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## CONDITIONS AND OPPORTUNITIES OF SUBJECT-BASED LEARNING AT UNIVERSITIES AND ITS IMPACT ON STUDENTS' LINGUISTIC COMPETENCE

### CONDICIONES Y OPORTUNIDADES DEL APRENDIZAJE POR ASIGNATURAS EN LAS UNIVERSIDADES Y SU IMPACTO EN LA COMPETENCIA LINGÜÍSTICA DE LOS ESTUDIANTES

Ludmila Gadzaova<sup>1</sup>

E-mail: [gadzaova@list.ru](mailto:gadzaova@list.ru)

ORCID: <https://orcid.org/0000-0001-9558-0818>

Elena Goverdovskaya<sup>2</sup>

E-mail: [elena\\_goverdovskaya@mail.ru](mailto:elena_goverdovskaya@mail.ru)

ORCID: <https://orcid.org/0000-0001-5987-3277>

Esmira Alisultanova<sup>3</sup>

E-mail: [esmira59@mail.ru](mailto:esmira59@mail.ru)

ORCID: <https://orcid.org/0000-0002-2565-5615>

Irina Fedotova<sup>4</sup>

E-mail: [fedotova@pgu.ru](mailto:fedotova@pgu.ru)

ORCID: <https://orcid.org/0000-0002-4133-2146>

Diana Tomaeva<sup>5</sup>

E-mail: [diana\\_tomaeva0304@mail.ru](mailto:diana_tomaeva0304@mail.ru)

ORCID: <https://orcid.org/0000-0002-4343-6301>

<sup>1</sup>Northern Ossetia State University after K.L. Chetagurov, Russian Federation. Chechen State University, Russian Federation.

<sup>2</sup>Pyatigorsk Medical and Pharmaceutical Institute, branch of the Volgograd State Medical University, Russian Federation.

<sup>3</sup>Grozny State Oil Technical University named M.D. Millionshchikov, Russian Federation.

<sup>4</sup>Pyatigorsk State University, Russian Federation.

<sup>5</sup>North Caucasus Mining and Metallurgical Institute. Russian Federation.

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#### ABSTRACT

Proceeding from the idea that the subject-based content of disciplines has to be taught and learned in close relationship with other disciplines, the study examines the problems, conditions, and opportunities of subject-based learning with consideration of linguistic specifics. The development of professional language is the primary task of all academic disciplines. Linguistic competence grows in conjunction with the study of professional subjects. Therefore, language training has to be designed consecutively with consideration of the subject content focused on the knowledge of a foreign language. This contributes to the conscious use of language as a medium of competence improvement in vocational education. Of importance is the teacher's reliance on the foundation of language learning processes, the didactics of language development, and methodological possibilities. The paper is devoted to the problem of students' choice of a language to study in the context of subject-based content, language competence and culture, and the functions of language in the relevant context.

#### Keywords:

Subject-based content of disciplines in higher education, linguistic competence, choice of language and its relationship with professional activity.

#### RESUMEN

Partiendo de la idea de que el contenido basado en materias de las disciplinas debe enseñarse y aprenderse en estrecha relación con otras disciplinas, el estudio examina los problemas, las condiciones y las oportunidades del aprendizaje basado en materias teniendo en cuenta las especificidades lingüísticas. El desarrollo del lenguaje profesional es la tarea principal de todas las disciplinas académicas. La competencia lingüística crece en conjunto con el estudio de materias profesionales. Por tanto, la formación en idiomas tiene que diseñarse de forma consecutiva teniendo en cuenta los contenidos de la asignatura centrados en el conocimiento de una lengua extranjera. Esto contribuye al uso consciente de la lengua como medio de mejora de las competencias en la formación profesional. De importancia es la confianza del maestro en la base de los procesos de aprendizaje del idioma, la didáctica del desarrollo del idioma y las posibilidades metodológicas. El artículo está dedicado al problema de la elección de un idioma para estudiar por parte de los estudiantes en el contexto del contenido basado en la materia, la competencia lingüística y la cultura, y las funciones del idioma en el contexto relevante.

#### Palabras clave:

Contenidos temáticos de las disciplinas de la educación superior, competencia lingüística, elección del idioma y su relación con la actividad profesional.

## INTRODUCTION

Language concepts, language learning models, their planning, and scientific approaches are becoming increasingly practiced in the academic educational process of higher education. Science is always presented through language. The clear and vital interaction of the international scientific community in different functional contexts, as well as the success of international projects in higher education, regardless of the language most popularly used to share knowledge and scientific findings, always depend on whether the participants can communicate in one or several common languages. Thus, international higher education projects can only be successful if they have a well-developed language concept adapted to the specific goals of cooperation and learning. This language concept can then form the models of language training.

The concept of general language competence is understood here as the conscious and adequate intercooperation of the languages that are needed for various communicative situations, in which subject-specific scientific content is taught and scientific (graduate) papers are written and in which universities provide scientific knowledge required for higher education, as well as special courses (internships). These languages are important both for scientific training and everyday life after graduation and are likely to play a major role in further professional practice.

## MATERIALS AND METHODS

In addition to professional subject-based content, foreign language teachers have to use teaching methodology and methods in a systematized and consistent manner. Methodological knowledge allows one to select the right method (training manual) or technique for a specific target group and their abilities and established goals and choose the optimal methodological path accordingly.

Due to the generalized nature of methodological guidelines, the efficiency of a method is largely contingent on particular factors, such as the personality and imagination of the teacher needed to explain and convey their convictions verbally and non-verbally. We observe a wide use of online methods, which provide much stimulation for the further methodological development of language teaching.

## RESULTS AND DISCUSSION

The knowledge of foreign languages is vital since fundamental scientific works need to be read in the original language. Students who manage to master this multilingual communication are especially successful in the labor market, as well as demanded and stable in professional

activities, and can become intermediaries of international organizations. Implementing the language concept in non-linguistic higher school specialties, we proceed from the following principles:

- language competence and professional competence contribute equally to the success of the participation in national and international higher education projects;
- language competence, along with professional competence, is a criterion of graduates' success in all kinds of foreign language projects.

Therefore, quality language training plays an important role in higher education, as it provides opportunities for students who can act with purpose, both professionally and linguistically, to meet modern demands and excel in their studies and professions.

Training in a foreign language pursues various goals, including ensuring that the models of language mediation and didactic-methodological concepts are developed in the national political, cultural, and multilingual contexts, being regulated by various national peculiarities. Language concepts, as well as didactic-methodological concepts and the intensity of language teaching, must be adapted to these framework conditions and comparable to the models of international higher education, thus providing students in the educational environment of a non-linguistic university with the linguistic prerequisites for successful communication on the subject in the foreign language(s).

The concepts of language training focus on the priority of its scientific context and the functions of teaching performed with productivity and receptiveness at an appropriately high level. These qualities of teaching require computer labs (classrooms) adequately equipped to meet these requirements and qualified teachers who base their work on effective methodological and didactic concepts related to scientific and professional activities.

The goal of language training has to be the opportunity to translate the subject-specific content of professional disciplines into a foreign language, as well as to translate the basics of the subject-based language and knowledge related to the native national language(s) into other languages (usually English, German, or French). "Die Fachsprache ist gekennzeichnet durch spezifische morphologische und syntaktische Merkmale – also Merkmale, die sich auf die Zusammensetzung und den Aufbau einzelner Worte sowie auf den Satzbau beziehen" ["Professional language is characterized by specific morphological and syntactic characteristics, that is, features that relate to the composition and structure of individual words as well as

to the structure of the sentence” (our translation)] (Leisen, 2011). Such a tandem is always associated with the formation of predictable behavioral patterns in students as well.

Teaching experience shows that the choice of language concept has a decisive influence on the quality of training programs and the achievement of foreign-language learning goals. The importance of the national component in the language concept is often undermined as it tends to appear secondary to the representatives of the subject disciplines. The basics of language learning and competence assessment for academic use may become apparent only after some time. For this reason, before deciding on the specific language concept, an in-depth analysis of the starting situation is needed. Only then can the suitable language be determined. On a basic level, this decision is influenced by what foreign language skills and at what level students already have at the beginning of their studies. Thus there arises the question of what languages are taught at schools. The consequences of an incorrect choice of language come with a delay. When students enroll in universities, their failures usually stem from the wrong choice of foreign language and the concomitant inadequacy of language training, which implies that some skills involved in language competence have not been developed previously. The choice of the language to be taught is therefore a problem that needs to be addressed.

Although the structural distance of languages does not necessarily pose an obstacle to training, the presence of a common (partial) language base can accelerate the mastery of a foreign language. For example, students with a good foundation in French, Italian, or Latin can relatively quickly acquire receptive skills in Spanish, while students with a good foundation in German are quicker to master English and vice versa. These preliminary considerations determine how and to what extent language learning and language training should be planned for non-linguistic majors. “Fachsprache ist die Sprache, die vorrangig im Bildungsbereich vorkommt und deren Beherrschung zur Teilhabe an der Bildung erforderlich ist. Sie beschreibt zudem die kognitiven Sprachkenntnisse, die im kognitiv akademischen Bereich gebraucht werden” [“Professional language is a language that is primarily used in the field of education and the mastery of which is necessary for participation in education” (our translation)] (Gogolin, 2009). Professional language also describes the cognitive linguistic skills required in the cognitive-academic sphere.

Aside from these measurable factors, the choice of the model needs to account for intercultural aspects, i.e. how widely the given language is used in the region. This is the question of whether students’ interest is limited to the

quality of the language and the content of its teaching, or whether there is a certain affinity for the culture of the studied language that would ensure further fruitful improvement of that knowledge. These aspects often create an additional barrier to the choice of a foreign language the study of which alongside the content of studies tends to be perceived by students as an impediment.

To achieve professional success using a foreign language, it is helpful to have a realistic assessment of what learning goals should be achieved, by which students, and with consideration of which learning factors, albeit to varying degrees. Once the goals are established, the question arises about the best procedure for implementing a language program. This includes decisions on whether the available program or model can be used, or whether it is necessary to develop new programs and models integrated into the semester. Another relevant question is whether grammar should be taught more explicitly or implicitly, whether it should be studied in a preparatory and/or accompanying form, and what role the existing languages can play in the professional training process.

Thus, the model of language training has to be chosen in accordance with the goal set. The combination of the aforementioned factors, i.e. students’ current foreign language skills, language skills available to teachers, and the cultural aspects lead to the language competence of non-linguistic students that is sufficient for intercultural communication, correct implementation of professional activities that are based, among other things, on the concepts of bilingualism and multilingualism. “Fachliches Lernen findet immer in der Sprache und mit der Sprache in einem Zustand statt, wo diese selbst noch generiert wird. Sprache im Fachunterricht ist wie ein Werkzeug, das man gebraucht, während man es noch schmiedet” [“Professional training always takes place in and with language in the state in which it is still being created. Language in subject-based teaching is a tool that is needed already in the process of its development” (our translation)] (Butzkamm, 1989).

Consideration is given to students’ language experience and language skills for professional use, which can be combined into an overall concept. Students with different proficiency have to be brought by the respective training program to comparable levels necessary for the established requirements and competencies. Bilingualism and multilingualism in the region can come in a variety of ways that contribute to the success of the educational process. Nevertheless, expectations regarding proficiency in a foreign language in students (and teachers) can vary greatly on an individual level and depending on the educational system. In most cases, receptive knowledge can

stay in the marginal zone for a long time, and productive knowledge can stay in the static zone. For this reason, the objective typically is to foster and improve foreign language proficiency in both students and teachers. As a rule, receptive knowledge is more important in this process than productive, as opportunities for practical implementation of the latter in the region are usually limited. In this respect, there is also an opportunity to work with additional online self-learning tools and other multimedia-based software. *“The study of a foreign language is one of the core elements of the system of professional training of specialists in vocational educational institutions. Proficiency in a foreign language is necessary for graduates to be competitive in the labor market. In the framework of the competency-based approach in education, this obligates the teacher to develop methodological support for the professional orientation of the training and for ensuring a close connection of the material studied with the student’s chosen specialty, the subjects of the interdisciplinary course, and industrial practice”.* (Boltenkova, 2022)

The practicality of training gifted students in an international context is more justified and valuable for graduates who can cooperate in the professional and academic context consistent with their needs and employment opportunities. Students who get international internships tend to have an increased need to master (proper) writing and educational language skills, while their verbal linguistic skills are often based on colloquial, dialectal norms.

The linguistic requirements for teachers in higher education call for a high level of training that goes far beyond linguistic skills. It is always desirable that teachers acquire general intercultural scientific literacy and adapt it to the specific target culture.

In the educational process, it is important to have learning material in an academic context with particular attention to dialogical speech related to studies (e.g., understanding structured subject situations and short conversations, making suggestions and responding to suggestions, requests) and monological speech (e.g., short practical presentations on a topic from everyday life in society, in a university, such as short presentations on a topic related to the educational institution, etc.).

Teaching material should be integrated into the training. This can be texts in a foreign language with lexical, grammar, and cultural regional studies exercises for further work on the texts. At higher levels, students can edit more difficult texts that relate to their professional context, focus on subject-based training, and require the corresponding basic training. The requirements need to be aligned with the training program. The linguistic goal of the program

itself should be focused on achieving students’ ability to learn a foreign language by the end of the course, adjusting to their language skills, such as articulating speech slowly but clearly while avoiding complex sentence structures, which primarily develops listening skills, demonstrates visual comprehension, and more.

Requirements for the choice of a foreign language are tied to the fact that *“personal and professional self-determination associated with the processes of self-knowledge, self-regulation, self-control, and self-evaluation of the student in educational and professional activities (communication, research, design, creative, etc.) using a foreign language”* (Bolsunovskaia & Kemerova, 2015) and contribute to professional competence.

It is critical that specialist teachers in their first years of teaching can adapt to the low foreign language competencies of students to simplify complicated subject-based content in the linguistic presentation. For this, it is enough to choose simpler, more clearly worded sentences and avoid complex adjectives, embeddings, and incomplete sentences. Such training promotes communication within the subject field. Following specific topics and speaking slowly and clearly, it is possible to teach students to communicate relatively easily in structured situations and brief conversations, exchange relevant information, and express their views on some issues under the condition that they get help in formulating and constructing grammatical structures and vocabulary and can request that key points be repeated if necessary (Kail & Severina, 2017).

For improving language proficiency, there are several electronic tools available as aids for learning and scholarly activities that are recommended for students, teachers, and scholars alike. Many resources are available for free in text editors, including spelling tests, thesauri, and dictionaries. Others are available on websites or in special software.

While grammar helps to clarify rules, vocabulary and thesaurus programs provide great assistance in finding words for productive and receptive use.

## CONCLUSIONS

Teaching a foreign language presupposes excellent linguistic training with an additional criterion of a training program geared to specific professions, providing a level of language proficiency that allows for professional activities. *“A foreign language must necessarily be included in the general training of a specialist. It should stimulate interest in the profession studied, thus creating a natural motivation to study the subject as a means of improving professional knowledge”.*

This motivation mitigates the frustration of students who want to achieve adequate results in vocational education but have insufficient knowledge of a foreign language. Thus, proper choice of a foreign language and purposeful use of electronic digital learning tools (Moodle components) provides opportunities to obtain and improve professional and subject-based linguocultural language skills, since the language program receives additional support. In addition, if students have a motivational interest, it is possible to continue the study of a foreign language.

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