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Conceptual Paper

Professionally oriented instruction in Kyrgyz as a second language in higher education: developing professional communicative competence and human capital

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Abstract: This conceptual paper examines professionally oriented instruction in Kyrgyz as a Second Language in higher education and its role in developing students' professional communicative competence. The paper considers how language learning can be connected with professional terminology, scientific and academic texts, authentic communication tasks, and situations related to students' future fields of work. Particular attention is given to the relationship between language competence, professional preparation, graduate employability, workforce readiness, continuing professional development, and human capital. The analysis draws on research in Languages for Specific Purposes, communicative competence, language education, and human capital, as well as on the educational and language-policy context of the Kyrgyz Republic. The proposed conceptual framework combines professionally relevant vocabulary, work with specialised texts, practice-oriented communicative activities, professional scenarios, academic literacy, and cooperation between language and subject-specific departments. The paper argues that instruction in Kyrgyz as a Second Language can perform not only a linguistic and educational function but also a preparatory function by helping students acquire language resources needed to understand professional information and participate in academic and workplace communication. The framework also highlights the importance of differentiated materials, independent learning, digital resources, and interdisciplinary curriculum design. These principles may support higher education institutions in aligning language instruction with professional preparation and the longer-term development of qualified human capital.

Keywords: employability; workforce readiness; terminology; scientific texts; academic literacy; interdisciplinary education; workplace communication; continuing professional development

1. Introduction

The Programme for the Development of the State Language and Improvement of Language Policy in the Kyrgyz Republic for 2021–2025, approved by Government Resolution No. 510 of 1 October 2020, identified the insufficient use of the Kyrgyz language in economics, science, secondary vocational education, and higher education, particularly in the context of professional training [1]. Since July 2026, the state language policy has been

guided by a new Programme for the Development of the State Language in the Kyrgyz Republic for 2026–2028, approved by Cabinet of Ministers Resolution No. 481 [2]. The continuity of these policy measures underscores the relevance of improving the educational and methodological foundations for the use of Kyrgyz in academic and professional contexts.

From a higher-education and human-resources perspective, professional communicative competence in Kyrgyz can be understood as one component of broader professional competence. When students learn to interpret specialised information, use field-specific terminology, and communicate professional ideas in the state language, language learning acquires a direct connection with graduate employability and workforce readiness. This connection does not imply that language competence alone determines employment outcomes; rather, it represents one element of the knowledge, skills, and achievements developed through higher education and subsequently applied in professional contexts [3,4].

The underlying problem is that a number of important domains of social and professional activity, including the economy, education, science, production, professional relations, and management, continue to function predominantly outside the Kyrgyz-language environment, while Kyrgyz language and literature remain the main academic fields in which the state language is systematically represented. Many institutional and professional domains were established during the Soviet period and have continued to function largely in Russian. Consequently, the development of a fully functional Kyrgyz-language professional environment requires the systematic adaptation of professional concepts, objects, processes, social relations, forms of professional interaction, terminology, and conceptual frameworks to the Kyrgyz language [1].

This process requires the development of bilingual professional dictionaries, textbooks, teaching materials, and other educational resources, as well as the gradual expansion of Kyrgyz as a language of instruction in professional and academic contexts. It is also necessary to develop professional language based on the norms of the literary language and the functional characteristics of business and academic discourse. Progress in this area requires close cooperation between subject-matter specialists whose professional knowledge has traditionally been developed in Russian and Kyrgyz language specialists with a strong command of the relevant professional terminology. Overall, the transition of professional domains into the Kyrgyz-language environment is a complex, resource-intensive, and long-term process.

Within higher education, however, Kyrgyz language educators should not wait until the complete Kyrgyz-language transformation of professional domains has been achieved. A more practical approach is to revise the state standard for Kyrgyz language instruction in accordance with students' future fields of study and professional activities and, on this basis, update university working programmes. At the initial stage, collections of professionally oriented texts can be developed for different fields of study and tested in educational practice. After sufficient methodological experience has been accumulated, these materials can serve as a basis for developing model textbooks for professionally oriented instruction in Kyrgyz as a Second Language.

Despite the relevance of these developments, the relationship between general instruction in Kyrgyz as a Second Language and the specific communicative demands of students' future professions remains insufficiently operationalised in teaching frameworks. Existing Languages for Specific Purposes (LSP) scholarship provides principles for needs-oriented vocabulary, specialised texts, and purposeful communication; this paper brings these principles together in a proposed framework tailored to Kyrgyz-language higher education. Its contribution is conceptual and methodological: it links terminology,

scientific-text analysis, communicative transformation, project-based learning, simulated workplace situations, and a proposed assessment framework. The framework is offered for adaptation and empirical testing rather than as a model whose effectiveness has already been demonstrated.

2. Conceptual foundations of professionally oriented instruction

In implementing these activities, it is useful to consider international experience in teaching languages for professional purposes. Research in Languages for Specific Purposes emphasises the importance of adapting language learning to learners' academic and professional needs and of combining specialised terminology, relevant texts, and communicative tasks [5,6,7]. Such approaches generally combine professional terminology, specialised texts, communicative tasks, and academic activities, thereby allowing learners to develop language competence in contexts relevant to their future occupations.

The concept of "professional language" or "language for specific professional purposes" refers to a system of linguistic resources that enables members of a particular professional community to understand one another, exchange information, and communicate effectively within professional contexts. Professional language is characterised by its interaction with other fields of specialisation, its formal and institutional use, its application in oral and written communication within specialised and interdisciplinary contexts, and the standardisation of terminology and text structures. Its structure can be considered through three interrelated dimensions of communication: lexical and terminological, morphological and syntactic, and textual [8,9].

In the teaching of Kyrgyz as a Second Language, professionally oriented instruction requires several important conditions. These include the use of authentic texts, that is, naturally occurring texts used in real social, academic, and professional contexts; systematic introduction to professional terminology; development of students' ability to independently compile and use personal professional glossaries; and the formation of oral professional communication skills through role plays and simulations that reproduce typical scenarios of professional interaction. This orientation is consistent with the broader emphasis on purposeful and contextualised language use in contemporary language education [10].

The range of academic programmes offered by higher education institutions in the Kyrgyz Republic is currently expanding beyond traditionally established fields. A growing number of specialised programmes require students to acquire increasingly differentiated disciplinary knowledge and professional competencies. This diversification makes it particularly important to develop corresponding Kyrgyz-language educational resources. For many academic programmes, specialised Kyrgyz-language textbooks and professional dictionaries have not yet been sufficiently developed.

At the same time, published Kyrgyz-language educational collections and textbooks demonstrate the feasibility of developing learning materials that introduce students to professional concepts and field-related language. Such resources can provide a textual and methodological basis for further development of professionally oriented instruction in Kyrgyz as a Second Language [11]. Textbooks and collections containing materials from different scientific fields can likewise be incorporated into the educational process. Such initiatives demonstrate the possibility of creating a methodological and textual foundation for further development of professionally oriented Kyrgyz-language instruction.

One of the major challenges in this process is the accurate translation and standardisation of professional texts. In the absence of established specialised dictionaries and textbooks, the translation of professional terminology and

conceptual content into Kyrgyz remains particularly challenging. The problem is not limited to the translation of individual terms; it also concerns the consistent representation of professional concepts, relationships, and processes within a coherent Kyrgyz-language professional discourse.

Another challenge concerns the fact that Kyrgyz language instruction in many higher education programmes is concentrated in the first and second years of study. At this stage, students primarily undertake general education courses in the humanities, social sciences, and other foundational areas, while their specialised professional knowledge is still developing. More substantial professional knowledge is generally acquired during the later years of bachelor's-level education. Consequently, professionally oriented texts introduced during the first years may sometimes contain concepts that students have not yet encountered within their specialised disciplines.

This situation gives Kyrgyz as a Second Language instruction an anticipatory function. Students may encounter professional terminology in language classes before they study the corresponding concepts in greater depth within their major subjects. Professionally oriented language instruction must therefore provide sufficient contextual and linguistic support to make specialised information accessible without requiring students to possess extensive prior disciplinary knowledge. At the same time, it should gradually prepare them for the professional discourse they will encounter at later stages of their education.

Contemporary language-teaching methodology increasingly addresses the acquisition of professional vocabulary. Nevertheless, the methodological problem of developing lexical competence specifically oriented toward students' future professions cannot yet be considered fully resolved. This situation highlights the need to improve methods for developing professionally oriented lexical competence among students enrolled in different fields of study.

The challenge is particularly significant given the limited amount of classroom time allocated to Kyrgyz language instruction in many higher education programmes. Within this limited instructional time, enabling students to acquire and actively use key terminology and concepts associated with their future professional activities represents a substantial methodological challenge.

One way to address this problem is to provide systematic methodological support for students' independent learning, ensure access to appropriate didactic materials, and make professionally oriented resources available through the websites and digital platforms of university Kyrgyz language departments. Such resources can extend language learning beyond classroom instruction and provide students with opportunities to develop their professional vocabulary and communication skills independently.

At present, the study of the language of specific professional domains constitutes an important area of applied linguistics. Particular attention is given to the standardisation of terminology in professional translation and to ensuring the accessibility and comprehensibility of specialised texts [8,9]. At the same time, the acquisition of professional language involves not only the development of linguistic and communicative knowledge and skills but also the gradual internalisation of the language system and its structural patterns [7].

Once bilingual professional dictionaries, phrasebooks, research articles, doctoral dissertations, teaching manuals, textbooks, monographs, and specialised websites have been developed in Kyrgyz within the relevant professional domains, the next stage in teaching Kyrgyz according to students' fields of study is the development of their ability to construct professional discourse. This involves enabling students to communicate professional information comprehensively and coherently, describe phenomena, processes, and ideas related to their future

occupations, express opinions, formulate arguments, provide substantiation, and participate in professional discussions.

3. Methodological approach

This article adopts a conceptual analytical approach rather than reporting an empirical study. The starting point for the framework was the author's own previously published research, which provided the principal conceptual foundation for examining professionally oriented instruction in Kyrgyz as a Second Language. These works were considered alongside other scholarly publications already known to the author and directly relevant to Languages for Specific Purposes, communicative competence, academic and scientific language, employability, and human capital. The sources were selected purposively because of their relevance to the paper's focus, rather than through a systematic database search or formal screening procedure. Policy documents were included to establish the language-policy and higher-education context of the Kyrgyz Republic. The selected literature and policy sources were examined in relation to the paper's central question: how professionally oriented instruction in Kyrgyz as a Second Language can connect terminology, specialised texts, purposeful communication, interdisciplinary cooperation, and workplace readiness. The discussion takes the form of a focused narrative synthesis, with concepts and approaches organised thematically to inform the proposed instructional framework. No systematic database search, formal screening protocol, empirical data collection, pilot-course implementation, or statistical analysis was conducted.

The framework is therefore a reasoned proposal derived from the selected literature and contextual analysis, not a set of demonstrated effects. The instructional activities, expected outcomes, and assessment indicators presented below are intended to guide curriculum design and future evaluation. Because source selection was purposive rather than systematic, the paper does not claim exhaustive coverage of all relevant studies.

4. Methodological framework for professional communicative competence

At this stage, methodological approaches are required to develop students' ability to transform received professional information into monologic and dialogic forms through receptive and productive language-processing techniques. Communicative and transformational exercises of this kind can help students consolidate newly acquired language material and use it in meaningful contexts [12,13]. Such activities should contribute not only to the comprehension of specialised information but also to students' ability to reproduce, interpret, and communicate professional content independently in Kyrgyz.

To facilitate the intensive acquisition of general academic and professionally relevant vocabulary, it is appropriate to employ transformational and communicative exercises that require students to identify and manipulate the position of words and word combinations within sentences. Other useful activities include formulating questions and answers based on specialised professional texts and translating selected fragments from Russian into Kyrgyz and from Kyrgyz into Russian in order to reinforce and activate newly acquired vocabulary.

Particular attention should be given to practice-oriented communicative exercises that develop students' ability to express logical and syntactic relationships between events and processes. These exercises should focus on linguistic structures used to indicate whether an action has already occurred, is occurring simultaneously with another action, or follows another action, as well as on structures expressing causal and consequential relationships. Such exercises allow grammatical structures to be acquired in meaningful communicative contexts rather than as isolated formal rules.

The teaching of professional language and professional communication

should be conducted within the framework of the literary norms of the Kyrgyz language. Subject-specific departments of higher education institutions are primarily responsible for introducing students to the fundamental concepts and knowledge of their respective academic disciplines. The role of Kyrgyz language departments, in turn, is to facilitate students' acquisition of professional terminology relevant to their future fields of employment and to support the development of their oral and written professional communication skills.

This division of responsibilities is particularly important in the context of Kyrgyz as a Second Language. Students from different fields of study require a common foundation of academic and communicative language skills, while the professional component of language instruction should be adapted to the specific requirements of their future occupations. Thus, the terminology, texts, communicative tasks, and professional discourse introduced in Kyrgyz language classes may vary according to students' respective fields of study.

Such an approach allows Kyrgyz language instruction to move beyond the teaching of general language proficiency and become an integral component of students' professional preparation. The development of professional Kyrgyz-language competence enables future specialists to understand, process, and communicate professional information in the state language and prepares them to participate more effectively in the professional, institutional, and academic environment of the Kyrgyz Republic.

From the perspective of human capital development, this approach is particularly significant. Professional language competence contributes to broader professional readiness by combining linguistic knowledge with disciplinary knowledge and communication skills. In higher education, such competence may also support employability by enabling graduates to demonstrate and apply relevant achievements in professional communication and information-processing tasks. It can further provide a foundation for continuing professional development, because specialists who can work with professional information in Kyrgyz are better positioned to extend their professional knowledge through state-language resources. The broader human capital literature treats knowledge and skills as central components of productive participation in social and economic life [3]. Consequently, the development of Kyrgyz-language professional communication among students from different fields of study can be considered one component of the long-term development of qualified human capital in the Kyrgyz Republic [3,14].

The development of professionally oriented language instruction is particularly important in the context of the increasing diversification of higher education and the growing demand for graduates who are able to apply their knowledge effectively in professional environments. Modern professional activity requires not only disciplinary knowledge but also the ability to understand specialised information, use appropriate terminology, formulate professional statements, and interact effectively with colleagues, clients, and other participants in professional communication.

In this context, traditional general language instruction may not fully address the communicative needs of university students. A gap may arise between students' general language proficiency and the language required for their future professional activities. Students may possess basic grammatical and conversational skills while experiencing difficulties in understanding specialised terminology, interpreting professional texts, formulating instructions, describing professional processes, presenting information, or participating in professional discussions. Such a gap can affect the effectiveness of their professional preparation.

Therefore, the development of professional communicative competence should be considered not only as a linguistic or pedagogical objective but also as an important component of professional training and human capital development. From an HR perspective, the relevant outcome is the graduate's expanded capacity to understand professional information, participate in workplace communication, and apply disciplinary knowledge through appropriate language practices. These capabilities can form part of the broader competence profile associated with employability and workforce readiness, while remaining dependent on disciplinary knowledge, practical experience, and other graduate attributes [4,11,16].

The problem becomes particularly relevant for students studying in different fields of higher education. Professional communication has specific requirements across different academic and occupational contexts. Consequently, language instruction should take into account the terminology, communicative situations, and discourse patterns characteristic of students' future professional fields, while maintaining a common methodological and linguistic foundation.

This approach requires a gradual transition from general vocabulary to professionally oriented lexical and communicative competence. Students should not only learn individual professional terms but also understand their meanings within specific contexts, recognise their relationships with other concepts, and use them appropriately in oral and written communication. Professional vocabulary should therefore be introduced through authentic or professionally adapted texts, practical situations, questions, discussions, role plays, and other communicative activities.

An important methodological principle is the integration of professional terminology with realistic professional situations. Students can be asked to describe a professional process, explain a problem, formulate an instruction, prepare a short report, respond to a colleague or other participant in a professional interaction, discuss a professional issue, or provide an argument based on specialised information. Such tasks allow students to move from passive recognition of terminology to its active use in professional communication.

Particular attention should also be given to the relationship between vocabulary and functional grammar. Professional communication requires students to use grammatical structures that enable them to describe processes, establish cause-and-effect relationships, express conditions, sequence actions, compare phenomena, formulate recommendations, and substantiate professional decisions. Therefore, grammatical material can be introduced through professionally meaningful communicative tasks rather than presented exclusively as an abstract system of rules.

To support this process, a professionally oriented lexical resource may be developed for different fields of study. Such a resource can include key terms, frequently used verbs and phrases, standard professional expressions, examples of their use in context, and audio materials for pronunciation practice. Digital formats can make these resources more accessible and allow students to continue developing their professional language competence independently outside the classroom.

The use of professional scenarios is particularly valuable for developing communicative confidence and practice-oriented competence. Simulated professional situations can reproduce typical forms of interaction between specialists, colleagues, managers, clients, and other participants in professional activities. Through such activities, students learn not only what terminology to use but also how to formulate questions, clarify information, report problems, explain decisions, and respond appropriately in professional situations. From a workforce-readiness perspective, these tasks provide opportunities to

practise language-mediated behaviours that may later be required in workplace communication.

The development of professional communicative competence is also closely related to students' ability to work with specialised texts. Students should gradually learn to identify key information, interpret professional terminology, distinguish essential from secondary information, summarise professional content, and transform written information into oral communication. Conversely, they should be able to express professionally relevant ideas in written form, including through short reports, explanations, descriptions, and other forms of professional documentation.

Thus, professionally oriented instruction in Kyrgyz as a Second Language should be viewed as a systematic process that connects language learning with students' future professional activities. Its purpose is not simply to increase the number of professional terms known by students but to enable them to use these terms accurately and appropriately in professional discourse.

This approach is particularly important for the preparation of future specialists in a multilingual professional environment. A graduate who is able to understand professional information, communicate effectively, formulate ideas clearly, and use field-specific terminology in the state language possesses an additional professional resource that can contribute to successful participation in institutional and occupational activities.

Within the proposed "Situation–Solution" approach, students work through a structured professional case: identify a problem, extract relevant information, select appropriate terminology, explain the issue, and communicate a proposed response to a relevant audience. For example, in a classroom simulation students may draft a short non-conformity notice using a guided template. The scenario and template should be adapted to the students' discipline and checked by subject specialists. This is an illustrative teaching activity; the present paper does not report an implemented intervention or measured learning outcomes.

If the proposed approach is implemented in a pilot course, it could be evaluated through a baseline and follow-up assessment, analysis of student work, observation of simulated communication tasks, and feedback from students and instructors. Potential benefits—such as more accurate terminology use, clearer professional writing, fewer language-related communication errors in classroom tasks, or greater confidence—are hypotheses to be tested, not findings of this conceptual paper. Any claim about effectiveness would require empirical evidence from an actual implementation.

The proposed instructional sequence is summarised in **Table 1**. It moves from supported language input to increasingly independent professional communication. Instructors can adapt the order and difficulty to learners' proficiency and disciplinary knowledge; collaboration with subject specialists is recommended when selecting texts and checking terminology.

Table 1. Proposed instructional sequence

Stage and objective	Illustrative teaching procedure	Expected learning outcome
1. Needs and terminology orientation	Identify typical communication tasks for the discipline; introduce a small set of key terms in context; build a glossary with definitions and examples.	Recognise and use core terms appropriately in short, supported tasks.
2. Specialised-text analysis	Use a short authentic or adapted scientific/professional text; complete pre-reading, while-reading, and post-reading tasks; identify claims, data, and key terms.	Locate, interpret, and summarise relevant information from a professional text.

Continued table:

Stage and objective	Illustrative teaching procedure	Expected learning outcome
3. Communicative transformation	Convert text information into a summary, oral explanation, presentation, memo, or short report; practise audience-appropriate language.	Organise professional information clearly in oral and written forms.
4. Project and workplace simulation	Complete a small discipline-related project; role-play a meeting, consultation, briefing, or problem–solution exchange.	Apply terminology and communication strategies to a simulated professional task.
5. Assessment and reflection	Use an analytic rubric; provide peer/teacher feedback; revise work and update the glossary.	Identify strengths and next steps for continued professional language development.

The proposed assessment indicators are presented in **Table 2**. For formative or pilot evaluation, instructors may use a common rubric with performance levels (for example, beginning, developing, competent, and strong) and collect comparable tasks at baseline and follow-up. The indicators below are proposed for adaptation and validation; they have not been tested as a validated measurement instrument in this paper.

Table 2. Proposed assessment framework

Indicator	What can be observed in student work
Terminology accuracy	Uses relevant professional terms accurately and consistently; explains key terms in context.
Specialised-text comprehension	Identifies the main idea and relevant details; interprets terminology and information without changing the source meaning.
Professional writing	Produces a coherent memo, summary, report, or message with suitable structure, register, grammar, and terminology.
Oral communication	Explains information clearly, responds to questions, and adapts language to the audience and purpose.
Simulated workplace task	Completes the assigned communicative task, conveys the issue and relevant facts, and proposes or communicates a next step appropriately.

The descriptors in **Table 3** are illustrative guidance for applying one proposed indicator; they are not empirically validated cut-off points. Instructors would need to adapt the rubric to learner proficiency, discipline, and task complexity.

Table 3. Illustrative performance-level descriptors for terminology accuracy

Illustrative indicator: terminology accuracy	Performance-level descriptor
Beginning	Uses few relevant professional terms; frequent inaccuracies make the intended meaning difficult to understand.
Developing	Uses some relevant terms, but accuracy or contextual appropriateness is inconsistent; support is often needed.
Competent	Uses most relevant terms accurately in familiar tasks; occasional errors do not prevent understanding.
Strong	Uses a broad range of relevant terms accurately and consistently, selecting and explaining terms appropriately for the context.

The development of professional communicative competence should not be regarded as an additional or secondary component of higher education. Rather, it constitutes an integral element of professional preparation that strengthens the connection between language competence, disciplinary knowledge, and practical communication skills. In this respect, professionally oriented Kyrgyz-language instruction can contribute to the preparation of graduates who are able to

communicate effectively in their future fields of employment and participate fully in professional, institutional, and academic environments [11,12].

5. Scientific and academic texts in professional language instruction

An important component of professionally oriented language instruction is the systematic use of scientific and academic texts. Such texts provide students with access to professional terminology, typical patterns of academic discourse, and established ways of presenting, analysing, and interpreting specialised information. Their integration into language instruction enables learners to become familiar with communicative practices characteristic of academic and professional environments while simultaneously expanding their lexical and terminological repertoire.

For university students from different fields of study, the ability to work effectively with scientific texts is closely connected with both academic and professional preparation. Throughout their studies, students are expected to read specialised literature, prepare reports and presentations, write essays and course papers, analyse professional information, and, at later stages, participate in research projects. These activities require not only knowledge of a particular discipline but also the ability to understand and produce texts that conform to academic and professional conventions [15].

Scientific texts are particularly valuable as a source of professionally relevant language. They contain specialised terminology and demonstrate how professional concepts are defined, explained, compared, and related to one another. Consequently, systematic work with such texts can simultaneously contribute to the development of reading, writing, speaking, analytical, and information-processing skills. For students learning Kyrgyz as a Second Language, this approach provides an opportunity to acquire professional terminology in meaningful contexts rather than through the isolated memorisation of individual lexical units.

Scientific texts therefore perform several interconnected functions in instruction in Kyrgyz as a Second Language. First, they serve as a source of specialised knowledge and terminology. Second, they provide models of academic and professional discourse. Third, they develop students' ability to analyse, interpret, and evaluate information. Fourth, they create a basis for practising different types of language activity, including listening, reading, speaking, and writing. Finally, systematic engagement with scientific texts contributes to the development of professional communicative competence [10,15].

At the same time, scientific texts may present considerable difficulties for learners whose Kyrgyz-language proficiency is still developing. A high concentration of terminology, complex syntactic structures, logical relationships between propositions, and formal patterns of academic expression can make specialised materials difficult to understand. Therefore, scientific texts should be selected and, where necessary, adapted according to students' language proficiency, academic level, and field of study.

The use of scientific texts should also be organised progressively. At the initial stages, students may work with relatively short and structurally simple texts containing basic professional terminology. As their language proficiency and disciplinary knowledge develop, the complexity of the materials can gradually increase. Learners can subsequently be introduced to specialised articles, textbook chapters, analytical materials, and other forms of academic discourse.

An effective methodology may involve a sequence of tasks corresponding to different stages of working with a scientific text. At the first stage, students identify unfamiliar terminology and determine its meaning from the context or with the support of a professional glossary. At the second stage, they identify

the main idea and key information of the text. At the third stage, they analyse relationships between concepts and formulate questions concerning the content. At the final stage, students reproduce the information orally or in writing, express their own position, and relate the material to their field of study.

For example, learners may be asked to identify professional terms in a specialised text, explain their meanings, construct sentences using the terms, formulate questions about the content, and prepare a short oral presentation. They may also write a brief summary, identify cause-and-effect relationships, compare professional phenomena, or explain a concept in their own words. Such tasks gradually transform receptive knowledge of professional terminology into the ability to use it in productive professional communication.

Particular attention should be given to distinguishing between general academic language and field-specific terminology. A professionally oriented text should not simply serve as a source of new vocabulary; it should demonstrate how terminology functions within a particular conceptual system and how professional information is linguistically organised. In this way, students acquire not only individual terms but also an understanding of relationships between concepts and the communicative patterns through which professional knowledge is expressed.

For students from different academic fields, the content of such texts should be differentiated according to their future professional activities. Such differentiation makes it possible to combine a common methodological foundation with field-specific content. The common foundation may include academic vocabulary, general grammatical structures, reading strategies, summarising skills, question formation, argumentation, and oral presentation. The professional component, in turn, is adapted to the terminology, concepts, texts, and communicative situations associated with each field of study.

Scientific texts can also contribute to the development of analytical and critical thinking. Students should gradually move beyond the reproduction of information and learn to identify an author’s position, distinguish facts from interpretations, compare different viewpoints, formulate questions, and provide reasoned responses. This transition from reproduction to analysis and interpretation is particularly important for preparing future specialists who are capable of independently processing and evaluating professional information.

Another important aspect is the development of academic writing skills in Kyrgyz. Students need to learn how to organise information logically, establish relationships between parts of a text, formulate definitions, describe processes, compare phenomena, express cause-and-effect relationships, and present conclusions. These skills are relevant not only to academic assignments but also to future professional communication, in which specialists are expected to prepare reports, analytical materials, explanations, official documents, and other forms of written communication.

The methodological organisation of work with scientific texts should therefore follow the principle of continuity. The complexity of linguistic and professional material should correspond to students’ level of preparation, while the terminology and subject matter should gradually expand as they progress through their academic programmes. Adapted scientific texts accompanied by explanations, glossaries, and structured methodological tasks can facilitate this process and make specialised information more accessible to learners [10].

The integration of scientific texts into instruction in Kyrgyz as a Second Language consequently creates conditions for the simultaneous development of language proficiency, professional terminology, academic literacy, and communicative competence. It also strengthens the connection between language education and disciplinary training, allowing students to apply language

knowledge in contexts that are directly relevant to their future professional activities.

The instructional value of scientific texts lies in the opportunity they provide for learners to practise interpreting specialised information and transforming it into clear oral or written communication. This function links text-based language learning with the professional tasks addressed in the following discussion.

6. Discussion

In the context of increasing demands placed on higher education by a changing and increasingly interconnected society, professionally oriented instruction in Kyrgyz as a Second Language acquires particular importance as an element of students' professional preparation. For university students from different fields of study, instruction in Kyrgyz as a Second Language should extend beyond the acquisition of general vocabulary and grammatical structures and include the development of the ability to communicate in contexts relevant to their future professional activities. This involves acquiring field-specific terminology, understanding professional texts, and using Kyrgyz to perform communicative tasks associated with academic and professional environments.

The primary objective of professionally oriented instruction in Kyrgyz as a Second Language is therefore the development of professional communicative competence in Kyrgyz. This competence can be understood as an integrated capacity that combines linguistic knowledge, professional terminology, communicative skills, and the ability to apply Kyrgyz language resources in academic and professional situations. It is not limited to passive knowledge of specialised vocabulary. Rather, it involves the ability to understand professional information, communicate ideas, participate in discussions, formulate questions, explain processes, prepare written materials, and perform other language-mediated tasks relevant to students' future professional activities [11,16].

6.1. Interdisciplinary implementation

Illustrative discipline-specific applications include: (a) agriculture—read an adapted field observation or crop-condition text, explain key terms, and prepare a concise field-condition report or recommendation; (b) economics and management—interpret a short table or organisational report, summarise its main message, and contribute to a simulated meeting or draft an internal memo; and (c) aviation or other technical programmes—analyse a non-operational training text and deliver a simulated safety-related briefing or draft a classroom incident report. These are examples of language-learning tasks; they are not operational guidance and would require adaptation and review by relevant subject specialists.

An important characteristic of professionally oriented instruction in Kyrgyz as a Second Language is its interdisciplinary nature. Professional communicative competence in Kyrgyz is not developed through language instruction alone; it is formed at the intersection of language learning, disciplinary knowledge, practical training, and academic activity. This makes cooperation between Kyrgyz language instructors and specialists responsible for different academic programmes particularly important. Such cooperation makes it possible to identify the terminology, concepts, communicative situations, and text types that are relevant to students' future professional fields and to incorporate them into language-learning materials. From an institutional perspective, this cooperation also supports curriculum alignment and the continuing professional development of instructors who jointly design professionally relevant learning activities.

At the same time, instruction in Kyrgyz as a Second Language may have an anticipatory function in relation to specialised disciplinary courses. Students may encounter professional terminology in Kyrgyz language classes before they study the corresponding concepts in greater depth within their

major subjects. This creates a particular methodological challenge: learners must be introduced to professional Kyrgyz without being expected to possess extensive disciplinary knowledge. Consequently, professionally oriented materials should provide sufficient contextual and linguistic support to make specialised information accessible while gradually preparing students for the professional discourse they will encounter at later stages of their education.

One effective approach is to organise work with professional texts through a sequence of pre-text, while-reading, and post-text activities. Pre-text activities can be used to introduce key terminology, activate students' prior knowledge, explain potentially difficult concepts, and anticipate the content of the text. While-reading tasks can focus on identifying key information, establishing relationships between concepts, and interpreting professional terminology in context. Post-text activities can then require students to reproduce, discuss, summarise, analyse, or apply the information obtained from the text. Such an organisation transforms reading in Kyrgyz from a purely receptive activity into a basis for subsequent professional communication.

Professional terminology in Kyrgyz should likewise be introduced through meaningful contexts rather than isolated vocabulary lists. Terminological units can be presented through definitions, examples, professional situations, short explanatory texts, diagrams, case materials, and other contextually relevant tasks. Students can subsequently use these terms in sentences, questions, summaries, presentations, discussions, and problem-solving activities. This progression from recognition to contextual understanding and finally to productive use contributes to the development of professional language competence in Kyrgyz.

Project-based learning provides additional opportunities for integrating instruction in Kyrgyz as a Second Language with professional preparation. Projects can be organised around topics relevant to students' future professional activities and may involve information search, analysis of professional sources, preparation of presentations, development of recommendations, discussion of practical problems, and presentation of results. Such activities require students to use Kyrgyz for concrete communicative purposes rather than merely reproduce previously learned language material. They also create opportunities for both monologic and dialogic communication, since project presentations may be followed by questions, discussion, and spontaneous responses.

The content of professionally oriented activities in Kyrgyz as a Second Language should be differentiated according to students' fields of study and future professional requirements. While the specific terminology, concepts, texts, and communicative situations may vary across academic programmes, the underlying methodological framework remains consistent. Students learn to use Kyrgyz to obtain, process, organise, interpret, and communicate information that is relevant to their future professional activities.

Professionally oriented instruction in Kyrgyz as a Second Language can also be connected with students' research and academic activities. Working with scientific literature in Kyrgyz, preparing abstracts and presentations, formulating research questions, discussing findings, and presenting project results require the simultaneous use of academic and professional language. The integration of such activities into language instruction can therefore contribute to the development of academic literacy and students' ability to participate in research and professional communication in the state language.

Another important condition for effective professionally oriented instruction in Kyrgyz as a Second Language is consideration of students' professional interests and communicative needs. Topics, texts, tasks, and communicative situations should be sufficiently connected with students' future professional

activities to demonstrate the practical value of learning Kyrgyz. Authentic or adapted professional materials, problem-based tasks, case situations, discussions of current professional issues, and simulations of professional communication can increase the meaningfulness of language learning and encourage students to use professional Kyrgyz actively.

The use of digital and interactive technologies can further expand these opportunities. Multimedia presentations, digital resources, online professional materials, interactive tasks, collaborative projects, and other technology-supported activities can provide additional contexts for practising professional terminology and communication in Kyrgyz. Their value, however, lies not in the technology itself but in its ability to create meaningful situations in which students must understand, analyse, and communicate professional information in the state language. Such technology-supported activities can reinforce active and practice-oriented language learning.

An important outcome of this approach is the strengthening of interdisciplinary connections within higher education. Knowledge and skills developed through instruction in Kyrgyz as a Second Language can be transferred to other academic subjects, while disciplinary knowledge acquired within students' educational programmes can provide meaningful content for language learning. In this sense, instruction in Kyrgyz as a Second Language becomes not an isolated academic subject but a component of an integrated educational process in which Kyrgyz functions as a means of acquiring, processing, and communicating professional knowledge.

Thus, the development of professional communicative competence through Kyrgyz as a Second Language requires a combination of classroom and independent activities, scientific and professionally oriented texts, terminology work, project-based tasks, professional situations, and opportunities for oral and written communication in Kyrgyz. The objective is not simply to teach students a set of professional terms but to enable them to use the state language as a functional instrument for understanding information, solving communicative tasks, participating in academic and professional interaction, and expressing professional ideas.

6.2. Human Resources (HR) and workforce implications

From an HR and workforce perspective, the conceptual analysis supports treating professional language competence as one component of graduate professional competence rather than as an isolated linguistic outcome. Its potential value lies in enabling students to obtain, interpret, organise, and communicate professional information in situations resembling academic and workplace requirements. Such competence may support workforce readiness by helping learners practise communication tasks before entering employment. Employability, however, is broader than employment itself: it concerns the achievements, understandings, and capabilities that graduates can apply in relevant contexts [4]. Professionally oriented language instruction is therefore one possible institutional contribution to these capabilities, alongside disciplinary knowledge, practical training, and other forms of professional preparation. Its longer-term relevance also includes continuing professional development, because specialists need to interpret new information, participate in professional communication, and continue developing their knowledge throughout working life. In this sense, professionally oriented language education may contribute to broader human capital development [3]. These are conceptual relationships; the present paper does not measure effects on employment or organisational performance. Professional language competence may also support organisational communication by helping employees convey information clearly, clarify

responsibilities, document issues, and participate in meetings; these are plausible conceptual links rather than effects measured in this paper.

For higher education institutions, this perspective suggests several practical steps. First, universities can map the communication tasks associated with each programme and align language-course outcomes with those tasks. Second, language instructors can use a progression from terminology and text comprehension to professional writing, oral explanation, project work, and simulations. Third, language and subject departments can jointly select or adapt texts and review terminology for disciplinary accuracy. Fourth, professional training institutions can use common rubrics to give learners feedback on terminology accuracy, professional writing, oral communication, and simulated workplace tasks. Finally, digital glossaries and curated learning materials can support independent practice beyond scheduled class time. The materials and assessment criteria should be adapted to learners' proficiency, programme requirements, and available resources.

7. Conclusion

This conceptual paper proposes a framework for professionally oriented instruction in Kyrgyz as a Second Language that connects terminology learning, scientific and professional text analysis, communicative transformation, project-based learning, simulated workplace situations, and formative assessment. Its theoretical contribution is to bring together principles associated with Languages for Specific Purposes, communicative competence, academic literacy, employability, and human capital within the context of Kyrgyz-language higher education. The framework treats professional language competence as a supporting component of workforce readiness and continuing professional development, rather than as a sole determinant of employment outcomes. The proposed sequence, discipline-specific examples, and assessment indicators are intended to help universities and instructors design and evaluate learning activities relevant to students' future professions. The main limitation is that the framework remains conceptual: it has not been implemented or empirically validated, and the focused narrative synthesis does not constitute a systematic review of all relevant literature. Future research should pilot the framework in different academic programmes, involve language and subject specialists, compare learners' performance before and after instruction using a transparent rubric, and collect student and instructor feedback. Such studies would be needed to determine feasibility, adapt the framework to different proficiency levels and disciplines, and assess its actual educational outcomes.

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