



Received: July 10, 2022
Accepted: August 23, 2022
Available online: September 25, 2022

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A MODEL OF TEACHING ENGLISH IN THE HIGHER EDUCATIONAL SYSTEM BASED ON THE CLUSTER APPROACH

ANNOTATION

The reforms taking place in Uzbekistan, along with the development of industrial production, are first of all reflected in the educational system. The goal of our research is to establish cooperation of the educational system institutions with production enterprises. In order to improve the quality of training of highly qualified personnel and to promote foreign cooperations, it is important to achieve an international level in foreign languages training. The research was carried out in 2020-2022, and 12 educational institutions of our Republic participated in it. The main task of our conducted research is to create a modular system based on cluster approaches in teaching English, to develop a mechanism for teaching English based on a cluster approach especially in the field of training biology specialists at the higher educational institutions. Theoretical, empirical and qualitative methods such as systematic analysis, pedagogical diagnosis, interview, scientific forecast, modeling and data processing, interpretation and correlational analysis were used in the research process.

According to the results of the conducted research, mutual cooperation relations were achieved between students and teachers of higher educational institutions, students of general secondary schools and academic lyceums and

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OLIIY TA'LIM TIZIMIDA INGLIZ TILINI KLASTERLI MODEL ASOSIDA O'QITISH

ANNOTATSIYA

O'zbekistonda amalga oshirilayotgan keng ko'lamli islohotlar jarayoni sanoat, iqtisodiyot va ishlab chiqarishni rivojlantirish bilan bir qatorda ta'lim sohasida ham o'z samarasini ko'rsatmoqda. Ta'lim tizimi va mazkur sohalar o'rtasidagi o'zaro hamkorlik aloqalarini va raqobat muhitini yanada mustahkamlash yuqori malakali kadrlar tayyorlash sifatini oshirishda muhim omil sanaladi. Bu borada chet tillarni puxta egallagan mutaxassislariga bo'lgan talabning ortib borayotgani hali-hanuz o'z dolzarbligini yo'qotgani yo'q. Bugungi davr ta'lim tizimining barcha bosqichlarida chet tillarni uzluksiz o'rganishni tashkil qilish, shuningdek, o'qituvchilar malakasini oshirish hamda zamonaviy o'quv-uslubiy materiallar bilan ta'minlashni yanada takomillashtirishni taqozo etadi. O'quv muassasalarida chet tillarini, xususan, ingliz tilini yangi innovatsion va ilg'or pedagogik texnologiyalar asosida o'qitish ta'lim samaradorligini oshirish barobarida dars sifatini yanada yaxshilaydi. Maqolada xalqaro miqyosdagi chet tillarni o'qitish muhim ahamiyatga egaligini inobatga olgan holda, ingliz tilini talabalarga to'laqonli o'rgatishda klasterli yondashuvlarga asoslangan modulli tizimni yaratish, biologiya ta'lim yo'nalishi talabalariga ingliz tilini klasterli yondashuv asosida o'qitish mexanizmini ishlab chiqish kabi masalalar muhokama etilgan. Tadqiqotlar 2020-2022-yillarda amalga

employers of specialized industrial departments. As a conclusion, it can be said that the effective method of teaching English in non-philological education areas based on the cluster approach in accordance with specialties was verified by statistical methods during the research.

Key words: teaching English, higher education, cluster approach, continued education, model, module, biological sphere, specialized industrial departments.

oshirilgan bo'lib, unda respublikamizdagi 12 ta ta'lim muassasasi ishtirok etdi. Tadqiqot mobaynida samaradorlik natijalariga erishishda tizimli tahlil, pedagogik diagnostika, interv'yu, ilmiy prognoz, modellash kabi matematik-statistik va ma'lumotlarni qayta ishlash, interpretatsiya hamda korrelyatsion tahlil singari nazariy, empirik va kvalimetrik usullarlardan foydalanilgan.

Tadqiqot natijalariga ko'ra, OTM talabalari, turli soha ixtisoslik kafedralari va xorijiy tillar kafedralari o'qituvchilari va ish beruvchilar, umumi ta'lim maktablari va akademik litsey o'quvchilari hamda o'qituvchilarining o'zaro hamkorlik munosabatlariga erishildi. Aytish mumkinki, nofilologik ta'lim yo'nalishlarida ingliz tilini klasterli yondashuv asosida mutaxassisliklarga mos holda o'qitish samarali metod ekanligi tadqiqot davomida statistik usullar orqali tahlil etib borilganligi bilan izohlanadi.

Kalit so'zlar: klaster, yondashuv, uzluksiz ta'lim, model, modul, usul, innovatsion, nofilologik ta'lim.

INTRODUCTION

Leading scientific centers and researchers in the world are carrying out scientific research on the internationalization of the personnel training process related to the development of cooperation based on cluster approaches in the system of comprehensive education and production integration. According to the tasks defined in the UNESCO Global Convention on Education (2019) [Abdisamatov A., 2022; 30], a special attention should be paid to learning a foreign language at educational institutions based on the cluster system. It is proved that education enables young people to enhance creative thinking skills and innovative development. Accordingly, in connection with the development of continuous education, integration of science and production, scientific research is being carried out in promising directions to improve the mechanisms of forming the scientific and theoretical foundations of the innovative cluster in the system of continuous education [Mikhailova M., 2018; 49].

Innovation clusters in the educational system are higher education and scientific research institutions located in a certain environment, including production, where all participants in the chain system created (scientific institutions, small innovative companies, testing centers, centrally used equipment, product certifiers) laboratories, higher educational institutions and centers that train specialists and send them to places, intellectual property agencies, etc.) are interactive and collaborative activities from the beginning to the end of creating an innovative product [Anistsyna N.N., 2010; 91]

It is actually that the last stage of the continued educational system is higher education. As a continuation of teaching English in step-by-step modules based on the cluster approach, teaching English to students of non-philological education, in

particular, biology, based on cluster approaches, was determined in the tasks of the research which was held by us. A student who has studied English in the upper classes (10-11 grades) based on the cluster approach, studies English at the university system as a continuation of this system [Kushieva N., 2020; 78].

METHODS

The principles noted in the modular system formed on the basis of our experimental work and systematic training based on the module were taken as a basis and efficiency indicators were achieved. According to this system, communication in English (General English), description of specialized resources in English (Introduction to the biological sphere), being able to express and communicate one's opinion in the specialty (Communicating in biological sphere), mastering foreign resources on agriculture and expanding one's worldview (Developing natural sciences outlook), providing information about industry news and technologies in English (Integration of education and production) are supposed to have such aspect (see Table 1).

Table 1. Modular stages of teaching English to the students of biological sphere

Module number	Modules (General themes)	Hours
1	General English	126
2	Introduction to the biological sphere	126
3	Communicating in biological sphere	126
4	Developing natural sciences outlook	126
5	Integration of education and production	126
Total: 5		630

1. General English.

During these studies, the General English module focused on the development of communication skills of biology students in professional and non-professional situations, interviews, conversations, telephone conversations, the use of gestures and reading various texts, and the development of communication skills by creating simple applications (see Table 2).

Table 2. Themes of the module "General English"

№	Themes	Dedicated hours	
		Auditory	Independent
1.	Greeting and introducing	10	6
2.	Talking about your background	8	4
3.	Relations and conversations	8	6
4.	Socializing getting to know each other	6	4
5.	Socializing through technology	4	4

6.	Hobbies and personal interests	6	4
7.	Body language	6	8
8.	How to network at work	10	4
9.	Dealing with different channels	8	4
10.	Addressing cultural gaps	10	4
	Total	78	48

A total of 126 hours have been allocated for training under this module, of which 78 hours are classroom hours and 48 hours are independent learning. Training topics and tasks were selected based on the conducted experimental work (see Table 3).

The system of exercises and tasks developed on this basis was tested in groups isolated in experimental areas. The exercises developed for this module focused on the formation of listening and speaking skills. The obtained results were compared with the control groups, and comparative indicators of the results were determined. In addition to this module, the following tasks were worked on with the experimental groups:

On the topic "How to network at work", an assignment was given in the context of "write a business letter" using the phrases given below.

Write your own business letter by using the given key phrases

I am writing to ask about ...

We would like to ...

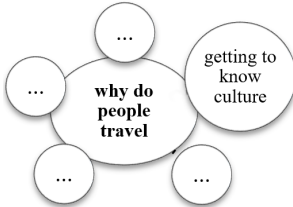
Please, let me know if ...

I would be grateful if you could ...

Please, include ...

I look forward to hearing from you ...

Table 3. Assignments for experimental groups on the topic "Learning about the world"

Name of the activity	Task	Used methods
Warm-up	Theme: Learning about the world	
	Answer the starter questions. 1. Do you think that travelling is the best way to learn the world? 2. Why do you think so? 3. What types of travelling do you know? 4. Why do you think people travel?	Method of giving instructions
Mind-map	Fill in the mind map. 	Brainstorming method

Matching the words with the definitions	Match the following words			
	1) trip (noun)	α) to go from one place to another, visiting different places	Insert method	
	2) journey (noun)	β) an occasion when you go somewhere and come back again		
	3) travel (verb)	γ) a long journey to a distant or unknown place, especially over water or through outer space		
	4) voyage (noun)	δ) an occasion when you travel from one place to another, usually having a long distance		
	5) tour (noun)	ε) a travelling by asking for lifts from vehicles that pass by you		
	6) hitch-hiking (noun)	φ) a journey for pleasure, during which you visit several different towns, areas		
Experience on travelling	Work in small groups. Decide whether the sentences are right (R) or wrong (W) and write how far you are sure in your answers.			Working in groups
	Sentences	R/W	Sure%	Gain
	I am planning a travel to London.			
	My brother travels to France once a year.			
	A travel broadens your world outlook.			
	Aziz is fond of travelling .			
	You should write about your travels.			
	TOTAL SCORE			
PPT	Make a poster presentation about a place you would like to visit. Make sure that you include a title, the reason of your going to that place.			PPT method

This module focused on getting students interested in learning English and making it easier to master the next steps. The reason is that not all students admitted to a higher educational institution have the B1 English language proficiency level set by SES (State Educational Standard). This module and its topics and exercises defined in it are focused on learning general English.

2. Introduction to the biological sphere.

"Introduction to the biological sphere" is taught in the 2nd semester of the 1st stage. The allocated class time for this semester is 78 hours. This semester focused on students, future biology majors, understanding their field and communicating key information to their peers and other groups. In this module, students will develop their language skills, including communicating their knowledge in a critical manner and English learning knowledge in such areas as, critical thinking, gathering information,

problem solving, presenting ideas and searching for information, cause and effect while learning the language.

Lessons were created taking into account the opinions of teachers with scientific degrees and experts in the field of biology education, and attention was paid to the elaboration of developing topics under the specialty of natural sciences. A system of exercises within these topics was developed (Table 4).

Table 4. Themes for the module “Introduction to the biological sphere”

Themes of biological field	Themes in the English language		Hours	
	Experimental group	Control group	Auditory	Independent
Development of Natural Sciences	Development of Natural Sciences	Theatre	10	6
Soil, water, seeds	Soil, water, seeds	British museum	8	4
Plant care	Plant care	Library	8	6
Plant products	Plant products	Great Britain	6	4
Animal world	Animal world	Mark Twain	4	4
Animal grain	Animal grain	Sport	6	4
Animal health	Animal health	Health	6	8
Weeds, pests and diseases	Weeds, pests and diseases	Holidays	10	4
Seasonal development	Seasonal development	My profession	8	4
Harvest	Harvest	Cambridge university	10	4
Total			78	48

Table 5. Assignments for experimental groups on the topic “Harvest”

Name of the activity	Task	Used methods
Warm-up	Theme: Harvest	
	Discuss these questions. 1. When do farmers harvest crops? 2. How do farmers gather crops during harvest?	Method of giving instructions
True (T) or False (F) statements	According to the distributed harvest summary report, mark the following statements as true (T) or false (F). 1. ___ The crops all have the same package type. 2. ___ None of the crops were rained on. 3. ___ Field #2 produced the smallest amount of wheat.	Step-by-step method

Find the words best fit to the blanks.	Read the sentence pair. Choose where the words best fit the blanks. 1. reap/mature A. _____ the crops in six months. B. Some plants take longer to _____ . 2. chaff/harvest A. The annual _____ is the next month. B. This machine removes the unusable _____ . 3. tons/bales A. There were many more _____ of hay this year. B. How many _____ of wheat were harvested?	
Find the word similar in meaning.	Write a word that is similar in meaning to the underlined part. 1. This year's <u>quantity of crops produced</u> was twice last year y ____ d. 2. <u>Removing unusable parts from</u> wheat makes it edible _ h _ _ s _ _ n _ . 3. Instead of gathering the crops in bales, we left them in <u>organized piles</u> _ t a _ _ _ . 4. When you go to the market, get 2 <u>units of measurement equal to 9.3 Gallons of grain</u> b _ s _ _ _ _ . 5. When you place in order, tell them what <u>form of packaging</u> to use p _ _ _ _ _ t _ _ _ .	TBA method
Act out roles	With a partner act out roles below. <i>Use statements such as</i> - We have ... for sale. - We will approve ... by - This is our ... harvest. Student A: You are a farmer. Talk with student B about: • a crop report • tons sold • your opinion of a harvest Student B answers.	Storyline method

Simple words and concepts were chosen for the entrance to the specialty, in order to increase students' interest in learning the language by teaching the majors in English and directing them from simple to complex based on the cluster system. Teaching the language to biology students according to their major has made it easy to learn English.

The following exercises are based on the topic "Harvest", and the words and concepts presented in the exercises are related to this topic and because they are reflected in the exercises that develop language skills and authentic materials, they are easily absorbed by students, and the exercises developed for this module focus on building writing (reading) skills.

Among the topics developed within the module "Introduction to the biological sphere" and the methods selected within the exercises, such methods as "instruction

method", "exercise method", "explanation (story) method", "step-by-step method" were used. "For example, the exercises developed for the topic "Harvest" under this module see in Table 5).

In the course of our research, it was observed that, based on additional assignments, students in the field of biology were introduced to concepts and scientific issues from this module in accordance with their specialization in English, so students not only gained the competence to use words and concepts in English appropriate to their fields when a situation of communicating in specific situations was created, but also they thoroughly mastered their specialty in English.

In the process of teaching a foreign language, communicative skills (reading, writing, speaking, listening) and lexical exercises are used to develop students' language skills and knowledge of the field. The program specifies the minimum number of lexical items for each step. According to the requirements of the program, training in the types of speech activities is organized in the sequence of teaching oral speech - reading - writing. For this reason, students learn new vocabulary first in speaking or the lexical aspect of speaking is taught. Then these new words are learned and strengthened in reading and written speech.

3. Communicating in the biological sphere.

"Communicating in biological sphere" is a communicative module of language teaching, which is effectively used today in Europe and the USA. As the name implies, this module is based on interaction, where reading, writing, speaking and understanding dialogues are essential, which form the basis of any language learning. Of course, in this module, teachers pay more attention to the last two methods (conversation and understanding of dialogues) and complex word devices and serious lexis are not encountered in the activities dedicated to this module. The only problem encountered in this module is that students in the experimented groups mastered the words related to the field, students easily understood the content of the texts related to their specialties, but it was difficult for them to engage in serious communication with the field specialist. The purpose of this module is primarily to overcome the fear of communication.

On the basis of the above-mentioned modules and the development of students' interest in learning the language, as well as the indicators of mastering the subjects taught in the educational fields, the topics of the English language classes in the "Communicating in biological sphere" module were also improved. At this point, it should be noted that in the control group, students' interest in language learning and division into small groups was not observed, because, as mentioned above, the students of the control group were trained on the basis of the existing curriculum in the usual (traditional) way (Table 6).

Under this module "Communicating in biological sphere", special attention was paid to the system of connecting students' learning skills with production. Based on the cluster approach, teaching English based on the modular system, dividing students into separate subgroups according to their chosen specialties, and according to the interests of these subgroups, educational programs were created, a sequence of topics

and exercises were developed.

Table 6. Themes for the module “Communicating in biological sphere”

Themes of biological sphere	Themes in the English language		Hours	
	Experimental group	Control group	Auditory	Independent
Development of animal industry	Development of animal industry	Culture	10	6
Beef industry	Beef industry	Newspaper	8	4
Poultry industry	Poultry industry	Computer technology	8	6
Dairy industry	Dairy industry	English grammar	6	4
Development of sheep breeding	Development of sheep breeding	My country	4	4
Equine industry	Equine industry	London	6	4
Sustainable farming	Sustainable farming	Industry	6	8
Organic farming	Organic farming	Tashkent is the capital of Uzbekistan	10	4
Soil conservation	Soil conservation	British meals	8	4
Salts and acidity	Salts and acidity	Ecology	10	4
Total			78	48

Then one of the subgroups was related to the direction of animal husbandry. Future biologists who have mastered concepts such as plants, water, and soil in English were able to communicate through the above concepts in this module, and special attention was paid to scientific communication, which is important for biologists who want to represent their profession in the press or at conferences, and in the formation of these skills, the types of speech activities presented in the above modules in addition, in this module, exercises aimed at forming writing skills were developed.

Communication in the field of natural sciences is important, because cooperation cannot be developed without communication with other institutions and countries. In the modules mentioned above, future biology specialists learned to communicate in English (General English), general concepts about the specialty (Introduction to the biological sphere), and now in this module they learned to communicate in the general agrarian and agricultural sphere (Communicating in biological sphere).

The authentic material "Farmers' struggle against salt and acid" (an article from a newspaper) was presented to students on the subject "Salts and acidity":

Activity 1. Choose the correct answers based on the given article/Read the newspaper article about Farmers' struggle against Salt and Acid. Then, choose the correct answers.

1. What changed the soil's primary salinity?
- A. Saline deposits in the soil

- B. Acids from rainwater
- X. Minerals from well water
- Δ. Toxins from fertilizer
- 2. How does the farmer improve his soil?
- A. He plants fewer crops.
- B. He adds lime to the soil.
- X. He irrigates in the summer.
- Δ. He increases the salinity.
- 3. When can you infer the crops will grow properly again?
- A. when farmers stop irrigating
- B. when the pH value of the soil is lowered
- X. when sulphur content in the soil increases
- Δ. when farmers purify the well water

Activity 2. Write a word that is similar in meaning to the underlined part

1. Plants will not grow in soil with too much alkaline metal _ _ _ i _ m.
 2. Some substances are harmful to plants t _ _ _ c.
 3. Irrigation leads to an increase in the salt level changed by land use and management _ _ con _ _ _ _ s _ l _ _ _ _ _ .
 4. Chemicals can alter soil's measure of acidity or alkalinity: _ h _ a _ _ .
 5. The soil has high metallic element levels _ ul _ _ _ .
 6. What is the concentration of salt the soil? s _ _ _ _ t _ .
- Activity 3. Write a word that is similar in meaning to the underlined part.
1. Plants will not grow in soil with too much alkaline metal _ _ _ i _ m.
 2. Some substances are harmful to plants t _ _ _ c.
 3. Irrigation leads to an increase in the salt level changed by land use and management _ _ con _ _ _ _ s _ l _ _ _ _ _ .
 4. Chemicals can alter soil's measure of acidity or alkalinity: _ h _ a _ _ .

4. Developing natural sciences outlook.

"Developing natural sciences outlook" is devoted to the 2nd semester of the 2nd stage of biology students. This module focused on developing oral and written skills of future professionals in their chosen field and focused on developing oral (telephone interview, teleconference, video conference) communication and written (e-mail, letters, formal requests, applications) skills in the field of biology. Moreover, according to the goals and tasks defined in this module, the experimental work carried out on the basis of the program created on the basis of the cluster approach was recorded as a continuation of the results of the module described above (see Table 7).

In this module, the following types of texts are offered for the development of students' knowledge in the agricultural sector: letters, messages, advertisements (audio/video/print), letters of recommendation, presentations on agricultural issues, video conferences, product descriptions. In addition, the following listening, speaking, reading, writing, skills-forming tasks were worked out with experimental groups on "Developing natural sciences outlook".

"What is bioengineering?" – watch the video without sound and answer the

following questions using the "brainstorming" method from the above interactive methods, working in groups:

1. Watch the video without its sound and predict the meaning of it. What the video is about?

2. Provide words, word combinations, phrases, terminology that can come across in the video.

3. Watch the video with its sound compare your thoughts with it.

Authentic material "Animal bioengineering conference schedule" was prepared for the topic "Bioengineering" and exercises were developed based on this material:

Animal Bioengineering

National Association of Bioengineers (NAB) Gulistan State University

Friday March 18

4:30 p.m. Registration

5:30 p.m. Keynote Address

Keynote speaker Professor Abdullaeva will describe her research in genetic engineering

Group B: Room 106

Biotechnology applications in agriculture. Professor Ismoilov discusses three promising new areas for biotechnology in agriculture.

2:00 p.m – 4:00 p.m. Poster session

Exhibition Area

Professor Azimov will discuss societal concerns about bioengineering. How might we face greater regulation of our research and even prohibition?!

In addition, students developed the skills to describe the cause and effect of a problem in the field, to draw up a conference schedule, and to briefly comment on the opinions of others. In the control group, the above-mentioned situation was repeated, as training was carried out in the traditional way on subjects completely unrelated to students' chosen specialties. With the help of the exercises, the students in the experimental group gained the ability to express their opinions in English on the subject of "Bioengineering". According to the results of this module, positive outcomes were observed in the English language learning indicators in the experimental groups.

Table 7. Themes for the module "Developing natural sciences outlook"

Themes of biological sphere	Themes in the English language		Hours	
	Experimental group	Control group	Auditory	Independent
Bioengineering	Bioengineering	A monument of friendship	10	6
Diagnosing crop problems	Diagnosing crop problems	Newspaper and Radio	8	4
Plants and animals	Plants and animals	Theatre, Cinema and Music	8	6
Artificial products	Artificial products	English grammar	6	4
Climate and weather	Climate and weather	Motivation and Inspiration	4	4

Preparing, seeding and planting	Preparing, seeding and planting	The Aral Sea	6	4
Sustainable farming	Sustainable farming	Conference participation	6	8
Feed and nutrient	Feed and nutrient	Hotels	10	4
Food security	Food security	Professions	8	4
GMO	GMO	State System of Uzbekistan	10	4
Total			78	48

5. Integration of education and production.

Integration of science and production biology course is intended for students of the 3rd stage, and at this stage the English language is studied only for 1 semester. The focus of this module is on developing language skills, participating in tenders, conducting meetings, submitting reports, and building capacity in the fields of biology.

The purpose of the module is to develop students' public speech, to enable the future biology specialists to describe in English the process from product preparation to production. This, in turn, became the basis for teaching English based on cluster approaches. That is, the process from product preparation to production was mastered by students in the higher educational system not only through the studied specialty subjects, but also in English, and the ground was created for the development of professional personnel. Accordingly, the experimental work conducted on the module, which was created on the basis of the cluster approach, according to the goals and tasks defined in this module, gave positive results as a continuation of the results of the module mentioned above (see Table 7):

In this module, as well as the above mentioned modules, product preparation and production orientation are reflected in exercises that develop language skills. In addition, the following tasks were used with the experienced groups on Integration of Education and Production.

The authentic material "A letter from an accountant to a farmer" on the topic "Agribusiness management" was distributed to students. Read the letter from an accountant to a farmer. Then, mark the following statements as true (T) or false (F):

- 1 ___ The farmer earned \$168,745 last year.
- 2 ___ The farmer has over \$ 450,000 in debt.
- 3 ___ The farmer has a negative net worth.

Match the words (1-5) with the definitions (A-E)

- 1 ___ interest payments
- 2 ___ gross farm revenue
- 3 ___ total production expenses
- 4 ___ income
- 5 ___ loan

- A. the total of all costs
- B. the sum of all money from sales
- C. money that a person earns
- D. money that is paid to a lender

E. money that is borrowed

Write a farmer's financial summary using authentic material "A letter from an accountant to a farmer". Include: income, expenses and debt.

Focused on the integration of education and production, the module is based on the development of students' creativity and independent thinking. The exercises conducted within the module formed on the basis of this goal served as the basis for the emergence of positive results. According to the results of the training, the application of modules formed on the basis of cluster approaches in non-philological educational areas of higher educational institutions, in particular, in biology areas, enables to achieve positive results.

RESULTS AND DISCUSSION

Within these experiments, the new approach is the basis of a number of concepts of module-based training of specialists, and from this point of view, the training process is aimed at students' sequential mastering of the elements of professional activity in accordance with the content of the modular education until the end of the training process or within a specific subject. That is, higher education taught under 4-level modules; during school-lyceum it is taught under 5-level modules with the focus on the cluster approach. Based on the teaching system in the modules oriented on this cluster approach, the following objectives are pursued:

- ✓ ensuring the continuity of teaching (between subjects and within the subject);
- ✓ creating sufficient conditions for independent learning of educational material;
- ✓ acceleration of training;
- ✓ achieve effective mastery of science.

According to the results of the research, the following main achievements were achieved:

■ Based on the empirical assessment of organizational conditions and pedagogical possibilities of innovative development of integration of education, science and production, a model of the English language teaching under the continuous education system based on cluster approaches was developed;

■ A 5-level (General English, Introduction to the biological sphere, Communicating in biological sphere, Developing natural sciences outlook, Integration of science and production) modular system of teaching English to students of the higher educational system based on the cluster approach was created.

CONCLUSION

Training an educated, modern-thinking young generation based on the goals and tasks set in the continuous education system is important in creating a system aimed at further integration of the Republic into the world community. Thus, according to the results of the research, the application of the modules formed on the basis of cluster approaches in the non-philological educational areas of higher educational institutions, in particular, in the areas of biology, made it possible to achieve positive results. The reliability of the research results and conclusions is explained by the fact that the applied approach, methods and data are obtained from official sources, that

the presented analyses and the effectiveness of experimental tests are scientifically based on mathematical-statistical methods, that the conclusions, suggestions and recommendations are put into practice, and that the obtained results are confirmed by authorized structures.

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