European Journal of Contemporary Education

ELECTRONIC JOURNAL

Methodological Aspects of Content – Based Strategies in Classroom Managerial Activity

Nataliya Dementyeva [a], Aigerim Kosherbayeva [a], Valeriy Korvyakov [b], Saule Sadykova [c, *]

[a] Abai Kazakh National Pedagogical University, Almaty, Republic of Kazakhstan
[b] Almaty Humanitarian-Economic University, Almaty, Republic of Kazakhstan
[c] K. Zhubanov Aktobe Regional University, Aktobe, Republic of Kazakhstan

Abstract

The cardinal changes in the socio-economic situation that have taken place in recent decades, the intensive development of market relations and integration processes have also affected the sphere of higher education, since, like many countries of the world, they find themselves in a situation of intense competition, which imposes special responsibility on managerial activity and requires current and future teachers of universities to master such an area of scientific knowledge and management practice in education. For pedagogical science, it is relevant to comprehend educational management as an interdisciplinary multidimensional phenomenon, identify the pedagogical aspects of this phenomenon, and comprehend the concepts and strategies of educational management in domestic and foreign pedagogy. The pedagogical component of this phenomenon is associated with the content and methods of organizing the educational process, with the transmission and formation of collective and individual knowledge. At the same time, these processes are carried out in organizations of various types: schools and universities, enterprises, public organizations. The implementation of the control function involves: monitoring progress and attendance, identifying possible problems for each student. The control of activity is understood as the realization of self-control of the class teacher, the student team and each student as an individual This research paper describes the problems of the methodological aspects of content-based strategies in classroom managerial activity and specifics of the designated technology, the advantages of its implementation in higher educational science, comparing the difficulties that the academic staff of the university may face when implementing it. The paper examines the contradictions faced by teachers in specific aim and teachers of specialized disciplines, and gives a critical assessment of how well curricula and programs meet the needs of teachers and students. The appropriate sides and disadvantages of using the technology of CBS in the organization of classes in order to help teachers effectively plan their activities are also

* Corresponding author
E-mail addresses: nurbeklu2018@mail.ru (S. Sadykova)

investigated. In conclusion, the author argues that an integrated interdisciplinary mode to teaching profile-oriented disciplines based on the described technology is a powerful platform necessary for the training of highly qualified specialists in a specific field.

Keywords: CBS, interdisciplinarity, professional, integration, professional training, purposes.

1. Introduction

Lessons in teaching foreign languages students with integration a subject content make it possible to link into a single whole all the knowledge and skills obtained in various academic disciplines and are a source of motivation for the educational process in a foreign language (Chinasilova, 2021).

The issue of CLI has become particularly popular in recent years, since the requirements for the language training of students in higher education are increasing, and traditional teaching only general foreign language (General English), starting from the 1st year, does not contribute to the dynamic development of speech skills and the increment of the system of language knowledge, does not give the required results. In this regard, there is a need to improve the learning process, the use of other approaches that would bring language training to a qualitatively new level.

For effective use of the CLI approach and its implementation in bachelor's degree curricula, it is necessary to address first of all the concept of this term, consider the theoretical basis of CLI, component composition and existing models of its implementation in the curriculum (Bissenbayeva, 2020).

There are also many researches which have been done in teaching foreign languages. The analyses for the previous works have been done, but still some gaps in enhancement of CLIL usage in applied linguistics. So this research will present new angles in CLIL and make teaching process more motivated and interesting, specifically this research present new set of techniques for improvement of teaching process. The focus is being done for the communicative skills and oral mastering in content based learning. Where students can apply their subject matter knowledge in producing the language (Abdikerimova, 2020).

For example, in the set dedicated to education and methodology aspects "Family and Friends" published by Oxford University Press, which I use as the main textbook in English lessons, vivid examples of interdisciplinary language integration are given: Dolphin Dreams and Flocke (cognition of the world), World Records (geography), National dishes (cultural studies), The Vikings and Papyrus (history), M-400 Skycar (technology).

2. Materials and methods

For the purposes of this study, a questionnaire was developed to assess the student's satisfaction and attitude to the applied CLIL. The questionnaire consists of 20 questions related to the CLIL of students of the specialties "Calculation and design of buildings and structures" and "Technology of industrial and civil construction" of the International Educational Corporation. The questionnaire is anonymous and is aimed at evaluating and enhancement of the quality in educational process. The questionnaire includes 19 closed questions measuring the reaction of students on a typical 5-level Likert scale covering the range: strongly disagree; I disagree; I find it difficult to answer; I agree; I completely agree with one open question in which students were asked to list the advantages and problems of studying academic subjects in English. The questions were selected for having determined the students' opinion about the level of application of the CLIL teaching method and its impact on the level of acquired theoretical knowledge and practical skills.

The study was conducted among 156 students majoring in "Foreign language" and "Interpreters" of the Humanitarian faculty. The outcomes of the case study showed that the vast majority of students 70 % believe that the content of various topics studied in the CLIL course fully corresponds to the set of specifically oriented engineering disciplines studied in Kazakh/Russian. To some extent, 8 % of students agreed, 5 % found it difficult to answer clearly, probably in the shortage of basic knowledge of general English, and 17 % consider compliance not at the proper level.

However, the process of such adaptation involves quite large-scale efforts because of situations that following a lot of obstacles in the way of application this technique is used in our country. To eliminate the obstacles, it is necessary:

1) approve the CLIL approach at the university management level;

2) establish interaction between employers, who are customers of educational services, and the university in the joint development of a training plan based on real-world tasks and problems-in a particular professional field;

3) create a team of developers of the CLI methodologies at the level of university;

4) organize retraining of subject teachers interested in applying the CLIL approach in their professional activities;

5) create conditions for improving the level of students and teachers;

6) establish a mechanism for interaction between teachers and lei-subject specialists and linguists to work together on the development of courses/modules involving the use of CLIL-methodology. Nevertheless, despite the scale of the event-

While implementing the CLI oriented approach in the sphere of education in university, possibly to be observed that these efforts will pay off with a result that assumes a higher level of training of specialists.

The predominant number of students with a stable level speaks about the positive dynamics of the forming of the being enhanced of skills to communication among learners of the fourth grade.

Thus, the comparison of diagnostics at the ascertaining and control stages of experimental search work and qualitative analysis showed a positive dynamic of the formation of dialogical skills and general communicative skills of students, that is, communicative skills.

Table 1. Distribution of learners by levels of formation of communicative skills

Stages/Levels	Elementary	Unstable	Stable
Stating	24 %	32 %	44 %
Final	8 %	28 %	64 %

As a result, during the conducted diagnostics in order to identify the level of abilities in communication being formed of learners at the final stage of the experimental search work, it is clear that the number of children with a stable level of formation of communicative skills increased by 20 %, and the number of learners with an initial level decreased by 16 % the formation of communicative skills; the amount of students with an unstable level decreased by 4 %.

3. Results

CLIL technology requires significant efforts to organize collaboration and collaboration, and in this sense represent a professional task for both language teachers and teachers of specialized disciplines. Therefore, it is highly necessary to focus of the university administration to what personnel needs they may face in the future and how it will be possible to provide the university with such personnel (Meyer, 2016).

In order to be coincided to the standards of the teaching staff in improving foreign language skills, Kazakh National University offers courses to improve foreign language communicative competence for the teaching staff, aimed at training teachers and supporting them in their desire to develop themselves and their professional qualifications.

Substituting the data into formulas (1) and (2), we obtain that n ..=0.58. Comparing the obtained value of the student's t-test with the tabular tKpHT = 2.01 (the number of degrees of freedom is 154 = 75 + 81-2), we conclude that the null hypothesis is not rejected and both samples belong to the same general population, i.e. they are homogeneous for a confidence level of 0.05 (probability 5%), which was to be proved. Let's carry out a similar statistical analysis for the second part of the test. To do this, we put forward the following hypotheses: BUT - the differences in the level of preparedness of students in mathematics are not significantly enough.

We will use Student's t-test for models that are independent, but first we need to check the conditions for its application.

The first condition is met, since the measurements were carried out on a ratio scale, the second condition is also met, since the compared samples are distributed according to the normal law (in the CG: mode = 6 b., median = 6 b., mean value = 7.11 b.; in the EG: mode = 6 b., median = 7 b., mean value = 7.49 b.) All conditions are met, therefore, Student's t-test is applicable in the second part of the test.

Carrying out similar calculations, we obtain that t3Mn = 1.44. Comparing this value with the tabular tKfJHT = 2.01 (the number of degrees of freedom is 154 = 75 + 81-2), we conclude that the

null hypothesis is not rejected and both samples belong to the same general population, i.e. they are homogeneous for the confidence level 0.05 (probability 5 %), which was to be proved.

Thus, the input testing showed the homogeneity and balance of the samples.

A necessary condition for teaching natural sciences in a foreign language is a certain level of knowledge of a foreign language. Comparative data of the outcomes of the beginning part of the test of the entrance test demonstrated that most of the group possessing levels B1 and B2 (52 students) and above C1 and C2 (14 students), which indicates their ability to understand the main questions in various situations (when applying for a job, at school, on vacation, etc.), communicate with native speakers, speak on interesting and understandable topics, describe your experiences and events, dreams, hopes, ambitions, and also argue your opinions and plans. So, the ascertaining stage of experimental work revealed: 1) homogeneity and balance of samples in the CG and the EG; 2) the initial states of knowledge in mathematics and English of the students among the Contr. G and the Exp. G can be coincided with the appropriate level of 0,05; 3) a high level of development among students of the department of Russian and foreign philology in the direction of "Pedagogical education", profile "Foreign language (English) and a second foreign language" of basic communication skills of daily communicating in English, which is a necessary condition for teaching the subjects in a non-native language. However, it is not sufficient.

At the formative stage (2021), a pedagogical experiment was conducted, which consisted in testing the effectiveness of the modelling of teaching in a foreign language at a university based on an CLI approach.

During this stage, students from the EG were trained in the discipline in English in the basis of CLI approach.

In the frame of the controlling stage of the conducted experiment for the students of the CG and the EG, consisting of three parts. Each part was designed to test the formation of one of the components: cognitive, academic or linguistic.

The performance-evaluative component includes diagnostic materials for identifying the level of skills of a subject foreign language competency (sub-threshold, threshold, advanced) in accordance with the criteria and indicators.

Statistical data processing, conducted for using a by-sided Student's t-test for models which are independent, showed the homogeneity and balance of the models used in this experiment both in terms of the level of foreign language proficiency levels (temp = 0.99, tcrit = 2.01, temp < tcrit, zero hypothesis H0, the samples are homogeneous for a confidence level of 0.05), and in terms of the level of basic knowledge, skills in mathematics (temp = 0.76, tcrit = 2.01, temp < tcrit, the null hypothesis H0 is accepted, the samples are homogeneous for confidence level 0.05).

Control (CG) and experimental groups (EG) were separated. The amounts of students in the EG was 81 people, in it the discipline "Fundamentals of Mathematical Information Processing" was taught English, while in the CG, were of 75 students, the subjects were taught in Russian.

A quantitative comparative analysis of the level of competence among learners at the CS of the experiment is represented in Table 2.

Table 2. The level of formation of competence among learners at the CS of the experiment (%)

levels	cognitive		academic		language	
	КГ	EG	KG	EG	KG	EG
Before	31,0	4,9	34,6	2,5	13,3	12,3
thread hold	59,2	65,4	42,7	32,1	49,3	33,3
high	9,8	29,7	22,7	65,4	37,4	54,4

Comparison of the results of students performing tasks from the developed fund of assessment tools allows us to conclude that, in total, the amount of students with threshold and elevated levels of formation of the cognitive, academic and linguistic components of the competence in the experimental group exceeds the quantity of students in the control group.

The effectiveness of experimental learning was established using a statistical assessment of the reliability of differences in the results of students completing tasks from the first, second, third parts of the bases in evaluational tools.

Table 3. Empirical Student's t-test values for each of components of language competence

COMPONENT OF SUBJECT FL COMPETENCE	t-CRITERION OF STUDENT
cognitive	$T_{emp} = 3,16, t^\wedge = 2,01$
academic	$T_{emp} = 2,43, t^\wedge = 2,01$
language	$T_{emp} = 2,06, -^\wedge = 2,01$

As can be seen from Table 3, the empirical value of Student's t-test for each of the components of language competence exceeds critical. Thus, there is reason to accept the alternative hypothesis (H1) that the difference in the results of assignments by students due not to random factors.

The positive dynamics of the development of the components is due to the fact that teaching subject knowledge in a foreign language was built in accordance with the principles and strategies of CLI, the cognitive activity of students was conducted in combination with speech activity, and the assimilation of subject matter occurred in simultaneous with mastering the tools of its expression in FL.

4. Discussion

The analysis of the level of general communication skills showed 32 % of respondents with a stable level of formation of general communication skills, 68 % – with an unstable level. There is no data on students of the fourth grade with an elementary level formation of general communicative skills.

Table 4. Indicators for assessing the formation of general communication skills

Level formation of skills	Understanding (tasks 2-10)	Playback (task 11)	General communication skills
Stable	14-16 points	4 points	17-20 points
Unstable	5-13 points	2-3 points	7-16 points
Elementary	0-4 points	0-1 score	0-6 points

Analysis of the level of formation of dialogical skills showed 56 % of respondents with a stable level of formation of dialogical speech, 20 % of fourth grade students showed an unstable level of dialogical skills, 24 % have an initial level.

The general level of formation of communicative universal educational actions consists of the sum of the points of general communicative skills and dialogical skills of students. Communicative skills are developed at a stable level among students who scored a total of 25 to 27.5 points. The unstable level of formation of communicative skills among students of the fourth grade is estimated at 20-25 points. Students with an initial level of formation of communicative skills scored less than 20 points.

The analysis of the formation of communicative universal educational actions among fourth grade students showed that 44 % of respondents have a stable level of formation of communicative UDS, 32 % of fourth grade students demonstrated an unstable level the formation of communicative UDS, 24 % – the initial level of formation of communicative UDS.

Thus, we see that most students have sufficiently developed dialogical skills, as well as a stable level of formation of dialogical skills. Based on the analysis, it is possible to see the absence of students with an initial level of formation of general communicative skills. However, the majority of students have an unstable level of formation of general communicative skills. It can be concluded that the communicative UDS are formed at a stable level in almost half of the students.

Next, we see a small difference in the percentage ratio between fourth-grade students with unstable and initial levels of formation of communicative skills.
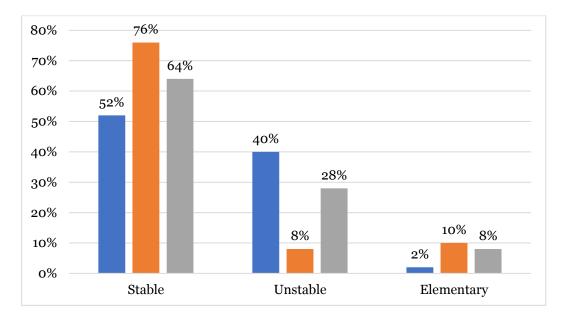

Fig. 1. The results of the formation of general communicative skills and the ability to build a dialogical speech

Comparison of quantitative results of diagnostics carried out at the ascertaining and control stages of experimental search work, as well as qualitative analysis showed positive dynamics of the formation of general communicative skills and dialogic skills.

There were 16 % more students with a stable level of formation of general communicative skills at the control stage of experimental search work, and 20 % more students with a stable level of development of dialogical skills. Table 5 shows the distribution of fourth grade students by levels of formation of communicative UMS in percentage ratio.

A qualitative analysis of the results suggests that some students have increased the level of ability to read the text with understanding, namely, the ability to find information given in an implicit form (determining the topic and the main idea of the text), to explain the meaning of a word based on the text. Also, students have grown the ability to express thoughts in writing in compliance with the rules of logic, the correct presentation of facts. These skills belong to the general communicative skills. Also, at the final at the stage, students showed the best results of formation to build speech in accordance with the content of the task and follow logic in the construction of speech, which refers to dialogical skills. Seven students scored at least 4 more points at the control stage compared to the ascertaining one (Elizaveta R., Lesha K., Sofia M., Daria Zh, Roman K, Mikhail K., Arkady D.).

The study does not claim to be an exhaustive description of the problem under study, but gives grounds to outline some further prospects in this direction.

5. Conclusion

To sum up, learning languages today is the education of the young generation which opens the way for free swimming in space, looks into the secrets of world science, and its own a need that allows them to demonstrate their abilities. Teaching languages is a modern requirement.

Its implementation is the duty of teachers. That is why there is no stop to modern teachers it is necessary to search and master opportunities without missing.

To fully master the knowledge, to develop students' ability to think, to speak freely, teaching to express one's thoughts openly and fully, broadening one's thinking is the main goal of education. We should educate each student in such a way that he can acquire knowledge and skills according to his ability

Whenever possible, all types of speaking activity should be included in the classroom (CLI), however, the peculiarity of this teaching method (CLI) is that it takes up most of the teaching time. However, the teacher can plan the lesson, some material can be presented in the form of audio-

text, and the material can be understood through dialogue and conversation through inquiry methods of teaching. Audition can be combined with subscription (filling in tables, drawing up a diagram, correcting defects). When choosing learning materials, you should choose original texts of different styles that correspond to the age characteristics and the level of language preparation of students. You can also use audio and video materials. Learning material should achieve two goals: subject and language. Texts are divided into small parts and include illustrations, diagrams, maps, etc. if accompanied, it is well accepted.

CLI is conventionally divided into 2: hard CLI and soft CLI. Hard CLI means that any school subject is conducted in English (only the student's English level should be L2). In the course of such training, students can study geography, literature, biology, physics, and even physical education through a foreign language. English language teachers use the soft CLI method, their task is to teach a foreign language using the topics of other subjects.

Thus, teaching in English according to the CLI method provides meta-disciplinary connections and allows to achieve practical results in the development of new educational standard principles, in particular, develops cultural awareness, internationalization, language competence, not only readiness for study, but also the ability to apply new knowledge in life. and, accordingly, leads to raising the vital evidence, aiming at success, and finally achieving the main goal – forming the professional competence of future graduates, increasing their mobility and ability to adapt to rapidly changing life conditions.

To sum up, in order to fully acquire knowledge, the main goal of education is to develop students' ability to think, to speak freely, to express their thoughts openly and fully, and to expand their horizons. In order to achieve this goal, "CLI" is an effective method of implementing the Lingual Education Program in connection with the updated teaching process.

References

Abdikerimova et al., 2020 – *Abdikerimova, G., Duisekova, K., Bissenbayeva, Zh.* (2020). The value dominant "Laicite" as part of the media picture of the world of France. *XLinguae*. 13: 75-85. DOI: 10.18355/XL.2020.13.01.06

Ball – *Ball, Ph.* What is CBSL? [Electronic resource]. URL: http://www.onestopenglish.com/ CBSl/methodology/articles/article-what-is-CBSl/500453.article

Ball, 2016 – *Ball, P.* (2016). Does CBSL work, in D. Hill & P. Alan (eds.). The best of both worlds: International Perspectives on CBSL. (pp. 32-43). Norwich Institute for Language Education, Norwich.

Bekbenbetova et al., 2022 – *Bekbenbetova, K., Baltabayeva, G., Aimbetova, U., Smagulova, K., Kemerbay, R.* (2022). Social and philosophical research structures of drama and folk narratives: the manifestations of embodied world views. *XLinguae.*

Chinasilova et al., 2021 – *Chinasilova, A., Almazbek, B., Ardak, K., Akshaim, Z., Sabira, M., Zhanat, B.* (2021). Modern Principles and Approaches of Adult's Social Work Arrangement. *Review of International Geographical Education Online.* 11: 4105-4113. DOI: 10.48047/rigeo. 11.05.291

Coyle et al., 2010 – *Coyle, D., Hood, P., Marsh, D.* (2010). Content and language integrated learning. Cambridge: Cambridge University Press.

Coyle et al., 2010 – *Coyle, D., Hood, Ph., March, D.* (2010). CBSL: Content and Language Integrated Learning. Cambridge, Cambridge University Press, 170 p.

Dalton-Puffer, Smit, 2013 – *Dalton-Puffer, C., Smit, U.* (2013). Content and language integrated learning. *A research agenda. Language Teaching.* 46 (04): 545-559.

European Commission – European Commission. White paper on education and training. Teaching and learning: Towards the learning society. [Electronic resource]. URL: https://files.eric.ed.gov/fulltext/ED461011.pdf

Kanybekovna et al., 2020 – *Kanybekovna, O.L., Nuralievna, K.A., Valerevich, G.V., Yklasovich, B.Y., Nuralievna, K.G., Bissenbayeva, Z.* (2020). Development of Electronic Resources on the Formation of Personal Qualities of Schoolchildren. *Journal of Intellectual Disability – Diagnosis and Treatment.* 8(4): 777-783. DOI: 10.6000/2292-2598.2020.08.04.21

Mehisto et al., 2018 – *Mehisto, P., Marsh, D., Frigols, M.* (2018). Uncovering CBSL: Content and Language Integrated Learning in Bilingual and Multilingual Education. Oxford: Macmillan.

Meyer, 2016 – *Meyer, O.* (2016). Introducing the CBSL Pyramid: Key Strategies and Principles for Quality CBSL Planning and Teaching. Basic Issues in EFL-Teaching and Learning, pp. 11-29.

Mukhametkaliyeva et al., 2022 – *Mukhametkaliyeva, S., Smankulova, Zh., Kidirbayeva, Kh., Ismagulova, N., Bissenbayeva, Zh.* (2022). Discursive strategies of using numerological expressions and paroemias. *XLinguae.* 15. 129-138. DOI: 10.18355/XL.2022.15.04.12

Nazarova, 2015 – *Nazarova, M.V.* (2015). Experience of using the CBSL methodology in teaching English. Disciplines: Linguistic and methodological aspects: Collection of scientific articles. Is. 31. Tver: Tver State University, pp. 63-67.

Ospanova et al., 2020 – *Ospanova, Z.B., Tolybayeva, K., Nurkenova, S., Duisekova, K., Baltabayeva, G.* (2020). Lingua and culture study research on indirect communication cognitive metaphor. XLinguae.

Polenova, Postukyan, 2014 – Polenova, A.Yu., Postukyan, M.M. (2014). On the problem of early language professionalization of bachelors in the field of economics. *Journal of Economic Regulation.* 5(1): 128-133.

Ryskulbek et al., 2021 – *Ryskulbek, D., Ermekova, T., Alibekova, L., Bektimirova, S., Togzhanova, L., Ziak, P.* (2021). Functional and parametric mapping of the semantics of phraseological units in intercultural space. *XLinguae.* 14. 155-171. DOI: 10.18355/XL.2021.14.04.11

Salekhova, Grigorieva, 2013 – Salekhova, L.L., Grigorieva, K.S. (2013). Content and Language Integrated Learning as the basis for the formation of professional discipline competence of students of technical universities. Discipline for professional purposes: traditions and innovations: collection of art. II correspondence. Republ. The Symposium. Kazan: KFU, pp. 89-94.

Shoibekova et al., 2020 – *Shoibekova, G.B., Yermekova, T.N., Satbekova, A.A., Odanova, S.A., Malik, M.* (2020). Latin borrowings as a linguistic problem: approaches, reasons, typology. *XLinguae.* 13(2): 149-156.

Smith, 2015 – *Smith, U.* (2015). English as a Lingua Franca in Higher Education. A Longitudinal Study of Classroom Discourse. Berlin, De Gruyter Publ., 150 p.

Thompson, Simmons, 2015 – *Thompson, T., Simmons, N.* (2015). Family and Friends, Oxford University Press.

Wolff, 2014 – *Wolff, D.* (2014). CBSL: Bridging the gap between school and working life. In D. Marsh & D. Wolff (Eds.), Diverse contexts-converging goals. CBSL in Europe (pp. 15-25). Frankfurt am Main, Germany: Peter Lang.

Yurasova, Gorbacheva, 2015 – *Yurasova, E.S., Gorbacheva, E.A.* (2015). CBSL technology in English lessons. XIX Tsarskoye Selo readings: sat. tr. Conferences. St. Petersburg: Leningrad State University, pp. 359-362.

Zimnaya, Zemtsova, 2008 – *Zimnaya, I.A., Zemtsova, E.V.* (2008). Integrative approach to the assessment of the unified socio-professional competence of university graduates. *Higher education today.* 5: 14-19.