training for social specialists. The study offers a comprehensive model, content, forms, and methods for such activity.

As evident from the literature review, scholars have explored various facets of integrating foreign languages into professional disciplines through teaching and learning. However, no comprehensive concept seamlessly integrates these aspects into a pedagogical framework with a robust theoretical and methodological foundation suitable for practical implementation within Ukrainian higher education. Consequently, educators and institutions must recognize the significance and urgency of establishing such an integrative teaching and learning concept within interdepartmental interaction.

Methods

The authors employed various methods to achieve the research objectives, including *analyzing*, *systematizing*, and *generalizing* psychological-pedagogical and methodical literature to identify research areas. They utilized the *proximetric* method to explore the experiences of integrating professional foreign language training in higher educational institutions in the EU and the USA, considering the development of foreign language communicative professional

competence. Furthermore, they conducted *conceptual and comparative* analyses to compare existing theoretical approaches for defining and substantiating the concept of integrative teaching of foreign languages and professional disciplines, as found in specialized literature. Due to space limitations, this article will focus on specific components of our concept.

Results

Because of space constraints, this article will concentrate on particular components of our concept. The authors have presented compelling arguments to support the necessity and relevance of formulating a pedagogical concept for integrative learning in the context of interdepartmental interaction. This need arises from the following factors:

- Enacting the conceptual principles outlined by the Bologna Convention, which advocate for comprehensive knowledge and proficiency in professional disciplines and harnessing the potential of foreign language education as an integrative discipline. This approach encourages future specialists to sustain their language learning endeavors throughout their lives.

- Leveraging and adapting the wealth of experience in bilingual education, encompassing native and foreign languages, within higher education institutions. This area remains relatively underexplored in scholarly investigations.

- Implementing and fostering educational bilingualism as a mechanism for mastery in a specialized field, which involves integrating traditional monolingual instruction of professional subjects with academic bilingualism, advancing the strategic objective of foreign language education by nurturing *multicultural foreign language professional personalities*. This integration also catalyzes the alignment of the Ukrainian education system with the global higher education arena.

- Cultivating a culture of quality within higher educational institutions to underpin the competitiveness of both the institution and its graduates.

- Cultivating trust in the qualifications of university graduates, both domestically and internationally, entails ensuring that the graduates' professional competence aligns with the expectations and requisites of clients and consumers, thereby contributing to the establishment's reputational capital.

- Recognizing, accommodating, and harmonizing all stakeholders' needs, requisites, and expectations concerning educational service provision according to national and international academic standards.

We have delineated the aims and objectives of the pedagogical concept of integrative learning within the context of interdepartmental interaction. Additionally, we presented the author's definition of integrative learning, elucidated its purpose, and outlined the strategies for its attainment.

Aims and objectives of the pedagogical concept of integrative teaching and learning in the context of interdepartmental interaction:

The concept aims to outline a procedural framework for realizing interdisciplinary amalgamation between professional subjects and foreign language instruction. This framework facilitates the acquisition of foreign language professional communicative competence through integrative learning.

The aim determines the expediency of defining the concept of "integrative teaching and learning." We prefer the author's definition because it reflects our understanding of the problem and serves as the basis for the research presented.

"Integrative teaching and learning is an approach to education that places the holistic development of students at the core of the language-learning process. It aims to cultivate the integration of linguistic and professional aspects, fostering interdisciplinary connections with both humanities and specialized disciplines. Reflecting on this integration, a comprehensive set of didactic materials should facilitate various activities to nurture and enhance students' integrative thinking. Ultimately, this approach ensures that students in their respective fields remain competitive in the future" (Khomenko, 2014, p.257). Integrative teaching and learning entail the simultaneous and equitable instruction of both a foreign language and a professional subject, thus ensuring concurrent linguistic and vocational education.

Consequently, specialized disciplines and foreign language studies mutually reinforce and enhance one another. This approach to learning encompasses a holistic grasp of shared concepts between the humanitarian and specialized disciplines. Moreover, it advocates for consistent learning methods and forms, especially interactive approaches, and continuous monitoring and adjustment of students' academic accomplishments. This cohesive educational strategy intends to foster a unified body of knowledge.

Integrative teaching and learning aim to form a holistic picture of the future profession and promote the future specialist's understanding of the relationship between special disciplines and a foreign language. The fulfillment of the following tasks achieves the aim:

- Use of the team teaching method - joint teaching, exchange of teaching decisions and strategies between a professional discipline teacher and a foreign language one, which involves organizing classes in two languages - foreign and mother tongue (bilingual teaching).
- Integration of pedagogical technologies/teaching methods and forms of various disciplines (accordingly, "intensive foreign language learning technologies, problem method, project method, case technologies, role-playing games, interactive presentations, practical work presentation competitions, discussions in a foreign language aimed at solving professional problems, "brainstorming," "round table discussion," business games, educational training, individual, paired, group performance of exercises, simulation of professional communication situations, development of programs, projects" (Sytnyakivska, 2018, p. 340).
- Selection of educational materials, processing of material, organization of student activities outside the classroom (intercultural interaction, which involves participation in real or simulated (production) contacts with native speakers of the languages or "using English as a lingua franca) and student's self-study work on the material.

- Development of assessment and corrective mechanisms applicable across professional disciplines and foreign language studies, fostering knowledge integration through the educational process.

- Recreation and emulation of the socio-professional environment within the educational institution, encompassing the subjects, subject matter, and societal context of a future specialist's professional pursuits. This immersion is imperative because acquiring proficient foreign language communicative competence, a crucial gauge of a specialist's qualifications and a catalyst for their professional trajectory, inherently depends on this immersion within the socio-professional milieu (Khomenko, 2015).

- Adaptability of educational materials, tasks, and simulated situations based on the student's language proficiency level, individual abilities, and self-defined goals.

- Focus on self-education and self-development, which determines the search for forms and tasks that stimulate the student's cognitive activity, the desire to learn more about the specialty, or the language for the specialty.

- Promoting self-management of activities, which involves modeling non-standard and spontaneous production situations in an intercultural professional space, which develops the ability to act and make responsible decisions and encourages effective behavior in stressful or competitive environments.

- Provision of subject interaction - personally and professionally oriented activities of teachers and students. At the same time, the creative individuality of teachers and a relatively high level of foreign language proficiency in the student group are paramount.

The authors also identified the significance of interdisciplinary interaction and coordination in training future specialists. As previously mentioned, the interdisciplinary approach, encompassing the instruction of diverse subjects as an integrated whole, stands as the pinnacle of integrative trends in pedagogical science. Fusing a foreign language with specialized subjects facilitates the systematic organization of knowledge across multiple domains, augmenting the pool of professional insights. Interdisciplinary courses broaden the spectrum of competencies for educators, fostering the concurrent and equitable acquisition of both foreign language skills and subject expertise – in essence, ensuring a simultaneous mastery of linguistic and specialized training.

We have delineated the advantages teachers and students gain from incorporating interdisciplinary courses into their learning experiences. Foreign language instructors benefit from gaining insights into the genuine context of foreign language professional communication and understanding students' authentic needs. They also have the unique chance to grasp the fundamentals of specialized subjects, enabling them to recreate genuine professional environments during classes. This approach helps in shaping both linguistic and professional competencies among students. Moreover, these educators can design distinctive evaluation methods that diverge from standard foreign language proficiency assessments. They also contribute to framing the

course objectives and developing problem-oriented communicative tasks tailored to the professional field.

Specialized subject teachers receive several advantages, including the ability to deliver their courses in foreign languages, the potential to engage foreign instructors for specialized modules, and collaborative efforts concerning methodology and language. Moreover, they gain the chance to employ a foreign language to consistently enrich their professional insights, keeping abreast of contemporary foreign publications within their field. This advantage is especially pertinent in educational internationalization, fostering academic exchanges, and facilitating opportunities like foreign internships.

Interdisciplinary courses provide an opportunity, through constant learning and self-improvement, to keep up with the times, thereby gaining authority among students and becoming a role model for them, i.e., contributing to raising the status of teachers.

In the presented concept, a foreign language is a tool for acquiring proficiency in other disciplines. Engaging in bilingual instruction for an academic subject is a multifaceted endeavor, as it demands the acquisition of both the subject matter and the linguistic form. Bilingual, professionally oriented education fundamentally employs a foreign language alongside the native language as a conduit for educational and cognitive pursuits in mastering specialized subject knowledge while training future experts. Cognitive engagement occurs in unison with linguistic activity, as students simultaneously learn the subject content while getting its expression in their native and foreign languages. In this manner, bilingual education is not solely the goal but also a means within the educational process. It is necessary to emphasize that in today's information-driven society, being bilingual is indispensable for professionals.

Taking all of the mentioned above into consideration, special departments and departments of foreign languages need to constantly interact with each other to coordinate the content elements of the disciplines and their compliance with the number of hours for these disciplines' mastering according to the curriculum.

Discussion

The research results presented here, derived from an analysis of specialized literature, dissertation research, and practical experience in integrative education, provide evidence for the relevance of the pedagogical concept of integrative teaching and learning in the context of interdepartmental interaction and underscore the advantages of this approach. Nevertheless, we maintain that the shift towards integrative learning necessitates thorough preparation as a primary requirement.

An analysis of both global and limited domestic experiences of interdisciplinary, integrative education within the framework of interdepartmental interaction underscores the significant potential inherent in this educational model. This potential suggests its ability to enhance the quality of training for future specialists within higher education. However, it is challenging to implement it in practice. Firstly, the interdisciplinary approach to designing a

holistic educational process is only beginning to replace the subject-disciplinary one. Not all higher educational establishments and departments are ready for this work. Secondly, one should also consider the inertia in our universities, the habit of traditional and well-known forms of organization of the educational process, and the additional load on department teachers. Integrative teaching and learning diverge from professionally oriented training through its heightened emphasis on subject content.

Conversely, in professionally oriented training, only 20% is allocated to subject-specific content, with the remaining 80% devoted to foreign language material. This division needs more modern requisites for cultivating comprehensive specialists who are proficient in their professional domain and possess knowledge across diverse fields. This distinction manifests in target orientations: professionally-oriented foreign language training entails language acquisition based on profession-oriented content. At the same time, integrated education aspires to the simultaneous and equitable mastery of specialized subjects and foreign language professional communicative competence, seamlessly integrated within the fabric of professional expertise. In other words, students master a specialty through the language and the language through the specialty. It involves communication in a foreign language in various professional communicative situations; motivation of students' speech activity, which can be either communicative or communicative-role one; organization of collective interaction, which means communication not only with the teacher but also with each other in simultaneous work in pairs and small groups of 3-5 people; concentrated presentation of new educational material intended for active learning; parallel mastering of all types of speech activity – listening, speaking (in forms of dialogues and monologues), reading and writing. The content of textual materials, exercises, and additional educational resources facilitates the simulation of a socio-professional environment. This environment nurtures conditions conducive to fostering students' professional cognitive skills and foreign language professional communicative competence. Also, it provides an avenue for integrating students' academic and practical engagements.

Another difference is the implementation of interaction between foreign language teachers and teachers of professional or other disciplines. In professionally-oriented training, such interaction is not a mandatory one. As noted above, even though the interdisciplinary approach has recently gained topicality, its implementation into teaching practice is taking place relatively slowly. It is fully realized exclusively within integrated education and is integral to developing foreign language professional communicative competence.

Integrated teaching involves the integration of teachers of specialized subjects and teachers of foreign languages, developing integrative educational programs by joint efforts, and organizing bilingual education, i.e., interdepartmental interaction. These factors challenge practical educators, researchers, methodologists, and students in specialized fields. Indeed, becoming proficient professionals in their respective domains necessitates foreign language proficiency, a reality underscored by our current information-centric society. Taking all these considerations into account, we assert that several aspects drive the development of the integrative teaching and

learning concept in the interdepartmental context: the underutilization of the potential benefits and resources stemming from integrating core subject matter and foreign language instruction, often due to the lack of a well-developed model for their effective fusion; an inadequately matured and scientifically underpinned bilingual education concept, which should harmonize language, professional, and intercultural elements. This concept aims to cultivate foreign language professional communicative competence. It is foundational for the internationalization of domestic education, aligning with the Bologna Convention's framework within the students' professional and pedagogical training process in Ukraine.

Considering the challenges and deficiencies outlined above regarding professional foreign language training in non-linguistic higher educational institutions in Ukraine, as well as the benefits of integrative education, as demonstrated in our brief comparative analysis of bilingual integrative and traditional monolingual education, we find it pertinent to propose specific pathways for transitioning to integrative education within the framework of interdepartmental interaction. These pathways facilitate the achievement of intended outcomes. Given the complexity of this transition, we identify two primary stages of integrative training: *the preparatory stage* and *the organizational-procedural stage*.

Preparatory Stage

Recognizing the imperative to align the professionally oriented content in a foreign language with specific disciplines, we advocate for developing a foreign language course titled "Introduction to a Specialty" or "Introduction to a Discipline." This course is a crucial stepping stone for assimilating terminologies and fundamental concepts from professional fields, thus acting as a conduit toward seamless integration within higher education. The instruction of such courses can be undertaken by teachers from foreign language departments themselves. For instance, courses such as "Introduction to the Global Economy" and the integrative transitional course "Business, Language, and Culture" are particularly recommended within economic disciplines. This latter course is pivotal in cultivating an integrated competency to effectively navigate a foreign language professional subculture while considering its culturally specific values and behavioral norms. As Khomenko (2014) highlighted, the success of our economists and entrepreneurs within the global international labor market hinges not solely on impeccable foreign language proficiency but also on their adept application of language, mindful of the national and cultural nuances of their business counterparts. The latter encompasses the ability to make decisions that align with the socio-cultural norms of partners, demonstrating flexibility, interpersonal communication skills, and an array of personal, organizational, and business qualities. In essence, this endeavor fosters a comprehensive professional culture among specialists, an amalgamation of each mono-national professional culture enriched through the lens of a foreign language.

For instance, students gain insights into the logic underpinning professional cultures across various countries. The Benelux nations, for example, operate based on consensus logic; Germany

exhibits a widespread reliance on contract logic; the USA follows a sense of paternalism, while France operates within a code of honor. Consequently, educators guide students to appreciate the value paradigms of foreign professional cultures, which is a quintessential prerequisite, as professional intercultural interaction inherently requires such understanding. Simultaneously, it becomes evident to future specialists that elevating their professional culture is imperative. Consequently, students cultivate a culture of professional communication, constituting an invaluable facet of their professional culture. This tenet holds not only within the realms of a foreign language but also within their native tongue.

Courses designed within the framework of integrative education remain amenable to updates during lectures, practical sessions, or seminar classes dedicated to specialized disciplines.

Integrative learning entails an educational trajectory centered on mastering a discipline through a foreign language. A cornerstone of such training is the principle of interdisciplinary harmony, necessitating the synchronization of diverse subjects, the concurrent teaching of various disciplines, specific sections, or designated topics in both linguistic and subject domains. This principle also demands the refinement of instructional methodologies across disciplines to construct and implement an interconnected structure of interdisciplinary knowledge. In essence, it constitutes an interdepartmental educational and methodological project. Various *interdisciplinary interaction and coordination* modes, such as interdisciplinary pedagogical tandems or small groups, are proposed. These approaches yield the creation of pertinent integrative work programs, shared class plans, joint educational and methodological resources, manuals, glossaries, and strategies for seminars and laboratory sessions. The imperative necessitates this collaborative effort for students to engage with materials pertinent to their specialized subjects while mastering a foreign language for specific purposes. Consequently, the development of such materials should result from interdepartmental cooperation.

The forms of interaction can be as follows:

1. Foreign language teachers attend practical classes and familiarize themselves with the content of the relevant discipline (section, topic).
2. The discipline teacher and the foreign languages jointly work on the appropriate educational and methodological support.
3. Teachers work together on terminology, selection of appropriate terminological vocabulary, and original literature for students.

Organizational-Procedural Stage

The organizational and procedural stage of integrative learning involves several levels that determine the algorithm of integrative learning based on interdepartmental interaction.

Level 1, the organizational level, encompasses establishing goals and objectives for integrated education, specifically targeting the development of professional and foreign language communicative competencies. At this stage, activities include the exploration and selection of bilingual literature, the creation of methodological manuals and recommendations, the

identification of electronic textbooks and video materials for specific sections or topics within a professional discipline, the compilation of relevant terminology dictionaries, and the design of assessments and other forms of evaluation. These efforts contribute to the comprehensive and effective implementation of integrated teaching and learning strategies (Khomenko, 2014).

The next step involves developing integrated educational programs and teaching materials for the sections of the discipline that will be taught in two languages. These materials encompass not only the content of the study but also include goals for integrative learning of the topic, section, or the entire discipline, thematic planning, material and technical support, and criteria for evaluating students' bilingual work.

Another essential preparatory point is the constant diagnosis of students' integrative learning results. In other words, it is crucial to determine what specific competencies (professional and foreign language ones) students will master within a particular class and what knowledge, skills, and thinking processes students will develop while working on a specific text or topic/section. Indeed, the significance extends beyond mere content knowledge acquired during classes. Considerations regarding the cultivation of cognitive skills, such as comprehension, must also account for these aspects. Consequently, including "comprehension questions" while students engage with textual material is recommended.

All of the above leads to the fact that it is necessary to approach the selection of educational materials, in particular texts, seriously ("considering content") (Coyle, 2008, p. 75), which should contain both new professional and linguistic knowledge, consider a particular problem from different points of view, allow independent search and discussion of problematic issues that are in the content itself.

Level 2, the methodological level, combines text analysis with cultivating students' cognitive abilities, specifically their ability to connect content and cognition. This approach is firmly grounded in Bloom's taxonomy, a framework that steers educational goals from basic cognitive actions towards more intricate ones like analysis, synthesis, and evaluation. Educators nurture these advanced thinking skills through hypothesis formulation, problem-solving, and creative tasks (Bloom, 1984). The taxonomy, further refined by Krathwohl, takes the shape of a pyramid, encompassing stages including remembering, understanding, applying, analyzing, evaluating, and creating (Krathwohl, 2002).

Thus, work with the text should be based on, starting with low-order thinking skills, offering, for example, the following tasks: make a list, identify and highlight certain features, apply, and then move on to exercises that form higher-order skills: analyze, compare, identify differences, invent, plan, prove, predict. That is, we emphasize that bilingual education is not a transfer of knowledge from a specialist teacher to a student with little knowledge but rather an opportunity for each student to construct their system of understanding this or that phenomenon, to engage in various cognitive actions, in particular planning, discussion of results, their evaluation in the thinking process.

Level 3 focuses on communication, encompassing the study and practical use of lexical units and grammatical structures concerning the content. At this stage, we recommend exploring the lexical and grammatical aspects of the text material and subsequently applying these linguistic structures and units in real-life communicative situations involving a foreign language.

Teachers at this stage should deal with different types of language for other purposes and alternative approaches to learning and using language (language of learning, language for learning, language through learning) (Coyle, 2007). In particular, the *language of learning* is a set of language and speech tools essential for studying a specific subject area. *A language for learning* encompasses the communicative tools students utilize when engaging in group tasks and interacting with one another. Language through learning comprises new speech tools that may emerge during the learning process, requiring observation, study, periodic reinforcement, and eventual integration into students' vocabulary (Coyle, 2008).

Level 4 focuses on developing cultural awareness and providing opportunities for students to engage with relevant topics, fostering respect for diverse perspectives and understanding their culture and foreign cultures. Students are encouraged to recognize the differences between their culture and others, prompting them to analyze and compare information from various cultural standpoints. This process helps them form their understanding of phenomena or situations. Coyle (2007) states that creating diverse socio-cultural contexts during classes is crucial. This goal can be achieved through tasks that identify differences in vocabulary, idioms, and proverbs and through activities such as watching videos and listening to audio texts to explore cultural variations in concepts, ideas, theories, and production practices, comparing them to other cultures.

Therefore, as it follows, when working with an educational text, the focus shifts from simply familiarizing and memorizing terminological vocabulary and transferring content to establishing logical and cause-and-effect relationships between different parts of the text. The integrated lesson aims to enhance students' understanding of conceptual units within the text and their interconnections. Moreover, by presenting challenging questions and creating problem-based situations, the integrated approach fosters the development of students' cognitive abilities. Simultaneously, students learn the linguistic aspects of the text as a tool for acquiring new knowledge and skills relevant to their future professional endeavors.

Thus, an integrated lesson combines professional and humanitarian knowledge, skills, and abilities students need to acquire, merging them into a cohesive system. It goes beyond narrow specialization, giving students a broader understanding and perspective. The lesson fosters the development of foreign language professional communicative competence by integrating diverse subject areas, empowering students to engage effectively and interact within their prospective professional environments.

Considering those mentioned above, we hold the belief that students should acquire the following competencies:

1. Proficiency in crafting written texts in both their native and foreign languages on professional subjects and skill in editing and proofreading them.

2. Capability in verbal and written communication in a foreign language, including delivering presentations on personal and collaborative endeavors using communication technologies and conveying professional information through modern information and communication tools.

Regarding intercultural interaction, students will scrutinize and acknowledge the intricacies of other cultures, effectively present professional information during intercultural exchanges, conform to ethical standards inherent in different production cultures, and analyze methods of social interaction, all while considering national, ethnocultural, and confessional attributes.

Conclusion

The presented pedagogical concept of integrative learning within the framework of interdepartmental interaction represents an innovative approach tailored for the Ukrainian non-linguistic higher education setting. It offers a theoretical foundation and practical methods to address the scientific challenge of bilingual training for future specialists. This concept justifies the importance of such activity and identifies the factors that underline its relevance within Ukraine. It delineates its goals and objectives, distinguishing between two primary stages of integrative training: preparatory and organizational-procedural. Detailed characteristics of these stages provide a practical algorithm for implementing this approach, particularly in interdepartmental collaboration. Consequently, this concept equips higher education instructors with the means to implement it in their teaching effectively. Moreover, it aligns with the growing need for future specialists to possess bilingual subject competencies and prepares them for their forthcoming professional roles.

About the Authors

Oleksandr Khomenko holds a Doctorate in Pedagogical Sciences and is a Professor in the Department of Foreign Languages at Kyiv National Linguistic University. His research focuses on professional linguodidactics and effective communication strategies. He teaches courses on Effective Business Communication and English for Specific Purposes (ESP) for business students. ORCID: <https://orcid.org/0000-0003-2539-837X>

Liudmyla Vasylychuk is a Ph.D. in Philology and the Head of the Department of Foreign Languages at Kyiv National Linguistic University. Her areas of expertise encompass teaching German as a first foreign language, translation from and into the German language, theoretical grammar of the German language, and comparative lexicology of German and Ukrainian. ORCID: <https://orcid.org/0000-0002-6798-8389>

Andrii Sotnykov holds a Ph.D. in Linguistics and an MA in Translation. He is an Associate Professor in the Department of Foreign Languages at Kyiv National Linguistic University. His primary teaching subject is "English for Specific Purposes," tailored for Psychology students. ORCID: <https://orcid.org/0000-0002-0288-9582>

Oksana Slaba, Ph.D. in Linguistics, is an Associate Professor at the Department of Foreign Languages, Kyiv National Linguistic University, Ukraine. Her teaching subjects encompass German as a primary foreign language, translation to/from the German language, and the theoretical grammar of the German language. ORCID: <https://orcid.org/0000-0001-5155-4554>

References

- Bloom, B. (1984). *Taxonomy of Educational Objectives*. Boston, MA: Pearson Education.
- Bouw, E., Zitter, I., & de Bruijn, E. (2021). Designable elements of integrative learning environments at the boundary of school and work: a multiple case study. *Learning Environments Research*, 24, (3), 487–517. <https://doi.org/10.1007/s10984-020-09338-7>
- Coyle, D. (2007). Content and Language Integrated Learning: Towards a Connected Research Agenda for CLIL Pedagogies. *International Journal of Bilingual Education and Bilingualism*, 1, (5), 543–562. <https://doi.org/10.2167/beb459.0>
- Coyle, D. (2008). *CLIL – a pedagogical approach*. In *Encyclopedia of Language and Education*. Retrieved from <http://blocks.xtec.cat/clilpractiques1/files/2008/11/slrcoyle.pdf>
- Dudley-Evans, T., & St. John, M. (2010). *Development in English for Specific Purposes (A multi-disciplinary approach)*. Cambridge: Cambridge University Press.
- Garcia, M., Martinez, R., & Rodriguez, E. (2017). Gamification in Integrative Teaching: Enhancing Motivation and Learning Outcomes. *Journal of Educational Technology Systems*, 45, (3), 457–472.
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A Learner-centered Approach*. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511733031>
- Khomenko, O. (2014). *Foreign language education of business students in the context of globalization: monograph*. Kyiv: KNUTD. Available at https://knutd.edu.ua/publications/pdf/Monographs/Khomenko_monogaph.pdf
- Khomenko, O. (2015). *Tendencies of business students foreign language education in the context of globalization: theoretical and methodological aspect*, (Unpublished Doctoral dissertation). Kyiv: Institute of Higher Education of the National Academy of Educational Sciences of Ukraine.
- Krathwohl, D. (2002). A revision of Bloom's Taxonomy: An overview. *Theory into Practice*, 41, (4), 212–218. https://doi.org/10.1207/s15430421tip4104_2
- Lee, S., Chen, H., & Wang, C. (2019). Exploring the Use of Virtual Reality in Integrative Teaching of a Professional Discipline and a Foreign Language. *International Journal of Educational Technology in Higher Education*, 16, (1), 1–16.

- Llinares, A. & McCabe, A. (2023). Systemic functional linguistics: the perfect match for content and language integrated learning, *International Journal of Bilingual Education and Bilingualism*, 26:3, 245-250, DOI: [10.1080/13670050.2019.1635985](https://doi.org/10.1080/13670050.2019.1635985)
- Marsh, D. (1994). *Bilingual Education & Content and Language Integrated Learning*. Paris: International Association for Cross-cultural Communication, Language Teaching in the Member States of the European Union (Lingua), University of Sorbonne.
- Marsh, D., Maljers, A., & Hartiala, A.-K. (2001). *Profiling European CLIL Classrooms: Languages Open Doors*. Jyväskylä: University of Jyväskylä.
- Nyen, T., & Tønder, A. (2018). Development of vocational skills through the integration of practical training periods in school-based vocational education in Norway. In S. Choy, G. B. Wärvik, & V. Lindberg (Eds.), *Integration of vocational education and training experiences: Technical and vocational education and training: Issues, Concerns and Prospects* (Vol. 29, pp. 227–241). New York: Springer. https://doi.org/10.1007/978-981-10-8857-5_12
- Smith, J., Johnson, L., & Brown, A. (2021). Integrating a Professional Discipline and a Foreign Language: A Blended Learning Approach. *Journal of Integrative Education*, 25, (2), 120–135.
- Sytnyakivska, S. M. (2018). *Theory and methodology of social specialists training on a bilingual basis in universities*: monograph. Zhytomyr. Available at <http://eprints.zu.edu.ua/id/eprint/32726>
- Winborg, J. and Hägg, G. (2023). The role of work-integrated learning in preparing students for a corporate entrepreneurial career. *Education + Training*, 65, (4), 674–696. <https://doi.org/10.1108/ET-05-2021-0196>