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E-mail: [s\\_eshengazina@yahoo.com](mailto:s_eshengazina@yahoo.com)**Enhancing interdisciplinary cooperation through EFL**

The paper addresses the challenges of modern teaching approaches in one of recently established international higher education schools with CLIL (Content and Language Integrated Learning) in Kazakhstan. To tackle the problems arising from the shortcomings of local school education, particularly from little or lack of focus on preparation of schoolchildren for CLIL-based programmes [2], tandem teaching or interdisciplinarity seem to be the call of the day in such international programmes. The research based on experimental teaching has revealed the beneficial impact of tandem teaching on the learners' academic performance. However, there are issues that need to be considered carefully while planning and organising the learning process.

**Key words:** interdisciplinarity, tandem teaching, proficiency level, modern teaching approach, CLIL.

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**Совершенствование междисциплинарных связей через курс английского языка для специальных целей**

Статья посвящена вопросу укрепления междисциплинарных связей посредством тандемного метода обучения в Международной Школе Экономики (МШЭ) КБТУ, являющегося аффилированным центром Лондонской Школы Экономики в Казахстане. Тандемный метод подразумевает совместную работу специалистов из различных сфер знаний над определенными темами для разработки общей стратегии преподавания с целью интегрирования знаний в единый образовательный комплекс.

В силу ряда объективных причин, применение тандемного или интегрированного метода обучения, требует переосмысления и адаптации к уровню и потребностям казахстанских студентов. С учетом анализа текущих проблем, были выявлены основные причины, препятствующие успешному применению данного метода и разработаны междисциплинарные стратегии, которые объединяют современные методики преподавания английского языка и содержание программы Лондонской Школы Экономики по профильным дисциплинам.

**Ключевые слова:** тандемный метод обучения, междисциплинарные стратегии, интегрированный метод.

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**Арнаулы мақсаттарға арналған ағылшын тілі курсы арқылы пәнаралық байланыстарды жетілдіру**

Мақала Қазақстандағы Лондон Экономика Мектебінің филиалдық орталығы болып табылатын КБТУ Халықаралық Экономика Мектебінде оқытудың тандемдік әдістері арқылы пәнаралық байланысты нығайту мәселесіне арналған. Тандемдік әдіс алуан түрлі сала мамандарының білімді біртұтас білім беру кешенінде кіріктіру мақсатында оқытудың ортақ стратегияларын жасау үшін белгілі бір тақырыптар аясындағы бірлескен жұмысын көздейді.

Бірқатар объективті себептерге орай, оқытудың тандемдік немесе кіріктірілген әдісін қолдану Қазақстан студенттерінің деңгейлері мен қажеттіліктерін ой елегінен өткізуді талап етеді. Ағымдағы күрделі мәселелерге жасалған анализді есепке ала отырып, аталған әдісті нәтижелі қолдануға кедергі болатын негізгі себептер айқындалды және ағылшын тілін оқытудың үздік әдістемесі мен кәсіби пәндер бойынша Лондон Экономика Мектебі бағдарламасының мазмұнын біріктіретін пәнаралық стратегиялар дайындалды.

**Түйін сөздер:** тандемдік әдістер, пәнаралық байланыс, кіріктірілген әдіс.

With the appearance of international CLIL-based (Content and Language Integrated Learning) programmes in Kazakhstan, such as the International School of Economics (ISE [www.ise.kbtu.kz](http://www.ise.kbtu.kz)) in Almaty, an affiliate center of the University of London School of Economics and Political Sciences, there has emerged an urgent need to

strengthen interdisciplinary links and cooperation due to a number of factors.

First of all, the ISE curriculum demands a higher proficiency level in the English language from the entrants of L2 type and some background knowledge in and understanding of economic concepts and social issues. These are prerequisite

to the programme since starting from the first days at the ISE the learners are exposed to the study of such advanced courses as Statistics, Macroeconomics and Microeconomics in English, which most of them have never done before. In fact, experience shows that two-thirds of the ISE entrants hardly meet the entry-level requirement, which is the Upper-Intermediate and higher level of English (or IELTS band score of 6.0 and higher). Nonetheless, the entrants with a lower level of English are enrolled to school because they demonstrate a higher level in a diagnostic test in Mathematics, which is in greater demand in this international programme. The school administration provide an opportunity to the most promising students to improve their level of English to the required standard during their first semester while doing a six-credit preparation course for the official IELTS. As a matter of fact, the first year of study at the ISE is a foundation course with a purpose to prepare students for the entrance exam, well-known as the Advanced Placement Test (APT), to the London School of Economics and Political Sciences.

Another determining factor is that the majority of high schools in Kazakhstan, being under a pressure of the Unified National Test for school leavers, are not able to prepare schoolchildren for CLIL-based [university programmes since English is not defined as a core subject. Finally, there is an urgent need to combine all the ISE teachers' efforts in training their students intensively because of the pressure of the APT in Economics, Statistics and Calculus (the London School of Economics and Political Sciences, University of London) to be taken by the freshmen upon the completion of the first year of study. The ISE learners are also required to pass the IELTS with 6.0 as a minimum band score, but much prior to the APT, more exactly upon the completion of the first semester.

To optimize the learning process, raise proficiency in the English language and facilitate integration of the language and content learning style related to the study of Economics, Statistics etc., the ISE faculty has come to realize that it is vitally important for them to establish effective cross-curricular links by working in tandem. The rationale is 'to achieve breadth, comprehensiveness, and synthesis of blurring disciplines to create complex thinking system' [4, 19]. This implies filling in the content of English language courses with the topics and materials from the major disciplines and designing a learning process that develops unique thinking and learning strategies

[1, 3]. According to Savignon [8,19], 'Content-based courses ...of language instruction are a natural concomitant of communicative approaches to foreign language instruction that emphasize the use of language to interpret, express and negotiate meaning'. No doubt, such a purposeful cooperative interaction with the instructors of different courses helps the English teachers "integrate new knowledge, better interpret and understand language phenomena, innovate and bring novelty in language studies" [7, 5]. It also enables the researchers from the relevant fields to launch joint research projects, go beyond the confinements of their disciplines and eventually create common teaching strategies and unique teaching methods [5, 4]. The tandem teaching at ISE seems to be one of the most effective approaches to meet the challenge of raising L2 proficiency to the standards of the London School of Economics defined in the content of the APT.

In response to this challenge, the ISE lecturers have developed a number of activities to raise the students' knowledge in the fields of the Economics, Statistics and raise their proficiency in the English for Specific Purposes (ESP).

One of these activities is exploring essential economy-related topics jointly with a bottom up approach, which has proven to be most effective with L2 learners. In this approach authentic specialist texts, selected by the professors in Economics, are first considered and previewed in the lessons of the ESP, then these texts are processed at the tutorials in Economics. The ESP instructors focus the learners on skimming and scanning of the sources in order to identify main and minor points of the articles, while giving a special focus to the study of terms and difficult vocabulary, then they engage the students in the discussion of the topic-related questions, which also requires from the students interpretation of the authentic material. To check comprehension of the main points at an individual level the ESP instructors request the learners to summarise the information from the text in a written form, the type of a summary being précis in this case. The summaries are evaluated by both the English and Economics instructors.

The next stage, which is a production stage, is taken up by the instructors in Economics, who explore the economists' ideas from the text from an economic point of view in the form of a discussion or debate. The process is rounded up by essay writing, with a discussion question defined and framed by a professor in Economics. The evaluation of the output information is made by

both instructors though each evaluates a student's progress from the perspective of his area of study. It is worth to note that the materials for class sessions have to be developed jointly, both the English teacher and the instructor in Economics. The benefits for both are obvious. The former obtains a deeper insight into the subject-matter, identifies the target language, and processes the text for distinguishing main and minor points with the help of the specialist. In contrast, the latter learns to understand the sequence of the language learning stages, and is empowered to monitor correctness of the material interpretation by the English teacher before the study materials are presented to the learners. A good example of this activity is processing Chapter 15 'of Money' from "Essays in Political Economy" by D. Hume, which has been selected for tandem processing by the instructors in Economics and English language. Without the specialist involvement the English instructor would find it increasingly difficult to understand the content of the scientist's work, while the instructor in Economics would have a difficulty in processing the material with the learners without the English teacher's help in previewing and skimming the text, identifying and practicing or drilling the key vocabulary step-by-step, reading for gist and detail etc.

For the learners the output of this activity is expressed in several ways: in terms of the English language, the learners' active vocabulary range increases by about 45-50 lexical units (mostly terminology) per week, they constantly improve their extensive and intensive content-based reading and listening skills as each assignment comprises 10-15 page long passages or chapters to be skimmed and scanned, followed by discussion and summarizing in a written form. From the economic point of view, the students are emerged in the content of their major subject, thus acquiring a deeper, more detailed comprehensive understanding of the subject matter. This enables them to compare and evaluate information from a number of sources and form their own critical judgment of the relevant issues [2, 2].

Exploration of the economy-related topics can be more motivating and engaging for the L2 if it is carried out in the format of academic debate. Debate is a multistage process, which involves: Formulation of the resolution, Research and selection of relevant information, especially statistic data, Building a case and the Debate tournament [9, 28]. The process is guided by lecturers from the relevant fields, including Economics, Statistics,

Intellectual History and English: they give references to adequate information sources and help students with identifying the criteria of assessment to pronounce a fair judgment. The English lecturers usually arrange the procedures and facilitate team work, help students with the language problems, while the specialists from the related areas assist students in processing and evaluating the input information for the debate case. This type of learning demands a lot of preparation from the trainees, continuous advising support from both specialists and English teachers.

The instructors in English also conduct in-class work: preliminary discussion of the topic-related issues, vocabulary processing, listening and reading activities with the specified content. Among the topics that have been successfully investigated by the ISE students are: Consumerism is/is not a positive force, Globalization is/ is not a negative trend; Free Trade is/is not Fair Trade; Advantages and disadvantages of market economy etc. The biggest benefit of this method of teaching and learning is self-exploration and self-discovery [1, 15] the students are engaged in willingly, facilitated with a competitive nature of debate. Another obvious merit is the debate incurs skills-integrated approach, of which critical thinking and public speaking skills are most desired though difficult: discussing economy-related or social issues call for a higher order of thinking and higher level of the English language.

Another effective activity to foster students' in-depth comprehension of the subject-matter through the medium of the English language is the use graphic organizers for summarizing extended information and teaching students to interpret information from graphs, charts, pies or tables. This is primarily done to help the freshmen understand Statistics, one of the most difficult subjects for yesterday's schoolchildren. The process involves three parties: the students, English teachers and Lecturers in Statistics. The objective of this activity is to equip the learners with effective writing strategies and useful language kit [7, 3] for the students to make best use of at their tutorials in Statistics. The input from the instructors in Statistics relates to the choice of the sources, topics and identifying a specific vocabulary to summarise the graphics input information. The skills students obtain through the Academic Writing-1 course in the first semester are transferred to the ESP reading and listening assignments, which require summarizing information in the form of graphic organisers. Examples of summarizing in graphic

format include texts with classification, sequencing, event chronology, designing a chart or a table with data. Summarizing and presenting information graphically is one of the most enjoyable processes for the learners because of the diversity of topics to choose from, opportunity to be independent in creating graphic organisers on their own, and conciseness of the language, which is structured and formatted in a preset way.

The next activity - summary presentations of the lectures in major disciplines the learners are most keen on - also leads students to improving their English and fostering knowledge in their major disciplines. Moreover, this is the type of learning the students are most enthusiastic about because they are given freedom of choice with a topic from their core subjects as well as freedom to design their presentation in a their own way but within time constraints. No doubt, this activity is like a role play for the students, therefore they feel important and responsible.

All the involved parties, students, specialists and English teachers have their own functions in this process too. The role of the English instructor is setting the learning objective, defining language-related requirements to the presentation and assisting the trainees with the presentation language. The specialist role is advising the learners on the choice of the topic, if needed; giving a coaching help to the English teachers with understanding the content of student selected topics and defining the student presentation evaluation criteria in terms of the content of a speech. Some examples of the lecture topics presented by the students are "Microeconomics vs. Macroeconomics", "The role of money in economy", "What makes a business successful?" etc. The English teacher should know that to assign such a task, his students should be aware of note-taking strategies and note-taking styles, or simply students ought to be trained in organizing information from the lectures in flow charts, tree diagrams, headings and notes, or spidergrams. Moreover, a lot of classroom practice is needed to teach the learners to use an appropriate type of a graphic organizer for a range of information: theories or opinions followed by supporting information, sequence of events, comparison and contrast, cause and effect etc. Of course, this task requires good summarizing skills as well as adequate presentation skills that are built up during the ESP course.

One of the ways interdisciplinary links are realized in the EFL instruction in the ISE is the students' engagement in the Project-based learning

(PBL) style [9, 5-7]. More specifically, they are actively involved in professionally oriented large-scale projects which imply a student independent or group learning styles. It's a well-known fact that PBL pushes students towards real-life learning by means of self-discovery and self-exploration, which demand advanced reading, writing, and thinking skills. By real-life learning we mean that the learners are given tasks to find out, collect, select, process, summarize or present the information related to their future professional careers in companies using various electronic and non-electronic resources and communication forms. This may include interviewing business people on a number of topics followed by report writing or presentations. Another good example is designing a mock company, preceded by research into industries and markets to identify potential market niche and opportunities for the business development [9, 31-32]. Listed below are some titles of professionally-oriented semester-long ESP projects, widely practiced in the ISE and other KBTU faculties:

1. Writing business success stories.
2. Setting up a mock-up company in students' professional field.
3. Exploring a company a student would like to work for.
4. Researching a problem of professional interest.

These types of tasks belong to guided writing assignments and English teachers working in tandem with the instructors in Economics, Management and Business Communication provide guidelines with clear and detailed instructions, which include description of all the stages with fixed deadlines. From the methodological point of view the ultimate goal of these writing tasks is to arouse students' interest in analytical and creative business writing by providing a stimulating learning environment that motivates students to broaden their knowledge through self-study. From a practical point of view, such projects can be considered as pre-service orientation activities with students' hands-on real life professional engagement.

Despite the obvious advantages of interdisciplinarity for the students and instructors, such as deeper and broader comprehension of the subject-matter, more meaningful content-based acquisition of the foreign language, enhanced student motivation, etc., there are some drawbacks that call for attention. One of them is the difficulty for the English teacher to maintain a balance between the content and language, which is understood differ-

rently by specialists from other fields of study. The compromise here is to establish open and intensive communication between all the involved instructors and conduct seminars and/or workshops to communicate and learn from other specialists about the specific features of their subjects. Another likely challenge is the selection of the material for study in terms of the language complexity and the size of the texts for processing in the English classrooms, which are sometimes too extensive and have an 18<sup>th</sup> - 19<sup>th</sup> century language. The solution here is to agree jointly on the requirements to the content and size of the information, and time for processing the materials.

The next difficulty is processing materials and developing the tasks for the students, which is time-consuming for all tandem participants. In this case the teaching load of the involved instructors must be reduced, approximately to 12 hours per week to allow more time for preparation and material processing. Finally, it is essential for the English groups to be level-based: this helps the English teachers to design assignments with the view of the students' language level.

The cross-curricular teaching is gathering pace and to implement it in Kazakhstan, CLIL or interdisciplinary approaches should be introduced and practiced widely in secondary school education.

### References

1. Boud D, Feletti G. I. The challenge of problem-based learning // Second edition. — Kogan page limited. — 1997. — P. 13-18. [http://books.google.kz/books?id=zvyBq6k6tWUC&pg=PA44&lpg=PA44&dq=Boud,+David+%281987%29:+Problem-Based+Learning+in+Perspective.&source=bl&ots=PLpIJ83pn5&sig=5bGh9CbboLJyo2GEEd7oGPUi6iUg&hl=ru&sa=X&ei=L\\_3XUKvRNPPZ4QS\\_YHICA&sqi=2&ved=0CG4Q6AEwCQ#v=onepage&q=Boud%2C%20David%20%281987%29%3A%20Problem-Based%20Learning%20in%20Perspective.&f=false](http://books.google.kz/books?id=zvyBq6k6tWUC&pg=PA44&lpg=PA44&dq=Boud,+David+%281987%29:+Problem-Based+Learning+in+Perspective.&source=bl&ots=PLpIJ83pn5&sig=5bGh9CbboLJyo2GEEd7oGPUi6iUg&hl=ru&sa=X&ei=L_3XUKvRNPPZ4QS_YHICA&sqi=2&ved=0CG4Q6AEwCQ#v=onepage&q=Boud%2C%20David%20%281987%29%3A%20Problem-Based%20Learning%20in%20Perspective.&f=false)
2. Brewster J. Content-based language teaching: a way to keep students motivated and challenged? CATS: The IATEFL young learners SIG publication. — 2004. — P. 3-9.
3. Brewster J. Teaching English through content: supporting good practice. In Kennedy, C. (ed) Innovation and Best Practice. — London: Longman. — 1999. — P. 83-95.
4. Klein, J. T. Interdisciplinarity: history, theory, and practice. — Detroit, Wayne State University. — 1990. — 140 p.
5. Lattuca, L. Creating interdisciplinarity: interdisciplinary research and teaching among College and university faculty. Nashville, Vanderbilt University Press. — 2001. — 296 p.
6. Nielsen A. E. Crossing Disciplinary Boundaries: New Challenges to Higher Education. PDF. — Retrieved 03.02.2013 from [Nielsen.ask.reference.com/web?q=What+Is+Cross+Disciplinarity&o=100100](http://Nielsen.ask.reference.com/web?q=What+Is+Cross+Disciplinarity&o=100100).
7. Popescu T., Pioariu R. and HerÑeg C. Cross-disciplinary approaches to the English language: theory and practice. Cambridge Scholars Publishing. — 2011. — 118 p. <http://www.c-s-p.org/flyers/978-1-4438-3389-9-sample.pdf>
8. Met, M. Curriculum decision-making in content-based language teaching. In Cenoz, J. & Genesee, F. (eds.) *Beyond Bilingualism*. Clevedon: Multilingual Matters. — 1998. — P. 31-45.
9. Yeshengazina S., Kerimkulova S. Project-based learning in English classrooms. A Self-study guide for students and English teachers. Kazakh-British Technical University, Almaty. — 2011. — 44 p.