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CLIL PROJECTS IN THE TRAINING OF SPECIALISTS IN "GEODESY AND LAND MANAGEMENT"

CLIL-ПРОЄКТИ У ПІДГОТОВЦІ ФАХІВЦІВ СПЕЦІАЛЬНОСТІ «ГЕОДЕЗІЯ ТА ЗЕМЛЕУСТРІЙ»

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ABSTRACT

The article delves into the integration of Content and Language Integrated Learning (CLIL) into the professional training of students majoring in Geodesy and Land Management within the context of educational digitalisation and globalisation. CLIL is presented as a dynamic interdisciplinary strategy that seamlessly combines subject content, English-medium communication, and digital technologies through project-based and blended learning.

The purpose of the study is to design a CLIL model that unites the 4C framework (Content, Communication, Cognition, Culture)-a framework that emphasizes the integration of subject content, language, and culture, and the principle of "triple literacy" (linguistic, digital, and spatial)-a concept that promotes proficiency in three key areas of literacy, and incorporates visual-narrative practices into geodetic education.

The methodology is based on an analytical review of current CLIL/EMI and digital competence research (DigComp, DigCompEdu), a synthesis of European experience, and practical implementation of Geographic Information Systems (QGIS, ArcGIS, Sentinel Hub, StoryMaps, Google Earth Engine).

The paper outlines a series of CLIL project formats – Geo-visual Report, 3D Landscape Mapping, Virtual Field Trip, Data Storytelling, GeoPoster, and GeoPodcast–that foster students' professional English competence, analytical and visual thinking, intercultural communication, and academic mobility, offering promising benefits for geodetic education.

The novelty of the study lies in adapting European CLIL approaches to the Ukrainian technical context, integrating content, language, and technology into a unified educational system. The practical significance is reflected in the model's applicability for developing English-medium courses in technical universities, thereby enhancing the quality

of professional training and increasing the international attractiveness of Ukrainian geodetic education.

Key words: *CLIL, geodesy, land management, 4C, triple literacy, GIS, distance and blended learning, visual–narrative practices, digital competence.*

Introduction. Rapid digitalization and globalization of the contemporary educational landscape necessitate a shift from reproductive instructional models to competency-oriented approaches that integrate content, language, and technology. For the "Geodesy and Land Management" major, it is critically important to combine the mastery of professional knowledge with the development of English-medium communicative competence and digital literacy. The CLIL (Content and Language Integrated Learning) concept enables such integration through subject – language interaction within projects modelled on real or professionally proximate situations. In contrast, information and communication technologies (ICT) provide the infrastructure for interdisciplinary collaboration, data visualization, and distance interaction.

The aim of the article is to design and substantiate a CLIL-based project-learning model for the "Geodesy and Land Management" major that integrates ICT and visual-narrative practices, aligned with the 4C framework and the requirements of triple literacy (language, digital, spatial). The methodological foundation of the study relies on analytical interpretation of the referenced scholarship and the construction of a generalized CLIL model for geodetic training. The scholarly novelty lies in the transfer of proven European approaches to the Ukrainian educational context with due regard for the specificities of technical disciplines. The practical significance is that the proposed model can be embedded into curricula to create courses such as Environmental English, Geospatial Analysis in English, Digital Land Use Planning, or Cartographic Narratives, thereby supporting students' professional development and enhancing the international attractiveness of Ukrainian geodetic education.

The current educational paradigm is characterized by a transition from traditional knowledge acquisition to competency-oriented learning centred on students' ability to integrate knowledge, language, and technologies to address authentic professional tasks. In this context, CLIL has gained recognition as one of the most effective innovative strategies, consistent with the requirements of the European framework for digital competence and with approaches to the formation of interdisciplinary skills. This shift empowers students, giving them more control over their learning journey.

Within CLIL, the foreign language is not an end in itself but a means of cognition. In technical specialities–particularly geodesy and land management – this approach creates conditions for the formation of professional English-

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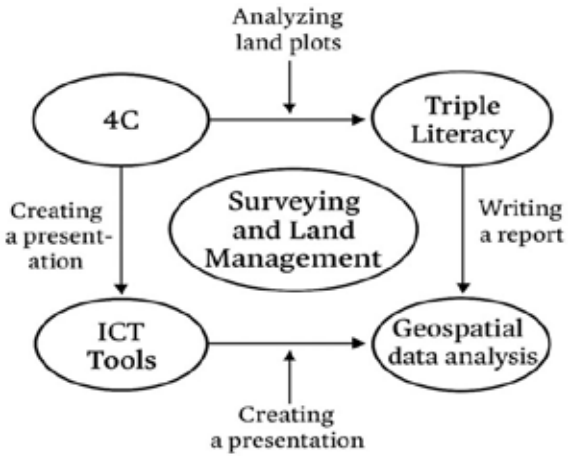

Fig. 1. A diagram of CLIL model for "Surveying and Land Management"

medium competence through authentic projects in which students work with maps, geodata repositories, and analytical reports in English. A generalized structure of interaction among the content, language, and technological components is presented in Fig. 1.

Figure 1. A CLIL model for training specialists in "Geodesy and Land Management," integrating the components of Content, Communication, Cognition, and Culture, triple literacy (language, digital, spatial), and ICT tools (QGIS, ArcGIS, StoryMaps, Sentinel Hub, Blender).

Digital technologies ensure flexibility of the learning process, the visualization of complex concepts, and support for collaborative modes of work. For prospective surveyors, this entails engaging with open geoportals, creating digital elevation models, and participating in international GIS projects in English [5].

CLIL is multidimensional – it encompasses cognitive, linguistic, communicative, and cultural domains. In technical disciplines, it fosters critical thinking and the skills of interdisciplinary integration. A key advantage of CLIL is its alignment with contemporary priorities – internationalization of learning and student academic mobility. Language becomes an instrument for international scientific collaboration and for the public communication of knowledge, fostering a sense of global educational community.

In contemporary educational discourse, interdisciplinarity is viewed as a key principle of curriculum renewal, integrating knowledge and fostering critical thinking. For technical and natural science majors – particularly

Geodesy and Land Management–this principle is of paramount importance, since the professional activity of future specialists inherently involves interaction with related fields such as ecology, urban studies, economics, social geography, spatial planning, and law. In this context, the CLIL (Content and Language Integrated Learning) methodology serves as an effective instrument for interdisciplinary integration, unifying content from different subjects through English as the language of science, technology, and international communication.

The integration of geography with digital technologies, sociology, cultural studies, and linguistics within a blended learning environment forms a flexible educational ecosystem in which students not only acquire knowledge but also create new knowledge at the intersection of disciplines. For geodesy students, this means integrating courses such as Environmental English, Cartography and Culture, or Digital Land Use Planning, in which professional content is delivered in English and accompanied by practical work with digital maps, analytical reports, and databases. This approach fosters a sense of achievement and growth, keeping students motivated and engaged.

Unlike traditional foreign language instruction, which focuses primarily on the acquisition of vocabulary, grammar, and formulaic communicative patterns, CLIL (Content and Language Integrated Learning) adopts the "4C" framework – Content, Communication, Cognition, and Culture – which ensures the simultaneous development of professional, linguistic, cognitive, and cultural competences. This model creates conditions in which a foreign language ceases to be the objective of learning and becomes a means of mastering professional content.

For students majoring in Geodesy and Land Management, this means that English is used for analyzing real spatial processes, solving applied problems, and modeling professional scenarios. They do not merely "learn words," but think, investigate, and communicate in English within the context of geodetic practice. During the module Urban Sprawl and Land Management, for instance, students analyze satellite imagery of cities (from Google Earth, Sentinel, or Copernicus), describe urbanization dynamics in English, and discuss sustainable development policies of different countries (What are the main challenges of suburban expansion in Kyiv compared to Warsaw?).

In Environmental Impact Assessment in English, they work with EU environmental reports, learning to identify key risks for land resources, formulate recommendations in English, and present their conclusions in a poster session format. In Geospatial Data and Mapping Technologies, students design mini-projects using open geodata (OpenStreetMap, Global Forest Watch), conduct comparative analyses of urban trends across regions, and summarize findings in English analytical reports (The rate of urban expansion in the Lviv region between 2010 and 2024).

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In Digital Land Use Planning, students engage in English-language role debates among “engineers,” “environmentalists,” and “community representatives,” where each team defends its approach to zoning using professional spatial planning terminology. Finally, in the Cartographic Narratives project, students create story maps (Esri ArcGIS, Mapbox) in English to describe historical or natural territories – for example, Mapping Flood Risks of the Styr River Basin or Cultural Landscapes of the Volyn Region.

Such CLIL projects exemplify the interdisciplinary nature of learning, where technical knowledge (cartographic, geodetic, environmental, informational) is combined with humanistic competencies–analytical thinking, communication, ethics, and intercultural awareness (see Table 1 for the correspondence between task formats, learning goals, assessment indicators, and tools).

In this context, a foreign language ceases to be an isolated discipline and becomes a meaningful tool of thinking–a medium for analysing, explaining, and presenting professional ideas. CLIL thus fosters the capacity for global knowledge integration and contributes to the formation of specialists equipped not only with technical skills but also with the ability to communicate effectively in a multilingual professional environment.

The blended learning model represents a pedagogical strategy that combines face-to-face and online activities within a unified learning environment. It ensures flexibility and personalisation of learning, enabling students to work at their own pace while receiving feedback through digital tools. Blended learning becomes a space of interdisciplinary interaction, where analytical methods of the natural sciences are integrated with the reflective practices of the social and human sciences [1].

Within the CLIL framework, this approach enables deeper immersion into the subject through language. For example, an instructor may organise a learning cycle consisting of three stages:

Online familiarisation with professional terminology through video lectures, interactive glossaries, and quizzes.

In-class practice, where students apply this knowledge while discussing cartographic case studies or modelling spatial scenarios.

A reflective online blog, where students formulate conclusions in English, publish maps, and interact with their peers.

Such modules create an authentic communicative environment in which the foreign language functions as a medium of collaboration rather than mere assessment. At the same time, digital tools – geoportals, remote sensing systems, and 3D visualisation – serve both as sources of learning material and as spaces for communication. In geodetic education, interdisciplinarity is realised through the integration of natural, engineering, and humanistic

approaches. CLIL allows these connections to be transformed into learning projects.

For instance, in the course Geospatial Analysis in English, students may:

– study the principles of geographic information systems (GIS) in English;

– analyse English-language geodatabases (e.g., OpenStreetMap, Copernicus);

– produce comparative analytical reports on EU spatial policies; and

– present results in interactive cartographic form.

This approach cultivates "triple literacy" – linguistic, digital, and spatial– responding to the challenges of modern engineering education. It also supports the development of intercultural communication: when discussing spatial issues, students learn to articulate arguments using professional English terminology and to collaborate in international online groups [9].

Blended CLIL models reduce psychological barriers to using a foreign language, since tasks are not abstract but have a specific professional purpose. The integration of ICT and communicative methods enables students to engage in learning that is both goal-oriented and collaborative [4].

Interdisciplinarity and blended learning form the organic foundation for implementing CLIL in geodetic education. They promote multidimensional student development – from English-language communicative competence to critical spatial thinking, digital literacy, and cultural reflection. Blended CLIL learning, grounded in digital tools, transforms the traditional educational process into an interactive environment where language, technology, and real professional experience converge [7].

In this way, CLIL projects evolve from mere educational tasks into models of future professional practice, where the student acts as an active participant in knowledge creation – a researcher, communicator, and spatial analyst.

The professional training of future geodesists and land surveyors increasingly requires not only technical but also communicative and analytical competence – the ability to present spatial research results clearly and persuasively. Consequently, visual – narrative practices have become an essential component of the CLIL approach, integrating content learning with language skill development. Within such practices, visual imagery, text, and language interact to create an integrated learning space in which students acquire not only professional terminology but also the ability to interpret, describe, and communicate complex spatial processes in English.

Visual media and social platforms are shaping a new methodology of spatial inquiry, empowering participants not only to observe their environment but also to interpret and represent it actively. This shift in educational perspective means that the student is no longer a passive consumer of

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information, but a co-author of academic content–a creator of texts, images, videos, and maps that reflect a personal perspective on geographic or urban space [3].

Within CLIL courses, this transformation turns language learning into content creation. The instructor may organise learning around the principle of "learn by creating", emphasising project-based tasks such as producing English-language video reports from field studies, maintaining blogs on land-use dynamics, or designing infographic story maps. Such tasks develop not only linguistic proficiency but also visual thinking – the ability to perceive spatial structures, identify relationships between objects, and present results both visually and textually.

Visual methods – maps, photographs, videos, diagrams, and 3D models – possess exceptional potential in CLIL education, as they combine linguistic and cognitive dimensions. The visual image in geography is not merely illustrative but serves as a knowledge structure through which individuals comprehend natural phenomena. This perspective aligns with the principles of CLIL, which emphasise deep cognitive engagement through cross-linguistic activity: the student does not simply read or listen, but creates a visual text that requires analysis, interpretation, and English-language commentary [8].

For geodesy students, the implementation of CLIL projects can take place through a variety of educational formats that integrate professional content with English-language activity. Among these are the creation of multimedia English-language reports (Geo-visual Reports) that combine maps, charts, graphs, and concise explanations of spatial transformations (e.g., Analysis of Land-Use Transformation in the Rivne Region, 2010–2024), providing students with a sense of accomplishment and confidence in their skills.

Another valuable format involves constructing digital terrain models in QGIS, SketchUp, or ArcGIS Pro, followed by English-language presentations of the results and explanations of the modelling techniques (3D Landscape Mapping).

An equally effective format is Field Video Reflection – short fieldwork videos in which students describe in English the measurement methods, equipment used, and observation conditions (e.g., Topographic Survey Using GNSS and Drone Photogrammetry).

The interactive Cartographic Narratives format invites students to create "map-based stories" using Esri ArcGIS StoryMaps or Mapbox, combining geodata, photographs, English-language text blocks, and research conclusions. Another engaging format is the GeoPoster Session, in which students prepare and defend English-language scientific posters based on their field or laboratory research–similar to the practices of the International Geography Olympiad or European Geospatial Week.

In the Remote Sensing Lab Discussion format, students collaboratively analyse satellite imagery (Sentinel, Landsat) and discuss in English topics such as anthropogenic landscape changes, land degradation, and erosion processes. This format fosters a sense of community and engagement among students, as they work together to understand and interpret complex spatial data.

Another example is the Infographic Challenge, where students design infographics in English to explain complex natural phenomena, such as How Groundwater Pollution Spreads in Karst Landscapes or Urban Heat Islands Visualised via NDVI Analysis.

The Virtual Field Trip (VFT) format involves online excursions with English-language commentary on distant geographical sites (e.g., Exploring Tectonic Landscapes of Iceland), during which students prepare English-language guides or audio tours.

In the Data Storytelling Workshop, learners develop analytical "data-stories" by working with open geospatial datasets (OpenStreetMap, Copernicus, NASA EarthData) and formulating English-language conclusions about spatial trends (e.g., Changes in Agricultural Land Use Due to Climate Shifts).

The sequence culminates with the GeoPodcast Project – short English-language podcasts in which students discuss issues of sustainable land use, digital cartography, or environmental monitoring from the perspective of future specialists.

All of these formats integrate technological, cognitive, and communicative activity, fostering visual thinking, analytical reasoning, and professional English competence, while transforming the learning process into a space of genuine interdisciplinary interaction.

The application of visual-narrative practices in CLIL education fosters two interrelated competences: visual literacy and narrative literacy. The former involves the ability to "read" maps, photographs, and diagrams – interpreting images as carriers of information – while the latter entails structuring information into coherent, sequential, and linguistically articulated stories.

From a practical standpoint, this contributes to the development of:

– skills for structured presentation of geodetic measurement results;

– abilities for comparing spatial data and formulating analytical conclusions;

– proficiency in describing technical processes and visual materials in English.

As a result, students acquire integrated literacy – the ability to think visually, argue linguistically, and act technologically. This integrated literacy is a key outcome of CLIL integration in geodesy education, as it equips students with a comprehensive set of skills necessary for success in the field.

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Visual-narrative practices also possess significant sociocultural potential. Social media has become a sphere of intercultural interaction where visual content enables “speaking about space in the universal language of images.” Within CLIL courses, this allows students not only to improve their English proficiency but also to enhance intercultural sensitivity, which is particularly vital in professions linked to international standards of cartography, land management, and environmental governance [3].

An example of such activity is the collaborative project “Mapping Cultural Heritage Sites.” Students conduct field photography of historical or natural landmarks, create 3D models, describe them in English, and publish the results in a shared virtual atlas. Thus, a geodetic task (measurement and mapping) merges with cultural interpretation. At the same time, English serves not only as a descriptive tool but also as a channel of international communication of knowledge about Ukraine.

The integration of visual-narrative practices into CLIL courses produces a range of pedagogical effects that reinforce both cognitive and motivational aspects of learning. These effects include [specific effects] that enhance the learning experience and improve learning outcomes.

– Motivational effect: students engage in the creative production of learning artefacts with tangible practical value – multimedia presentations, videos, maps, or analytical reports.

– Cognitive effect: the combination of analytical and emotional modes of perception deepens comprehension and establishes durable associations between knowledge and visual imagery.

– Communicative effect: students demonstrate increased ability to express ideas clearly and logically in professional English contexts, presenting research results and participating in expert discussions.

– Cultural effect: learners develop an understanding of geographical space as a bearer of history, culture, and identity, fostering intercultural awareness and an appreciation of their national heritage within a global framework. This cultural effect is a significant outcome of the CLIL approach in geodesy education, as it prepares students to work in diverse international settings.

The combination of blended learning and visual methods “creates conditions for transforming the student from a passive listener into a creator of knowledge who operates within a multilingual and interdisciplinary environment”. Thus, visual-narrative practices within CLIL-based geodesy training establish a holistic learning model in which language, technology, and culture function in an interconnected manner. Students not only master English terminology but also develop the ability to perceive space through a cultural lens, presenting research results in a visually engaging and academically sound manner [1].

The CLIL approach has the power to transform visualisation into a tool of thinking and the narrative into a means of shaping professional identity. Visual-narrative forms of communication serve as a bridge between the natural and humanistic dimensions of geography, paving the way toward a new educational paradigm–geo-education through culture and language. The implementation of the CLIL approach in the "Geodesy and Land Management" curriculum exerts a comprehensive impact on the quality of professional preparation. The integration of foreign-language instruction, digital technologies, interdisciplinary links, and visual-narrative methods contributes not only to enhancing students' linguistic competence but also to fostering a new educational culture oriented toward knowledge integration, learner autonomy, and international collaboration [6].

One of the most notable outcomes of CLIL implementation is the growth of students' cognitive activity, reflected in their ability to analyse information, compare concepts, and use a foreign language as a tool for reasoning rather than merely for communication. For geodesy students, this translates into the ability to process English-language maps, geodata repositories, and international regulatory documents, and to employ English in a professionally meaningful context.

An early and tangible result is an increase in students' communicative competence in foreign languages. Participants in CLIL projects demonstrate significantly improved mastery of professional terminology, more coherent oral presentations, and more structured written reports. The CLIL methodology encourages the development of interactive language use, where communication takes place in authentic professional contexts–such as discussions of measurement results, analysis of cartographic data, or preparation of technical proposals – in English.

Using language as a medium of scientific communication enhances students' confidence in their expertise and promotes academic mobility. They gain experience participating in international seminars, conferences, and online projects–an essential step toward integrating Ukrainian universities into the European Higher Education Area.

A crucial component of the CLIL approach is integrating language learning with digital tools. The effectiveness of distance and blended learning in geographic education depends mainly on the level of digital competence of both teachers and students. Within CLIL, this means that learners do not merely consume information but use technology to create their own educational products – interactive maps, multimedia presentations, video reports, and spatial models.

As a result, students develop a new type of digital literacy that combines technological, linguistic, and analytical skills. This includes the ability to:

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– operate geographic information systems (GIS) in English, using professional terminology and interfaces of contemporary software platforms;

– visualise spatial data in 2D and 3D formats, creating digital maps, terrain models, and dynamic landscape presentations;

– interpret visual information and formulate English-language commentary on geospatial research outcomes.

Such integrated digital–linguistic training strengthens students' capacity to work in international environments, present data in English, and engage in global professional and research projects.

The fusion of geographic education with blended and interdisciplinary approaches opens new horizons of knowledge – from the natural to the social, from the local to the global perspective. In the CLIL context, this manifests in students' ability to examine professional issues comprehensively–not only from a technical standpoint but also through ecological, economic, and cultural lenses [1].

For example, in the Sustainable Land Use in English project, students analyse satellite imagery to track landscape changes, calculate urbanisation indices, and simultaneously discuss in English the social consequences of anthropogenic impacts. This format promotes interdisciplinary thinking and critical data analysis. In this way, CLIL functions not merely as a language-teaching method but as a pedagogical platform for integrating natural, engineering, and humanistic knowledge, bringing the educational process closer to the demands of the modern labour market, which values professionals capable of effective communication across multicultural and cross-sectoral contexts.

Another significant direction of CLIL's effectiveness lies in the development of visual-narrative skills that combine scientific reasoning with an aesthetic and cultural perception of space. Visual methodologies and social media open new opportunities for "shared perception of space through images, stories, and communication". Within CLIL courses, this is realised through multimedia tasks such as creating story maps, maintaining field video diaries, and developing digital atlases with English-language commentary. This approach cultivates students' ability to communicate complex scientific data in an accessible, visually compelling way, aligning with the principles of open science and the popularisation of geospatial research [3].

An essential consequence of CLIL implementation is the growth of social responsibility, cultural sensitivity, and academic integrity among students. Through projects focusing on natural and urbanised environments, they gain awareness of the global nature of ecological challenges and the critical role of geodesy in addressing them. Moreover, in the process of English-mediated teamwork, students develop soft skills–collaboration, reasoned debate, synthesis of conclusions, and professional presentation of results.

The strategic importance of implementing the CLIL approach in the system of geodesy education is paramount, as it encompasses several strategic directions that define the trajectory of modern engineering education.

Foremost among these is the enhancement of educational quality through the integration of linguistic, content-based, and technological components, which ensures the integrity of the learning process, aligns it with European academic standards, and provides a robust foundation for students' future careers.

Another vital direction is the establishment of international academic partnerships through student and instructor participation in joint inter-university projects, seminars, and digital platforms. This fosters an open, globally connected learning environment, opening new horizons for students and instructors alike.

The implementation of CLIL also contributes to students' scientific potential, particularly through the preparation of English-language publications and conference presentations, as well as participation in grant programs and international research competitions. This experience develops academic mobility and research autonomy.

One of the key outcomes of this approach is the formation of a European-level specialist – a professional who speaks English as a professional language, can present research results within the global knowledge space, and can collaborate effectively across multicultural and interdisciplinary contexts.

Moreover, CLIL produces a positive institutional effect, strengthening the university's image as a modern academic hub that integrates international teaching standards, advances academic multilingualism, and positions itself as an active participant in the European Higher Education Area.

For future geodesists and land managers, the CLIL approach ensures the development of professional English-language competence through authentic projects, engagement with cartographic databases and geographic information systems, and visual-narrative tasks. The combination of content and language learning fosters a shift from passive knowledge acquisition to active knowledge creation, while digital tools provide an environment conducive to collaboration, creativity, and research.

Empirical results of CLIL implementation confirm significant improvements in students' communicative, digital, and cultural literacy, as well as their autonomy and readiness for international engagement. CLIL projects stimulate visual-analytical thinking and enhance the ability to describe and interpret spatial processes in English – skills indispensable to contemporary professional activity in geodesy.

In conclusion, CLIL serves not merely as a methodology of language teaching but as a comprehensive pedagogical platform that unites science,

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technology, and culture. It shapes a new type of specialist–a geodesist-communicator, capable of operating in a global scientific environment, presenting professional outcomes in English, and contributing to international research and educational initiatives.

Such an approach fully aligns with the strategic objectives of modernising Ukrainian higher education and promotes the integration of the national geodetic school into the European educational space.

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АНОТАЦІЯ

Стаття висвітлює інтеграцію підходу CLIL (Content and Language Integrated Learning) у професійну підготовку здобувачів спеціальності «Геодезія та землеустрій» в умовах цифровізації та глобалізації освіти. CLIL розглядається як міждисциплінарна стратегія, що поєднує фаховий зміст, англомовну комунікацію та використання цифрових технологій у форматі проєктного і змішаного навчання. Метою дослідження є розроблення CLIL-моделі навчання, що поєднує методологію 4C (Content, Communication, Cognition, Culture) з принципом «потрійної грамотності» (мовної, цифрової, просторової) та впроваджує візуально-наративні практики у геодезичну освіту.

Методологічну основу становлять аналітичний огляд сучасних досліджень CLIL/EMI та цифрової компетентності (DigComp, DigCompEdu), узагальнення європейського досвіду і синтез практик використання геоінформаційних систем (QGIS, ArcGIS, Sentinel Hub, StoryMaps, Google Earth Engine).

У статті описано низку навчальних форматів (Geo-visual Report, 3D Landscape Mapping, Virtual Field Trip, Data Storytelling, GeoPoster, GeoPodcast), які формують у студентів професійну англомовну компетентність, аналітичне та візуальне мислення, навички міжкультурної взаємодії та академічної мобільності.

Наукова новизна полягає в адаптації європейських підходів CLIL до українського технічного контексту, що сприяє інтеграції змістовного, мовного та технологічного компонентів у єдину освітню систему. Практична цінність визначається можливістю упровадження моделі у навчальні плани технічних університетів для підвищення якості підготовки фахівців і розвитку міжнародної привабливості геодезичної освіти України.

Ключові слова: *CLIL, геодезія, землеустрій, 4C, triple literacy, GIS, дистанційне та змішане навчання, візуально-наративні практики, цифрова компетентність.*

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