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Interdisciplinary integration as a means of developing English lexical competence in primary school students

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Abstract. Interdisciplinary integration is an effective tool for developing English lexical competence in primary school pupils. It enables systematic vocabulary expansion, supports cognitive activity, and increases motivation through links with literature, mathematics, science, art, and ICT, promoting deeper understanding and retention.

Keywords: interdisciplinary integration, lexical competence, primary education, vocabulary development, English language learning.

One of the main directions for improving the methodology of teaching foreign languages in primary school is the implementation of interdisciplinary connections as a resource for developing lexical competence. Interdisciplinary integration allows for expanding pupils' vocabulary, ensuring the repetition of vocabulary in various contexts, stimulating cognitive activity, and increasing motivation to learn English.

According to research by V. Redko, the implementation of interdisciplinary connections contributes to the formation of a holistic worldview among students, the development of their cognitive activity, and ensures the practical orientation of learning [7, p. 190]. In the process of developing English lexical competence, interdisciplinary connections create additional opportunities to expand pupils' vocabulary, establish logical relationships between concepts, and ensure repeated use of lexical units in different contexts. It is important to emphasize that interdisciplinary integration involves not merely transferring knowledge from one subject to another, but creatively rethinking and establishing meaningful, logical, and methodological connections [3, p. 12].

An analysis of psychological and pedagogical literature highlights the key aspects of implementing interdisciplinary connections in teaching English vocabulary. O. Savchenko identifies three main aspects: content-based, operational, and methodological, which are closely interrelated and complement one another [4, p. 30].

Based on the analysis of academic literature, five essential aspects of interdisciplinary connections in developing English lexical competence in primary school pupils can be identified:

- 1. Systematic integration of knowledge
- 2. Competency-based orientation
- 3. Multidimensional approach
- 4. Technological variability
- 5. Multidisciplinarity

A particularly important element is the integration of English with subjects from the humanities cycle, especially Ukrainian language and literary reading. Bernatska O.V. and Komohorova M.I. emphasize that such integration creates favorable conditions for the development of linguistic intuition, metalinguistic awareness, and broadens pupils' general linguistic outlook. When teaching vocabulary, it is crucial to highlight common roots of words in different languages, the features of word formation, and relationships of synonymy and antonymy [1, p. 25]. The use of literary texts, fairy tales, and poems provides a natural context for introducing and consolidating new vocabulary, supporting the development of figurative thinking and emotional engagement with language material.

There are also substantial opportunities to develop English lexical competence through interdisciplinary links with subjects in the natural and mathematical cycle. Groshovenko O.P. and colleagues point out that the use of mathematical concepts, numerical expressions, and geometric shapes in English lessons not only enriches vocabulary but also develops logical thinking and spatial imagination [3, p. 12]. Integration with natural science topics allows for the acquisition of vocabulary related to natural phenomena, flora and fauna—highly valuable for communication.

Artistic and aesthetic subjects also play a significant role in interdisciplinary integration. Krasulia A. and Honcharova O. note that incorporating elements of music and visual arts into English lessons provides opportunities for emotional assimilation of vocabulary, development of creative abilities, and increased motivation to learn. Songs, rhymes, dramatizations, and art activities not only facilitate better memorization of vocabulary but also create a positive emotional atmosphere, develop phonemic awareness and rhythm sensitivity [6, p. 154]. It is crucial that the selected material corresponds to pupils' age, interests, and language proficiency.

Implementing interdisciplinary links for the development of English lexical competence requires careful planning and coordination among teachers of different subjects. Dubrovska L.O. and colleagues stress the importance of aligning curricula, lesson planning, and thematic scheduling [5, p. 9]. It is essential to maintain logical sequence in content delivery, balance different types of activities, and avoid overloading students.

Additional opportunities for interdisciplinary connections arise from the use of modern information and communication technologies. Rogulska O., Rudnytska K., Drozdova V. emphasize that multimedia tools allow for the integration of various types of information (text, graphics, audio, video), the creation of interactive learning materials, and personalized instruction [8, pp. 161–169]. Using computer programs, edictionaries, and educational platforms enhances students' independent work with vocabulary, supports systematic repetition, and enables assessment of vocabulary retention.

Special attention should also be given to organizing project-based learning. Project work integrates knowledge from different subject areas, promotes research skills and creativity. Podosinnikova H.I. and Khrystych N.S. note that during project work, students not only acquire new vocabulary but also learn to use it in varied contexts, while developing independent learning and teamwork skills. Project topics should align with pupils' interests, have practical relevance, and include opportunities for presenting their outcomes.

Interdisciplinary connections also reveal great potential through extracurricular English activities. Yatsyshyn N. and Yastrub A. stress that various extracurricular formats (clubs, events, contests) provide additional opportunities to integrate knowledge, stimulate interest, and foster creativity [9, p. 12]. However, it is important to ensure that such activities are systematic, goal-oriented, aligned with the curriculum, and tailored to students' individual needs.

An important component of interdisciplinary integration is the inclusion of sociocultural learning. Bilyk O. and Puha O. emphasize that vocabulary learning should take place within the context of familiarizing pupils with the culture, traditions, customs, and everyday life of the target language country [2, p. 156]. This supports the development of a comprehensive worldview, sociocultural competence, and intercultural communication skills.

In conclusion, interdisciplinary connections in the process of developing English lexical competence in primary school students hold significant potential, which can be realized through various forms and methods of instruction. Effective use of this potential requires a systematic approach, careful planning, and coordination among all stakeholders in the educational process. It is vital to maintain a balance between different aspects of integration, consider pupils' age and interests, and foster an environment that supports cognitive activity and creative expression.

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