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ISSN 3030-3907

DESCRIPTOR AS A FRAMEWORK FOR DEFINING LANGUAGE SKILL DEVELOPMENT ACROSS PROFICIENCY LEVELS

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Annotation. Due to globalization processes, the demand for qualified specialists who know foreign languages is rapidly increasing in all professional fields. Language and linguistic education have become tools for international professional communication and an important cultural element for successful social development. As a result, the need, demand, and motivation to learn foreign languages, especially English, continue to grow. The relevance of this research lies in the fact that developing pragmatic competence is connected with a person's readiness and ability to adapt to changes in professional activity. It is considered an integral personality characteristic. To describe the process of developing pragmatic competence in higher education, modeling methods widely used in pedagogy were applied.

Keywords: activity-based, vocabulary acquisition, self-regulated learning, involvement load hypothesis, artificial intelligence, the ability to overcome misunderstandings multimodal input, dual coding theory, cognitive load theory, adaptive learning systems, online dictionaries, corpora, interactive learning platforms.

Ключевые слова: Деятельность, овладение словарным запасом, саморегулируемое обучение, гипотеза вовлеченной нагрузки, искусственный интеллект, способность преодолевать недоразумения мультимодальный ввод, теория двойного кодирования, теория когнитивной нагрузки, адаптивные системы обучения, онлайн-словари, корпусы, интерактивные платформы обучения.

Аннотация. В связи с процессами глобализации во всех профессиональных сферах стремительно растет спрос на квалифицированных специалистов, владеющих иностранными языками. Язык и лингвистическое образование стали инструментами международного профессионального общения и важным культурным элементом успешного общественного развития. В результате растут потребность, спрос и мотивация к изучению иностранных языков, особенно английского. Актуальность данного исследования заключается в том, что развитие прагматической компетентности связано с готовностью и способностью человека адаптироваться к изменениям в

ISSN 3030-3907

профессиональной деятельности. Она считается неотъемлемой характеристикой личности. Для описания процесса развития прагматической компетентности в высшем образовании были применены методы моделирования, широко используемые в педагогике.

Annotatsiya. Globallashuv jarayonlari tufayli barcha kasbiy sohalarda xorijiy tillarni biladigan malakali mutaxassislarga bo‘lgan talab jadal sur’atlar bilan ortib bormoqda. Til va lingvistik ta’lim xalqaro kasbiy muloqot vositasi va muvaffaqiyatli ijtimoiy rivojlanishning muhim madaniy elementiga aylandi. Natijada xorijiy tillarni, ayniqsa, ingliz tilini o‘rganishga bo‘lgan ehtiyoj, talab va motivatsiya tobora ortib bormoqda. Tadqiqotning dolzarbligi shundaki, pragmatik kompetensiyani rivojlantirish shaxsning kasbiy faoliyatidagi o‘zgarishlarga moslashish tayyorgarligi va qobiliyati bilan bog‘liq. Shaxsning integral xususiyati hisoblanadi. Oliy ta’limda pragmatik kompetentlikni rivojlantirish jarayonini tavsiflash uchun pedagogikada keng qo‘llaniladigan modellashtirish usullari qo‘llanildi.

Kalit so‘zlar: faoliyatga asoslangan, lug‘atni o‘zlashtirish, o‘z-o‘zini tartibga soluvchi ta’lim, ishtirok yuklamasi gipotezasi, sun’iy intellekt, tushunmovchiliklarni bartaraf etish qobiliyati multimodal kiritish, ikki tomonlama kodlash nazariyasi, kognitiv yuklama nazariyasi, adaptiv ta’lim tizimlari, onlayn lug‘atlar, korpuslar, interaktiv ta’lim platformalari.

INTRODUCTION.

In modern linguistic didactics, the model for developing pragmatic competence is conceptualized as an integrated process involving the interrelated development of learners’ communicative, pragmatic, and cognitive abilities. This model emphasizes the role of communicative strategies in facilitating learners’ acquisition of sociocultural knowledge and interpretative understanding of the target-language community. Consequently, it underscores the necessity of a clearly defined pragmatic orientation in the teaching of English. Pragmatic competence is the ability of learners to show their knowledge when constructing sentences in a foreign language, combining them into coherent texts (discourse), and using statements for different communicative purposes. It also includes the ability to produce speech in a foreign language according to the characteristics of interaction between speakers.

In this research, taking into account practical, activity-based, and personality-oriented learning in the formation of professional competence, as well as the specific features of foreign language teaching, types of speech activity, and characteristics of student learning, the concepts of **competence**, **competency**, and **speech competence** are distinguished.

ISSN 3030-3907

Competence is a set of knowledge, skills, and abilities acquired by a person.

Competency is a complex combination of personal qualities and states that reflect knowledge, skills, and experience in a particular field.

Pragmatic competence also includes the ability to overcome misunderstandings and difficult situations during communication in the studied foreign language.

Due to globalization processes, the demand for qualified specialists who know foreign languages is rapidly increasing in all professional fields. Language and linguistic education have become tools for international professional communication and an important cultural element for successful social development. As a result, the need, demand, and motivation to learn foreign languages, especially English, continue to grow.

It is recommended to develop students' pragmatic competence through the following approaches:

creating organizational and pedagogical conditions that support not only theoretical and professional training but also students' social, cultural, and professional development;

ensuring comprehensive mastery of a foreign language in both academic and extracurricular activities;

encouraging active participation of all students in improving their pragmatic competence;

identifying effective didactic opportunities for developing pragmatic competence.

Within this study, several pedagogical opportunities are highlighted. The first is motivation to improve methods for developing students' pragmatic competence. Motivation can be internal or external.

Internal motivation comes from personal needs and desires.

External motivation comes from outside factors such as rewards, approval, threats, or pressure. External motivation can be positive (reward-based) or negative (punishment-based).

The second opportunity is creating organizational and pedagogical conditions that allow students not only to study theoretical and professional subjects but also to develop socially, culturally, and professionally.

The third didactic opportunity is developing students' foreign language communicative competence to at least the B1 level.

The introduction of innovative approaches in education can effectively solve these problems. Innovative approaches are considered dynamic systems that introduce new methods and improvements into educational processes.

ISSN 3030-3907

A descriptor is a description of the skills that language learners are expected to develop at each level and demonstrate through different types of speech activity. It serves as a benchmark for assessing communicative competence, reflecting what learners can understand, produce, and perform in real communicative situations. Descriptors help define learning outcomes by specifying the progression of linguistic, sociolinguistic, and pragmatic abilities across proficiency levels. In the context of language education, they provide guidance for curriculum design, teaching objectives, and assessment criteria, ensuring a structured and measurable approach to language development.

Based on the research conducted, the concept of pragmatic competence was defined, its main components were described, and a list of descriptors reflecting pragmatic competence was developed. This made it possible to address the task of improving pragmatic competence among undergraduate students learning English in non-linguistic universities and to achieve the main goal of the dissertation — improving pragmatic competence in future bachelor-level specialists who are not language majors. The findings also demonstrated that the development of pragmatic competence requires systematic instruction, integration of professionally oriented communicative tasks, and the use of authentic interactional situations that foster learners' ability to choose appropriate language strategies according to context, intention, and social norms. In addition, the proposed descriptors can serve as a practical tool for designing instructional materials, assessing learners' pragmatic development, and further refining methods aimed at strengthening communicative effectiveness in professional and intercultural communication.

The second chapter of the dissertation, titled *"Methodology for Developing Students' Pragmatic Competence Based on Interdisciplinary Connections"*, analyzes the content, model, and teaching methodology for developing pragmatic competence through interdisciplinary learning.

Preparing students for communication in a foreign language requires mastering specific knowledge, skills, and abilities, which are usually part of pragmatic competence. In teaching English for specific purposes, communicative competence includes not only language knowledge but also pragmatic competence, which takes into account differences in scientific and professional communication. Language teaching includes vocabulary related to scientific concepts in a specific field, as well as grammar and syntax instruction.

Students must also learn common professional communication activities such as:

analyzing scientific articles,

writing research papers,

ISSN 3030-3907

presenting research results,
participating in academic and professional discussions.

To improve pragmatic competence, it is necessary to create complex, professionally oriented communication situations.

Developing sophisticated, professionally focused communication scenarios that mimic real-world interactional demands that students are likely to face in actual professional settings is essential to enhancing pragmatic competence. These scenarios should include students in negotiating meaning, interpreting intentions, controlling speech acts appropriately, and choosing context-sensitive communication techniques rather than just rehearsing isolated linguistic forms. Students can learn how to use language correctly and responsibly in accordance with social, cultural, and professional norms through role plays, case-based discussions, problem-solving exercises, and simulations of workplace speech. Additionally, including pragmatic training into professionally focused tasks fosters the growth of strategic competence, intercultural awareness, and discourse flexibility—all crucial elements of successful communication in specialized professions.

Analysis of scientific literature shows that English language teaching should include reflection on students' learning experience and improvement of professional and pragmatic competence through innovative educational systems. These systems were tested in the teaching process and helped identify effective ways of teaching English, including lesson content, teaching strategies, and work formats.

The relevance of this research lies in the fact that developing pragmatic competence is connected with a person's readiness and ability to adapt to changes in professional activity. It is considered an integral personality characteristic. To describe the process of developing pragmatic competence in higher education, modeling methods widely used in pedagogy were applied.

The model also emphasizes that understanding one's actions is closely related to independent thinking and the connection between external (practical) and internal (mental) activity. Through reflection and self-analysis, students can improve their skills. A foreign language is not only a communication and intercultural tool but also a means of developing professional competencies such as teamwork, analytical thinking, creativity, reflection, self-management, and information skills.

The content component of the model includes forms, methods, tools, techniques, and technologies aimed at improving pragmatic competence through scientific communication in English learning.

ISSN 3030-3907

The methodology for developing pragmatic competence through interdisciplinary connections includes:
educational quests (brainstorming, word mapping, fishbone analysis),
gamification methods,
SMART and project-based learning technologies,
written speech and semantic exercises,
analysis using a transformed Bloom's taxonomy.

The use of role-playing and business games, project work, training sessions, intercultural communication studies, and communicative skills sessions in English classes influences communication goals, communication conditions, and the choice of language forms.

The research also showed that educational quests are effective in solving foreign language learning difficulties. For example, brainstorming is an effective method for starting a new lesson because it helps generate ideas and encourages creative thinking.

USED LITERATURE

1. Kasper G. Four perspectives on L2 pragmatic development (NFLRC
2. Net Work #19) [HTML document]. Honolulu: University of Hawaii, Second Language Teaching & Curriculum Center. 2000. http: //www.nflrc. hawaii.edu/NetWorks/NW 19/.
3. Martínez-Flor A., Uso-Juan E. A comprehensive pedagogical
4. framework to develop pragmatics in the foreign language classroom: The 6 Rs approach // Applied Language Learning. – 2006. – Vol. 16. – № 2. – Pp. 39-64.
5. Muslimov N.A Bo‘lajak kasb ta’limi o‘qituvchilarini kasbiy
6. rivojlantirish. Monografiya. -T.:Fan, 2004.-128b
7. Musoyeva A. Jahon mamlakatlari ta’lim tizimida CEFR-ning ta’siri.
8. O‘zbekiston milliy universiteti xabarlari, 2021, [1/5/1] ISSN 2181-7324. 169-243-betlar.

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