



Content and Language Integrated Learning in English

Sadikova Shahlo Jalolovna

Teacher at the department integrated course of teaching english 2 The English language is the second faculty Uzbek state university of world languages

***Abstract:** Content and Language Integrated Learning (CLIL) is an approach where students learn a subject and a second language at the same time. A science course, for example, can be taught to students in English and they will not only learn about science, but they will also gain relevant vocabulary and language skills.*

***Keywords:** Content and Language Integrated Learning, learn a language, extra dimension.*

Content and Language Integrated Learning (CLIL) is an approach where students learn a subject and a second language at the same time. A science course, for example, can be taught to students in English and they will not only learn about science, but they will also gain relevant vocabulary and language skills.

Many teachers see CLIL as a more natural way to learn a language; when a subject is taught in that language there is a concrete reason to learn both at the same time. And as students have a real context to learn the language in, they are often more motivated to do so, as they can only get the most of the content if they understand the language around it.

Content and Language Integrated Learning (CLIL) plays an increasingly important role in language education, both as a feature of foreign language teaching and learning, and as an element of bilingual and plurilingual education. As learners develop their language competences, they are able to deal with evermore complex topics, so teaching material needs to offer learners interesting and challenging subject matter. One way to do this is through CLIL where language and subject teachers work together; language teachers acquire subject knowledge and subject teachers acquire expertise in combining language development with teaching the content effectively. Recent developments in CLIL have focused more specifically on academic literacies as well as on the use of CLIL approaches in the teaching of the language of schooling/majority language. At present, CLIL-type approaches are frequently becoming adopted in European higher education in the fields of law, business, economics, engineering, medicine and humanities. Predominantly they appear at MA level, often as degree programmes which are either fully delivered in a foreign/target language (most frequently English) or contain extensive modules delivered in the target language. At BA and postgraduate levels, students may take 'content' modules or individual lectures in a foreign language. Language support is delivered both as direct contact teaching and using blended approaches with e-learning methodology / distance-learning. The number and distribution of hours, as well as the European Credit Transfer System (ECTS) credits allocated differ with each higher education institution and the CLIL variety adopted. Language for specific purposes (LSP) / language for academic purposes (LAP) practices are more common than fully integrated approaches. The 'content' courses are usually taught by either a native or non-native speaker of the target language, and collaboration between the 'content' teacher and the language teacher is quite rare. Some institutions have developed CLIL practices whereby specific LSP/LAP courses are offered as pre-sessional modules to students before they enrol in their subject studies. Closer content and language integration, with the language support coinciding with what is required in



the subject studies is also practised successfully. These models involve full collaboration between language specialists and subject specialists, either in the form of joint planning or team teaching.

Moreover, being content focused; CLIL classes add an extra dimension to the class and engage students, which is especially advantageous in situations where students are unenthusiastic about learning a language.

Content and language integrated learning (CLIL)

Definition

Content and language integrated learning (CLIL) was originally defined as a pedagogical approach with a dual focus, involving the integration of (second/foreign/target) language study with the study of a subject domain instructed in that language. However, there are many other definitions and terms, with over 40 in use in Europe alone (see e.g. www.clilcompendium.com), all referring to some kind of an approach where both content learning and language learning are being promoted. Nevertheless, because CLIL has become a relatively established term in European primary and secondary education, and also suggested for higher education (HE), the term will be used here as an umbrella term for all those HE approaches in which some form of specific and academic language support is offered to students in order to facilitate their learning of the content through that language. These approaches vary on a continuum of discipline-specific and pre-content support to full integration of language and content.

CLIL in the European Higher Education Area

At present, CLIL-type approaches are frequently becoming adopted in European higher education in the fields of law, business, economics, engineering, medicine and humanities. Predominantly they appear at MA level, often as degree programmes which are either fully delivered in a foreign/target language (most frequently English) or contain extensive modules delivered in the target language. At BA and postgraduate levels, students may take ‘content’ modules or individual lectures in a foreign language. Language support is delivered both as direct contact teaching and using blended approaches with e-learning methodology / distance-learning. The number and distribution of hours, as well as the European Credit Transfer System (ECTS) credits allocated differ with each higher education institution and the CLIL variety adopted. Language for specific purposes (LSP) / language for academic purposes (LAP) practices are more common than fully integrated approaches. The ‘content’ courses are usually taught by either a native or non-native speaker of the target language, and collaboration between the ‘content’ teacher and the language teacher is quite rare. Some institutions have developed CLIL practices whereby specific LSP/LAP courses are offered as pre-sessional modules to students before they enrol in their subject studies. Closer content and language integration, with the language support coinciding with what is required in the subject studies is also practised successfully. These models involve full collaboration between language specialists and subject specialists, either in the form of joint planning or team teaching.

Knowledge, understanding and skills (competences)

- Having completed a higher education programme (first or second cycle) in a CLIL context, students should have acquired:
- multilingual competence in the field-specific and professional domain to include knowledge and understanding of how information is managed, conceptualised, and communicated in the target languages/L2s in the field-specific academic and professional domain and the role of research in contributing to the body of knowledge in the field



- understanding of the national and international dimension of the professions in the field, including cultural differences and their own cultural, academic and professional presuppositions and representations, not least how these are manifested in the target languages/L2s
- knowledge and understanding of how multilingual and multicultural professional teams, networks and communities operate in both face-to-face and virtual contexts and which interpersonal and intercultural skills, linguistic and non-linguistic, are required
- awareness, knowledge and understanding of communication conventions in the field and profession in the target languages/L2s, e.g. genre, discourse and register conventions, as well as sensitivity to appropriate language use in academic, professional and social contexts
- understanding of the importance of continuously developing one's own professional expertise through multilingual and multicultural sources and experiences, including ICT-enhanced environments

Students who have acquired such knowledge and understanding will be expected to demonstrate the capacity for:

1. receptive and productive skills necessary to access, process and critically evaluate information in the field of study, to share information, and to identify, analyse and solve problems in multiprofessional settings of the field
2. mediation between languages and cultures in social and in professional settings, including effective translanguaging (code-switching, intercomprehension strategies, mediation), intercultural awareness and negotiation of meaning needed in domain-specific professional multilingual and multicultural environments (multiliteracy)
3. professional and interpersonal communication in the target languages/L2s in order to function and interact in specific and interdisciplinary contexts, teams, networks and communities, as well as in social contexts
4. using oral and written communication in target languages/L2s appropriately in the specific academic field and in professional and social contexts, including communicating their expertise to different audiences
5. awareness and ability to apply appropriate metacognitive skills and strategies needed for self-directed and integrated content and language learning on a lifelong basis

CLIL also promotes a deeper level of assimilation – as students are repeatedly exposed to similar language and language functions and they need to produce and recall information in their second language. As CLIL requires new kinds of collaboration between subject specialists and language specialists it is important to acknowledge that new kinds of pedagogical practices are also required and that interdisciplinary meanings have to be negotiated for the role of language in knowledge construction and sharing. In principle, the language learning outcomes in CLIL are considered from a functional and communicative viewpoint, which is in line with the descriptors of the Common European Framework of Reference for Languages (CEF). This implies interactive pedagogical approaches and carefully designed learning tasks, as well as institutional support systems for both students and teachers.

Sometimes this type of instruction (unless properly planned out) instead of fulfilling its aims will only put pressure on both students and staff and will result in dissatisfaction and ultimately, unfulfilled aims. Varieties of CLIL are currently being delivered both as direct contact hours and using blended approaches with e-learning methodology/distance-learning. The different



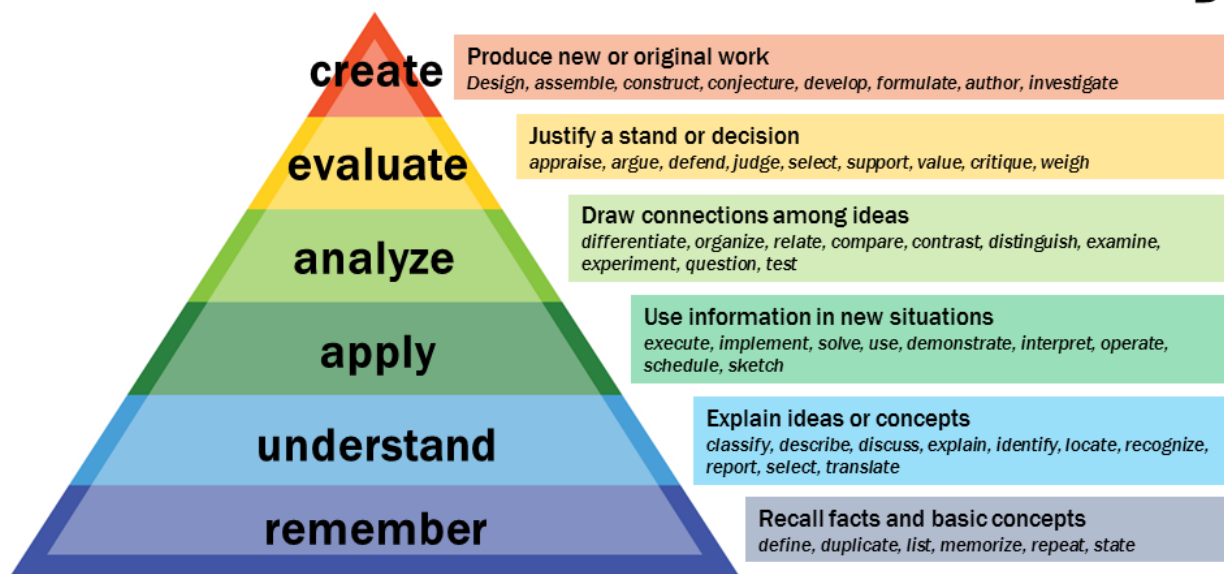
pedagogical approaches to CLIL are outlined in the table below. Partial CLIL may rely on a native or non native speaker of the L2 to deliver content based courses.

The focus is usually not on language enhancement and there may be little awareness that a number of communication problems could be avoided if language were properly considered. Language support may also be offered to students before they enrol in the subject courses or there may be distinct language for specific purposes/language for academic purposes courses that are coordinated with the subject specialist. However learning outcomes are mainly assessed separately and a clear distinction is made between language mastery and subject mastery. The more integrated approaches, namely adjunct CLIL and dual focus CLIL then involve (full) coordination between language specialists and subject specialists, either in the form of joint planning or team teaching. Learning outcomes and criteria are specified for both language and content. There might also be a distribution of credits (ECTS or other types) in assessment.

Furthermore, it has the advantage that multiple subjects can be taught in English, so that students' exposure to the language is increased, meaning their language acquisition is faster.

Literature:

Bloom's Taxonomy



Vanderbilt University Center for Teaching

The multiplicity of terms used to refer to instructional approaches for the integration of content and language learning (immersion, CBI, CBLT, CLIL, EMI) can be a source of confusion in EIL studies, although they all commonly share the purpose of additive bilingualism via a dual focus on content and language learning. Debate continues about the extent to which immersion, CBLT, CBI, and CLIL are different, similar, or the same. Some argue that CLIL represents an appropriate umbrella term that can be used to house various approaches towards content integration (e.g., immersion is a type of CLIL), where terms can be used interchangeably (e.g., CLIL and CBI are the same concept with a different name) (Cenoz et al., 2014).[9] However, others argue that CLIL and CBI represent very different concepts, where CLIL represents the intersection between content and language from the content perspective (i.e., CLIL happens in content classes), while CBI is an attempt at responding to the content needs of learners in language classes (Dalton-Puffer et al., 2014).[10]



The similarities (and variability) between approaches lead to circular arguments about whether the key features of one approach are also shared by others (e.g., immersion and CLIL), and therefore they are indistinguishable. In some ways, this is an inevitable result of terms being used outside of academia, by educators applying ideas from one context to another,[10] and the lines of demarcation become more unclear as approaches are transported to different countries and contextualized to meet different learning situations.[2]

In EIL studies, different terms have been associated with different regions, such as CLIL, which is associated with Europe, and was “purposefully coined” by European educators and researchers attempting to influence language policy and ideology (Dalton-Puffer et al., 2014:214).[10] CLIL represented a deliberate attempt to develop a European model for additive bilingual education.[9] However, policy makers, educators, and researchers from international contexts have started to apply and develop CLIL approaches in distinctly non-European situations, and the term is now widely used within the wider international foreign language learning community.

With the expansion of the European Union, diversity of language and the need for communication are seen as central issues.

- Even with English as the main language, other languages are unlikely to disappear. Some countries have strong views regarding the use of other languages within their borders.
- With increased contact between countries, there will be an increase in the need for communicative skills in a second or third language.
- Languages will play a key role in curricula across Europe. Attention needs to be given to the training of teachers and the development of frameworks and methods which will improve the quality of language education
- The European Commission has been looking into the state of bilingualism and language education since the 1990s, and has a clear vision of a multilingual Europe in which people can function in two or three languages.

CLIL is an innovative approach in which content and language are integrated with the goal to provide more exposure to the foreign language and to enrich the areas of language use thus enhancing language learning through the content of various school subjects (Goris, Denessen &Verhoeven, 2019). David Marsh, a university professor mainly focused on multilingualism and bilingual education, was the first to use the term CLIL (Hanesová, 2015) and according to Mehisto, Marsh and Frigols, “CLIL is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language”. (2008). In this approach lessons for subjects like chemistry, history or geography are redesigned and taught in the language target leading to a better acquisition of the target language (Graddol, 2006). The Akkadians first used an approach with a similar notion 5000 years ago when they conquered the Sumerians and used the Sumerian language as the language of instruction (Hanesová 2015). This way they acquired the Sumerian language faster and more effectively becoming able to communicate with the Sumerians in a more effective way (Hanesova, 2015). LAC (Language Across Curriculum) was an idea that preceded CLIL, possibly the predecessor of CLIL, and was implemented by a group of teachers that wanted to get better results out of language teaching than the results they got using traditional teaching approaches. LAC was used on the teaching of all students even those who only had lessons in their native language and it was planned to be implemented during long periods of time (Lin, 2016). In the 1960’s Canada was the first country to apply immersion programs, using the L2 as the language for instruction in face of the need for bilingual citizens proficient in both English and French (Naves, 2009). This programs started from very young ages, applied at kindergarten levels and aimed not only to provide children with proficiency in French language but also at educating them about the French culture to help them



develop appreciation and understanding of the French culture (Hanesová, 2015). These immersion programmes soon spread to Europe and the US after their benefits were known (Hanesova, 2015). Today CLIL is considered as a beneficial way to teach both language and content and has come to be widely used in many European countries, for students of a wide age range up to working individuals. Such methods which enhance multilingualism are mostly needed in circumstances of contact between people of different linguistic backgrounds involving two or more different languages like border areas, trading areas and other places where language diversity is present, places where people need to be proficient in more than one language in order for communication to be possible. The goal of educating trilingual individuals in the modern day globalized societies has also led to the incorporation of more than one foreign language in teaching (Marsh, 2002). Even if CLIL as an idea is quite old it has been gaining more popularity and attention from European policy makers as well as researchers in recent years due to the need of integration of individual societies into the multicultural environments of today.

The European Union has received CLIL as an approach that would benefit the Union's goal on educating multilingual citizens and enhancing communication among them. CLIL has been supported and promoted as a means to accommodate the need for plurilinguals through the 1995 resolutions of the Council which stressed the need to improve language learning through new methods and various ways through the education systems in the European Union (The 1995 Resolution of the Council). Teaching in two languages was considered an important tool which needed to be implemented in order to promote and facilitate language learning not only for young learners but also people working in technical or other areas (The 1995 Resolution of the Council). The document also emphasized the need for training teachers in order for them to be able to apply teaching in a foreign language and offer motivation and support to those willing to enforce this technique in their teaching thus promoting foreign language learning (The 1995 Resolution of the Council). In a globalized market and in a European Union where 23 different languages are spoken, where the market is globalized and where employers require people able to communicate in more languages than just their own and work with people of a variety of cultural backgrounds the need for plurilinguals is obvious and leads to the need of methods that will work toward that goal, by bringing people in contact with other languages and other cultures from early age and through a life time of education (Puffer, 2011). CLIL was viewed as a valuable tool that would promote Europe's multilingualism goals while at the same time educating learners about world cultures, history and science (Vez, 2009). European Union's policies targeted the promotion of CLIL throughout the Union as an approach that would benefit its citizens in various aspects and provide them with more opportunities (Vez, 2009). Public awareness about the benefits of CLIL was of importance so that people would see how students' progress would now be associated with their advancement in the European society, their professional careers as well as their increased mobility and opportunities as citizens of the European Union (Vez, 2009). The European Union set out to promote CLIL and develop it further as to be applicable in a number of countries with desired results (Vez, 2009). What's more, Europe recognized the need for teachers who would be ready and able to implement CLIL and realized the need to educate them for this purpose (Vez, 2009). Among European Union's considerations was the need for evaluation of the effectiveness of CLIL regarding educational levels, target language and also its proper enforcement thus acknowledging the need for data and evidence gathering (Vez, 2009). Europe has not stopped promoting CLIL as an innovative way of language learning. The 2003 Action Plan of the European Commission (European Commission, 2003) includes CLIL as an approach that works towards improving the quality of language teaching. European initiatives promoting CLIL include the European Label for innovative projects in language teaching and learning and the Leonardo and Socrates programmes (European Commission, 2003). EU has been funding a variety of projects that include foreign language learning like Europe 25, a newspaper about European



matters written entirely using foreign languages, teaching drama in a foreign language, language learning through film education, and learning about the environment in a foreign language. (European Commission, 2003).

As an approach CLIL can vary in terms of target group, learner's age and timeframes and these variations mostly depend on the environment in which the target language is to be taught. CLIL can be specifically designed and applied in not only the education of young learners but learners of all ages and it can be enforced with a range from a few hours to a large percentage of the teaching module (Coyle, 2006). The implementation of the approach is not fixed but sustained of a wide variety of subjects and ways of teaching them (Coyle, 2006). Although the European Union has been promoting CLIL, it hasn't provided a rigid frame for its implementation and each country is responsible of an efficient planning and an effective execution (Zarobe, 2013). It has been found that among socially and culturally different contexts, the CLIL approach changes according to parameters like people's views about the target language and the target language's prestige in those contexts (Zarobe, 2013). In the design of a CLIL model and to assure that the certain model will be effective, all factors that affect quality CLIL implementation must be taken into account to ensure the desirable outcome (McDougald, 2015). As Coyle states in his "Planning tools for Teachers", no standard model for CLIL exists, but several variations which are always based on content and language integration. The model adapted varies according to the teaching goals and the learning focus of every circumstance (Coyle, 2005). However, Coyle provides a framework sustained of four principles – the four Cs – that can be used as guidelines for planning CLIL curriculum (Coyle, 2005). These guidelines refer to content in offering students' knowledge and academic advancement on a topic, communication in order for interactive learning and use of the target language towards this learning, cognition in provoking thought and developing students understanding and critical thinking and culture to promote multicultural understanding and collaboration as well as the need for multilingualism (Coyle, 2005).

One type of implementing CLIL is the teaching of a specific topic in the target language, which leads to the acquisition of knowledge on the certain topic while at the same time improving target language skills, for example teaching history in the target language of Spanish (Coyle, 2005). The modular model adapted in schools involves the teaching of a subject, previously taught in L1, in the target language for one to two hours a week which is the time allocated to the teaching of the certain subject on the weekly schedule. This model requires either close subject-teacher and language-teacher collaboration or a single teacher qualified on the subject and able to teach in the target language (Coyle, 2005). The soft model of CLIL refers to a language led lesson incorporated in the weekly schedule for one hour a week while in hard CLIL language is the means to teach content and not the lesson's focus (Ball, 2018) Another type of CLIL implementation involves projects on a wide variety of topics, like for example technological progress and its affect on the environment, carried out in the target language again with the collaboration of language and subject teachers (Coyle, 2005). CLIL can also have a more cultural character, being implemented in the examination and the comparison of various cultures in a language focused way providing this way learner's with both cultural and language learning (Coyle, 2005). In a similar way CLIL can be implemented in the examination of a subject/issue in the target language analyzing it in a wider perspective through all its themes and applications and for various cultures and languages of the world (Coyle, 2005). A similar division is made by Marsh and Hartiala who distinguish between CLIL types according to each one's main focus and targets (2001). In their attempt to outline common CLIL types they present five dimensions each with a distinct focus and targeted toward different skills. CLIL acquires a cultural dimension when the aim is the development of intercultural knowledge and understanding (Marsh and Hartiala 2001). The environment dimension mainly focuses on cultivating integration and international skills while the language dimension focuses on the improvement of language skills, the need for



plurilingualism and oral skills for communicational purposes (Marsh and Hartiala, 2001). The content dimension is about content and terminology learning through the medium of L2 and preparation for further study while the learning dimension complements students' individual learning style and increases learners' motivation (Marsh and Hartiala, 2001).

CLIL was accepted as a way that would provide a more interesting, innovating way of learning through association of language to various topics, in a more natural context and with various benefits for the learners including the enhancement of both language and cognitive skills, but also the benefits of cultural awareness and development, societal integration and awareness on current and global issues depending on the aims and objectives of each implementation project. As a method CLIL is a rather communicational focused one targeting the needs of the multicultural environments of today's societies since it enhances acquisition rates and improves communication (Naves, 2009). CLIL provides a more natural way to learn language, placing it in a thematic context and allows learners to use it extensively in that context, promoting content learning and raising students' motivation while enhancing both their linguistic as well as their academic skills (Griva & Chostelidou, 2017)

CLIL students benefit from exposure to language in various topics and acquisition of related language as well as the enhancement of their skills in using language while at the same time practice and develop critical thinking and expanding their thought on various aspects (Griva & Kasvikis, 2014). Research shows that the more time spent in contact with the foreign language, the more the students learn and are able to use the language in a variety of situations with different requirements leading to a more advanced linguistic competence (Coyle, 2006). Content acquisition is also favored in that CLIL students achieve better results in subjects like Mathematics and Science than when the subject is taught in L1 due to teachers more aware of the challenges in students' understanding (Jäppinen, 2005). Merino's and Lasagabaster's research showed that CLIL learners perform better in L2 than non CLIL students especially regarding speaking and writing skills while their advancement in L1 is not affected and at the same time students also develop a more positive attitude towards the learned languages and the idea of multilingualism (2018). Research has proved that subjects like math can be better understood when taught in a foreign language due to the teacher's effort to better explain concepts when using a foreign language to do so (Marsh, Maljers & Hartiala, 2001). CLIL also reinforces content learning through group work which is also vital for developing the ability to learn, to take initiatives and to build confidence, things not achieved when using traditional language teaching techniques (Marsh, Maljers & Hartiala, 2001). As a technique CLIL is also new to teachers who are now in a position of preparing for implementing it. This also provides teachers with the opportunity to enhance their own development, try new things and discover new more creative ways to teach language which benefit students even more (Coyle, 2006). Through CLIL the target of teaching content is acquired while at the same time there are significant parallel benefits for the students like the advancement of their communication abilities using the foreign language, their cultural awareness and understanding for a variety of cultures other than their own while at the same time they become increasingly motivated and more engaged in the learning process.

References

1. British Council BBC Teaching English
2. Thompson & McKinley (February 2018). "Integration of content and language learning" (PDF). TESOL Encyclopedia of English Language Teaching. 1. Retrieved 10 January 2018.
3. "What is CLIL?". Onestopenglish. Retrieved 14 September 2016.
4. Amanova Nodirabegim Furkatovna. (2022). Effective method of teaching. conference zone, 53–55. retrieved from <http://www.conferencezone.org/index.php/cz/article/view/124>



5. Amanova N.F Amanova F.F (2022) Malum bir maqsadga qaratilgan va maxsuslashgan til. <https://conf.iscience.uz/index.php/yumti/article/view/118/110>
6. Shakhnoza, A. . (2022). Legal Basis of the Environmental Impact Assessment System. Journal of Ethics and Diversity in International Communication, 2(2), 46–49. Retrieved from <https://openaccessjournals.eu/index.php/jedic/article/view/10332>.
7. Ахмедова, Ш. (2019). Пути совершенствования экологического законодательства республики Узбекистан в области обеспечения благоприятной окружающей среды. Обзор законодательства Узбекистана, (4), 37–42. извлечено от https://inlibrary.uz/index.php/uzbek_law_review/article/view/126863.
8. Akhmedova S. correlation of environmental impact assessment with other organizational and legal mechanisms of environmental protection measures //international bulletin of medical sciences and clinical research. –2023. –Т. 3. –No. 1. –С. 5-14. <http://www.researchcitations.com/index.php/ibmscr/article/view/449/312>
<http://www.researchcitations.com/index.php/ibmscr/article/view/4494>.
9. Amanova N.F Amanova F.F .innovative activity in the field of tourism. euro-asia conferences, <http://papers.euroasiaconference.com/index.php/eac/article/view/9718>
10. Furkatovna A. N.(2022). Effective method of teaching. Conference Zone, 53–55. Retrieved from <http://conferencezone.org/index.php/cz/article/view/1245>.
11. Saydullayevna N. N., Furkatovna A. N. teaching english language for medical purposes in higher school. https://eprajournals.com/jpanel/upload/1206am_41.EPRA%20JOURNALS-2147.pdf
12. Furkatovna A. N., Furkatovna A. F. innovative activity in the field of tourism: essence and specificity //zbiór artykułów naukowych recenzowanych. http://xn--e1aaifpcds8ay4h.com.ua/files/95_01_s.pdf#page=97
13. Furkatovna A. N., Furkatovna A. F. innovative activity in the field of tourism. Euro-Asia Conferences, 1(1). Retrieved from <http://papers.euroasiaconference.com/index.php/eac/article/view/97> .
14. Amanova N.F Amanova F.F (2022) Malum bir maqsadga qaratilgan va maxsuslashgan til. <https://conf.iscience.uz/index.php/yumti/article/view/118/1101>
15. Amanova N, and Amanova F. "problems of quality of distance learning online." ta'lim va rivojlanish tahlili onlayn ilmiy jurnali (2022): 89-91. <http://sciencebox.uz/index.php/ajed/article/view/1515/140320>
16. Amanova N.F. "active teaching strategies in higher education." academia: an international multidisciplinary Research Journal <https://doi.org/10.5958/2249-7137.2021.02068.1>.
17. Pulatov F A. (2022). The importance of tourism. conference zone, retrieved from <http://conferencezone.org/index.php/cz/article/view/147>
18. Akhmedova Shakhnoza Ozodjonovna. (2023). global implications of climate change. Conference zone, 79–86. retrieved from <http://conferencezone.org/index.php/cz/article/view/937>
19. Akhmedova Shakhnoza Ozodjonovna. (2023). relationship of environmental impact assessment and environmental expertise. Conference Zone, 115–121. Retrieved from <http://conferencezone.org/index.php/cz/article/view/941>



20. Akhmedova Shakhnoza Ozodjonovna. (2023). climate change: everyone's struggle for survival. Conference zone, 70–78. retrieved from <http://conferencezone.org/index.php/cz/article/view/936>
21. S.M Makmudov, O.A Kim assessment of nutritional status based on bioimpedancemetry in young people - journal biomeditsiny i practice, 2022. <https://tadqiqot.uz/index.php/biomedicine/article/view/5518>
<https://tadqiqot.uz/index.php/biomedicine/article/view/5518/5223>
22. Makhmudov Sardor Mamasharifovich the functional state of the cardiorespiratory system of athletes involved in swimming.- “Янги Ўзбекистонда миллий тараққиёт ва инновациялар” 2022. <http://conf.iscience.uz/index.php/yumti/article/view/106>
<http://conf.iscience.uz/index.php/yumti/article/view/106/99>
23. Хакимов Мухаммадали Рафикович развитие инновационных технологий в системе высшего образования республики узбекистан // re-health journal. 2020. №2-2 (6). URL: <https://cyberleninka.ru/article/n/razvitie-innovatsionnyh-tehnologiy-v-sisteme-vysshego-obrazovaniya-respubliki-uzbekistan>
24. Хакимов, М. (2020). роль инновационных технологий в развитии современной системы высшего образования. interconf, (16). вилучено із <https://ojs.ukrlogos.in.ua/index.php/interconf/article/view/2581>
25. Хакимов, М. 2021. Дистанционное изучение иностранных языков: современные тенденции и перспективы развития. Общество и инновации. 2, 8/S (сен. 2021), 252–257. DOI: <https://doi.org/10.47689/2181-1415-vol2-iss8/S-pp252-257> .
26. Rafikovich H. M. the classification of teaching methods in higher education //journal of positive school psychology. – 2022. – с. 1582–1587-1582–1587. <https://www.journalppw.com/index.php/jpsp/article/view/6098>
<https://www.journalppw.com/index.php/jpsp/article/view/6098/4019>
27. Ibragimova Malika Shavkatovna. (2022). characteristics of rehabilitation of children with cerebral palsy and speech defects. Conference zone, 410–414. retrieved from <http://conferencezone.org/index.php/cz/article/view/877>
28. Ibragimova Malika Shavkatovna. (2022). effectiveness of hydrokinesiotherapy in the rehabilitation of children with spastic cerebral palsy. Conference zone, 507–511. retrieved from <http://conferencezone.org/index.php/cz/article/view/887>
29. Чуканина Д. Б., Хакимов М. Р. использование видео и аудио педагогических технологий в изучении иностранного языка //ученый ххi века. – с. 55.
30. Хакимов М. Р. роль инновационных технологий в развитии современной системы высшего образования //editor coordinator. – 2020. – с. 189. https://uch21vek.com/assets/uch21vek_2_5_2016.pdf#page=55
31. Тухтасинов , И. и Хакимов , М. 2021. современные взгляды на проблему дистанционного и традиционного методов обучения итальянскому языку в высших учебных заведениях . общество и инновации. 2, 2 (апр. 2021), 111–117. doi: <https://doi.org/10.47689/2181-1415-vol2-iss2-pp111-117> .
32. Amanova N.F Amanova F.F. Innovative activity in the field of tourism. euro-asia conferences, 1(1), 308–309. retrieved from activity <http://papers.euroasiaconference.com/index.php/eac/article/view/97>



33. Amanova N.F Amanova F.F (2022) Malum bir maqsadga <https://conf.iscience.uz/index.php/yumti/article/view/118/110>
34. Amanova N, and Amanova F. "problems of quality of <http://sciencebox.uz/index.php/ajed/article/view/1515/1403>
35. Normuradova N, and Amanova N. "teaching https://eprajournals.com/jpanel/upload/1206am_41.EPRA%20JOURNALS-2147.pdf
36. Amanova N.F. "active teaching strategies <https://doi.org/10.5958/2249-7137.2021.02068.1>