



Resource-Based Learning of Students in The System of Cross-Cultural Training of Future Specialists in Fitness and Recreation

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ABSTRACT

The article considers the problem of introduction of resource-based learning of students in the practice of the educational process of higher education institutions that provide training under the educational program «Fitness and Recreation». The aim of the study is to clarify the place of RBL of students in the system of cross-cultural training of fitness and recreation professionals. The study involved 233 students of higher education institutions of Ukraine. Research methods: theoretical, empirical and methods of mathematical data processing. The essence and place of resource-based learning of students in the system of cross-cultural training of future specialists in fitness and recreation were determined, a subsystem «Resource-based learning of future professionals in fitness and recreation» was developed, which consists of three interrelated components: target, implementation and performance; mechanisms of information search for acquisition of cross-cultural knowledge in the field of fitness industry are considered.

Keywords: resource-based learning, cross-cultural training, specialist, fitness and recreation, cross-cultural knowledge, fitness industry, cross-cultural competence, information search.

1. INTRODUCTION

The educational process in higher education institutions that train specialists in fitness and recreation is based on the understanding of the fact that today's students are tomorrow's professionals, which will direct their activities to achieve and maintain the proper (high) level of physical condition of representatives of different age and social groups by organizing and conducting: comprehensive measures for the formation of a healthy lifestyle; work on the introduction of physical culture at enterprises, at the place of residence and in areas of mass recreation of people; various sports and entertainment holidays, competitions, contests, shows taking into account the national traditions of Ukraine. Undoubtedly, their professional activity is aimed at exchanging cultural achievements, establishing direct contacts with

specialists from around the world, cooperation in international health, social projects, etc. Therefore, the emphasis on cross-cultural training of future specialists in fitness and recreation, the purpose of which is: formation of cross-cultural competence of students; increasing knowledge about culture, cultural differences and real problems that occur in the interaction of different cultures; acquisition of foreign language skills, effective functioning in a multicultural world, understanding of people from other cultures.

At the same time, in the conditions of global changes there is an intensive search for ways to develop higher education in Ukraine as a basis for economic, social, spiritual, intellectual, cultural development of society and the state. One of the effective ways to improve the quality of higher education for students is the transition to resource-based learning (RBL) in the process of cross-cultural training of future professionals in fitness and recreation.

The issue of introduction of RBL students in the practice of the educational process of higher education is the subject of research of many Ukrainian and foreign scientists (Shu-Nu Chang, 2007; Kononets et al., 2021; Nestulya et al., 2021; Rumahlatu et al., 2021).

Generalizations of research on the issue of resource-based learning have revealed a large number of original interpretations of this concept. Thus, American scientists M. Hannafin and J. Hill under the term «RBL of students» understand the creation of a unique context for optimizing learning, combining tools for finding and interpreting information from different resources, consistent with the process of knowledge research and different educational models. Indonesian scientists D. Rumahlatu, K. Sangur note that «The RBL is one of the most important learning models used during this time, and it requires students to learn from a variety of sources to access and communicate using technology» (Krzystof, 2007; Rumahlatu et al., 2021).

Ukrainian researchers (Kononets et al., 2021) interpret RBL as a dynamic process of organization and stimulation of independent cognitive activity of students on mastering the skills of active transformation of the information environment, which provides for the optimal use of the triad «student-teacher-librarian» of consolidated personnel, material and technical, educational and methodical, information and digital resources. The main characteristic of RBL in the process of cross-cultural training of future specialists in fitness and recreation is the fact that it can be considered as a set of methods and tools for teaching students, aimed at a holistic approach to the organization of the educational process, which focuses not only on the acquisition of cross-cultural knowledge and the acquisition of certain communication skills, but also on training skills of independent and active transformation of the information environment by searching and practical application of a wide range of information resources and digital technologies (Kononets et al., 2020).

The study will identify the levels of formation of search and research competence in future specialists in fitness and recreation and trace the dynamics of changes in the levels of formation of search and research competence in future specialists in fitness and recreation after the introduction of resource-oriented learning subsystem.

2. MATERIALS AND METHODS

The aim of the study is to clarify the place of RBL of students in the system of cross-cultural training of fitness and recreation professionals.

The study was conducted during the 2020-2021 academic year at Poltava University of Economics and Trade (development of the concept of resource-oriented education of students in the system of cross-cultural training of future specialists in fitness and recreation, didactic support, methods of information retrieval, content of practical seminars), Poltava V. G. Korolenko National Pedagogical University, Poltava State Medical University involvement of students in the experimental implementation of the subsystem of resource-oriented learning - 233 people).

Research methods:

- theoretical: analysis and generalization of modern psychological-pedagogical and educational and methodical literature, normative-legal documents, to clarify the state of development of the problem of resource-oriented education of students in the system of cross-cultural training of future specialists in fitness and recreation, development and implementation of the subsystem «Resource-oriented training of future specialists in fitness and recreation»; synthesis, modeling, which made it possible to systematize and generalize information about the object of study, to form a terminological apparatus, to develop a subsystem;
- empirical: questionnaires, pedagogical observation in the process of educational and research activities of students in order to diagnose the level of formation of their research competence; interviews, surveys, pedagogical testing; pedagogical experiment (organizational, ascertaining, formative);
- mathematical statistics: for processing experimental data, their quantitative and qualitative analysis.

3. RESULTS AND DISCUSSION

The creation of the RBL subsystem of students in the system of cross-cultural training of specialists in fitness and recreation was based on the following provisions.

Culture as a resource of fitness service. In our study, culture as a set of unique historically formed knowledge should be considered as a resource of fitness service, after all, fitness centers and fitness clubs are a common organism in which there should be people who are able to set up communication at a professional level, especially cross-cultural, between different departments of the institution and visitors.

The importance of studying by future specialists in fitness and recreation of such discipline as «Fundamentals of management in the fitness industry» with the introduction of an additional module «Cross-cultural management in the fitness industry», whose main task is to focus on the use of this resource, i.e. not to neutralize or control cultural peculiarities (differences), but to teach students to build their work on them.

The need for cross-cultural knowledge. According to (Petrushenko, 2009), cross-cultural knowledge will help coordinate actions in work and study during contacts in which cultures as historically formed knowledge, values and experience are included in joint multicultural activities. Undoubtedly, cross-cultural knowledge is needed by modern fitness and recreation professionals to solve many problems, because they will be able not only to manage multinational and multicultural staff in fitness centers, but also to develop the fitness industry in different countries, negotiate, work with clients, deal with potential clients from around the world, etc. Therefore, for all professionals in fitness and recreation should be known motto “knowledge of the mentality of the opposite party is the key to success.

Integrity and continuity of cross-cultural training of future specialists in fitness and recreation. Cross-cultural training of students of the educational program «Fitness and Recreation» in Ukrainian higher educational establishments (HEE) is carried out in the conditions:

- 1) classroom work (disciplines «Foreign language for professional purposes», «Second foreign language», «Professional foreign language», «Current issues of history and culture of Ukraine», «Marketing in physical culture and sports», «Culturology», «Fundamentals of tourism and local lore» etc.);
- 2) extracurricular activities (student clubs and fitness centers, clubs, electives, trainings, seminars, round tables, workshops, conferences, educational activities, student projects, etc.);
- 3) practice (tourist and local lore practice, excursion practice, training practice, practice in recreation camps, undergraduate practice).

It should be emphasized that the term «cross-cultural training», according to (Shiyan, 2015), can cover the period from several classes to several semesters. In our opinion, given the urgency of preparing students for effective functioning and cooperation in the global environment of the fitness industry, overcoming conflicts based on cultural misunderstandings, cross-cultural training of future professionals in fitness and recreation should be organized continuously for the entire period for students in HEE. Continuity of cross-cultural training of future specialists in fitness and recreation is based on the concept of continuing education as a learning process throughout life, as an aspect of educational practice, which is a continuous process of human socio-cultural experience, professional development and retraining.

In our study, continuous cross-cultural training of future specialists in fitness and recreation is interpreted as a set of ways, means, methods and forms of acquisition, deepening and expanding the system of competencies for the successful organization of training, organizational, managerial and analytical activities with an emphasis on the practical application of knowledge, skills and abilities in the field of physical culture and sports, development of social and cross-cultural maturity, professional competence of students, education of tolerant attitude to multicultural reality, enrichment of their culture during the period of study in HEE, as well as the formation of a sustainable focus on lifelong learning and the continuous development of cross-cultural competence.

And RBL is a key vector of lifelong learning, as it is a process of organizing self-study of all comers using a variety of digital and online learning resources, Internet services, which contributes to the development of information culture (Nestulya et al., 2021). Note that cross-cultural maturity is seen by us as the ability of the future specialist in fitness and recreation to navigate freely in another culture, global fitness trends and overcome culture shock, to easily operate within it and not be embarrassed by different traditions, beliefs, attitudes, values and behaviors specific to a particular culture, ie the student is able to identify himself with another culture and is able to work in a multicultural society (Todorova, 2009).

Activation of information retrieval. Given the opinion of scientists, it should be noted that RBL promotes the active search for a variety of necessary for future fitness and recreation information from various resources: textbooks and teaching aids, fiction books, newspapers, magazines, media, movies, TV series, websites, blogs, online communities, electronic databases, etc.).

The task of resource-based learning in the process of cross-cultural training of future specialists in fitness and recreation is not only the search, collection, analysis and interpretation of information to achieve the educational goal, but also the construction of cross-cultural knowledge, their research, the formation of decision-making skills and cross-cultural literacy, which will contribute to the intellectual development of students, the development of self-regulation of educational (in the future - professional) activities of the fitness industry. The experience of independent search for information, independent learning in practice, no doubt, mimics real life, turns a student into an information hunter who builds knowledge and is able to solve problems with information tools (Kononets et al., 2021).

Analysis of research (Shu-Nu Chang, 2007; Kononets et al., 2020), made it possible to build in the system of cross-cultural training of fitness and recreation specialists following subsystem «Resource-based learning of future specialists in fitness and recreation». Under this subsystem, students of the educational program «Fitness and Recreation» will learn to interact with a wide range of different information resources, both traditional and digital, will gain cross-cultural knowledge that will be useful when working in the fitness industry (Fig. 1).

Target component	Implementation component	Effective component
<ul style="list-style-type: none"> •The purpose of RBL: information culture, digital and cross-cultural competence of future specialists in fitness and recreation •Tasks: search, collection, analysis and interpretation of information to achieve the educational goal; construction of cross-cultural knowledge, their research, formation of decision-making skills that will contribute to the intellectual development of students, the development of self-regulation of educational (in the future - professional) activities of a fitness industry specialist 	<ul style="list-style-type: none"> •main discipline "Modern information technologies" •classroom work, extracurricular work, practice •use of a wide range of information resources (printed, digital resources) •the main focus is on the acquisition of cross-cultural knowledge •RBL pedagogical technologies: web-quests, educational projects, network projects, cloud technologies, mindmapping, etc. 	<ul style="list-style-type: none"> •The result: the formation of future specialists in fitness and recreation "learning culture" as a certain climate that encourages active and productive learning; formation of skills of search, processing and analysis of cross-cultural information; development of cross-cultural and digital competence of students; digital educational environment of the university.

Fig.1: Subsystem «Resource-based learning of future specialists in fitness and recreation»

Figure 1 shows that the subsystem consists of three interrelated components: «Target component», «Implementation component» and «Effective component».

It should be emphasized that the key task of resource-based learning is realized mainly in the process of studying the discipline «Modern Information Technologies»: during these classes students learn to effectively search for information (educational projects, web quests), use modern Internet services (clouds, blogs, video hosting, communication in virtual communities, etc.) and digital technologies in general, and then transfer these skills to the learning process. other disciplines, for the acquisition of cross-cultural knowledge.

The emphasis in the implementation component of the subsystem «Resource-based learning of future professionals in fitness and recreation» is as follows:

- scientific and pedagogical staff of the HEE act as a mediator (guide in the process of searching for information and acquiring cross-cultural knowledge);
- use of a large number of different sources of information;
- learning incentive is a question that is posed to the student (independently or with the help of a teacher);
- independent multi-vector information search (information search methods);
- the main attention is paid to the process of acquiring knowledge;
- the transition of the amount of information obtained in its quality (application of processing methods, information analysis);
- use of pedagogical technologies of resource-based learning (web quests, educational projects, network projects, cloud technologies, mindmapping, etc.) (Shu-Nu Chang, 2007; Kononets et al., 2020).

Paying attention to the essence of resource-based learning, which is to give the student the role of researcher of the information environment and to the teacher - the role of a guide, involvement of freelance librarians in the process of information retrieval and ensuring the freedom of choice of information resources for acquiring cross-cultural knowledge. We should agree with researchers that argue about resource-based learning being a set of information retrieval systems that allow the search and selection of information in various educational materials and the organization of access to them. The dominant feature of resource-based learning is the search for information for the student, in the process of which he is assisted by a teacher and a librarian (Kononets et al., 2020).

Involvement of librarians and powerful library resources of HEE to help find information has necessitated the definition of tasks for librarians and research and teaching staff who will implement resource-based learning in the process of cross-cultural training of future specialists in fitness and recreation:

- cooperation: librarians and scientific and pedagogical staff work on the formation of information culture of students and their cross-cultural competence;
- help: librarians and research and teaching staff help in finding information in solving problems that require information from many sources (printed and electronic);

- cataloging: librarians and scientific and pedagogical staff create and constantly update the catalog of information resources on cross-cultural issues and the fitness industry, while forming the ability of students to work with library catalogs and printed resources;
- continuity: librarians and scientific and pedagogical staff orient future specialists in fitness and recreation to continuous education, self-study, continuous self-improvement and provide the library with appropriate conditions for continuous cross-cultural training of students.

To acquire cross-cultural knowledge it is necessary to acquaint students with the principles and methods of information retrieval on the Internet (search engines and catalogs, portals, scientific information retrieval systems, information retrieval systems, content search of electronic libraries, etc.).

According to S. Graham, students should know that Internet search engines are divided into 2 categories: 1) resource directories; 2) search engines (Graham, 2012).

A resource directory is an organized collection of links by topic. The resource catalog is based on the principle of hierarchical (tree-like) organization of information, which is called a classifier, is compiled and maintained by specialists of the technical service of the resource. The disadvantage of its use in the process of searching for cross-cultural information is the low speed of information accumulation; searching for information takes a long time; low efficiency. Example: <http://www.bigmir.net/>.

Search engines are specialized servers designed to search for information at the request of users. Search engines create a dictionary (index) from words found in documents posted on the World Wide Web. So, in the index at each word the list of documents where this word meets is stored. Example: currently the most popular and most effective search engine – Google.

When teaching students to search for information, their attention should be focused on the concept of «search efficiency», which is measured by special indicators – pertinence and relevance. Relevance is nominated as the formal (object) correspondence of the found query document or the degree of correspondence of the query response. Pertinence is a subjective assessment by the user of the degree of conformity of the found information to his need or the usefulness of the found information to solve the problem. That is, a permanent document is a document that meets the needs of the search.

Real Time: Tips for Fast, Effective Internet Searches

Suzanne R. Graham

In Real Time: Tips for Fast, Effective Internet Searches

Suzanne R. Graham

It will be useful to acquaint students with the systems of scientific information retrieval, in particular, classified according to the organizational principles of modern information retrieval systems of scientific information (Vasiliev, 2009):

1. Professional systems (DIALOG-DataStar, STN International, Questel-Orbit, Lexis-Nexis etc.).
2. Aggregator systems (EBSCOhost®, ProQuest, Gale etc.).
3. Search engines for scientific periodicals (Elsevier, Springer, Blackwell, Taylor&Francis, Wiley, Cambridge University Press, Oxford University Press etc.).
4. Electronic libraries of scientific societies (IEEE, ACM etc.).
5. Institutional repositories of library consortia and universities (ArXiv.org, Organic Eprint etc.), as well as systems that support the concept of open access to information (DOAJ, Open Access Initiative etc.).
6. Library information retrieval systems, web portals of libraries, information centers and institutions.
7. Specialized search systems for scientific information on the Internet (Scopus, Web of Science, PubMed, Scirus, ScholarGoogle, Windows Live Academic Search, ScienceResearch.com, Ingenta-Connect, CiteSeer.IST, InfoTrieve etc.) (Vasiliev, 2009).

It is also advisable to acquaint students with the method of data mining such as «Web mining». In general, Web mining is the use of data mining methods to automatically find and extract information from Web documents and services. In this direction, according to (Krzystof et al., 2007), a lot of research is being done, due to two main factors: a significant increase in the amount of diverse information that appears on the World Wide Web and a great interest in e-commerce.

According to researchers, Web mining consists of such subtasks:

- finding resources – finding relevant Web documents. Resource retrieval is the process of finding and selecting data from text sources contained in the Web: such as e-news, newsgroups, tagged HTML text, and manual retrieval of Web resources. Resources also include online text resources made for researchers, text databases, etc.
- selection of information and pre-processing – automatic selection and pre-processing of information from found Web resources.
- generalization – automatic finding of general patterns both on separate web sites, and on a set of sites.
- analysis – verification and / or interpretation of the found patterns. Web mining is closely related to machine learning and data analysis (Krzystof et al., 2007).

Much of the useful cross-cultural information in the fitness industry is contained in modern social networks, such as specially created communities and discussions of people involved in fitness, as well as fitness trainers, fitness centers

that offer their services. Therefore, students should get acquainted with the peculiarities of searching for communities and discussions on Facebook. As you know, the social network Facebook allows users to create their own groups and community pages in which you can unite people by interests. A group (or so-called discussion) is a community in which users can communicate with each other, share information and interact, but only within a given topic, i.e. it has the characteristics of thematic discussions. One of the main disadvantages of these discussions is that they are not indexed by global search engines, so Facebook search has its own specifics, namely the use of a formalized query to find pages on the social network Facebook (Site: facebook.com Intext: community & (Keywords)) with further analysis of the HTML code of the page) and a special algorithm for finding discussions on the social network Facebook.

A convenient and useful search engine for information that students should familiarize themselves with is contextual search in documents: search in PDF documents, search in Word processor documents, search in web documents, search in SharePoint Online. In addition, students must distinguish and be able to perform informational, documentary and bibliographic search for information.

Summarizing the above, we believe that it would be appropriate and useful for future professionals in fitness and recreation practical seminar «Secrets of information retrieval». Note that such a seminar was held at the faculty, Poltava V. G. Korolenko National Pedagogical University, Poltava State Medical University. The following main issues were brought to the seminar:

- How to find the necessary information or what, where, when?
- Google Search Secrets.
- Algorithm for finding discussions on the social network Facebook.
- Search for information in documents.
- Find information in SharePoint Online.

The practical part was presented by variants of exercises «Five for search», which included groups of five questions, the answer to which was to be found on the Internet and to present the results of the work in the form of a presentation Sway.

Example of a «Five for search» option: Twenty world fitness trends. Find popular mobile fitness apps abroad. Which network is the leader in the number of fitness areas? Modern fitness technologies for health and recreation. When did fitness officially appear? In which country?

In addition, students had to describe the process of finding answers to questions (the last slide of the presentation is a scheme for finding information): how they formulated queries, what answers they received, which site addresses were first in the ranking, whether they found graphic information within the answer to the question, whether they used different languages to formulate queries, etc. The presented answers to the questions of each of the options were presented by the students to all participants of the practical seminar, so this form of control over independent work contributed to the enrichment of the treasury of cross-cultural knowledge in the fitness industry of each student. At the end, students were given a homework assignment: create a Sway presentation on «What you need to know when planning to work as a fitness trainer abroad», find and formulate 7-10 rules (text information), and find 10 images within the topic. The experience of organizing the educational process of studying the discipline «Modern Information Technologies», the introduction of pedagogical technologies of resource-based learning of students of the educational program «Fitness and Recreation» testified, that the main type of educational activity of students in the context of acquiring cross-cultural knowledge in the field of fitness industry is research, which provided for the use on parity rights of various printed and, above all, digital resources.

Experimental verification of the subsystem «Resource-oriented training of future specialists in fitness and recreation», which was conducted during 2020-2021 academic year. at Poltava University of Economics and Trade (development of the concept of resource-oriented education of students in the system of cross-cultural training of future specialists in fitness and recreation, didactic support, methods of information retrieval, the content of practical seminars), Poltava V. G. Korolenko National Pedagogical University and Poltava State Medical University (involvement of students in the experimental implementation of the subsystem of resource-oriented learning – 233 people), showed that in general the level of research and research competence of future specialists in fitness and recreation increased after the form, during which this subsystem is implemented.

Effective in the educational process of higher education institutions during the pedagogical experiment were: practical seminars «Secrets of information retrieval», «Scientific information retrieval systems», «Data mining method Web mining», «Cross-cultural education in the fitness industry: information retrieval strategies», «Fitness abroad», «Use of library resources in the system of cross-cultural training of future specialists in fitness and recreation», «Electronic libraries: the specifics of information retrieval», «Improving the efficiency of cross-cultural information retrieval»; development of joint research projects of teachers and students of cross-cultural topics in the field of fitness industry; the latest technologies for research and development, etc.

The degree of formation of research competence in future specialists in fitness and recreation is determined by gradation on three levels: high, medium and low.

A student demonstrates a high level if he / she has stable system knowledge in the field of cross-cultural information retrieval in the field of fitness industry and creatively uses them in the process of educational activity; freely masters and uses new ways of searching for information in non-standard situations; easily finds any information of the cross-cultural context.

A student demonstrates an intermediate level if he / she has knowledge in the field of cross-cultural information retrieval in the field of fitness industry and uses them in the process of educational activities to perform specific research tasks; seeks to master and use new ways of finding information in non-standard situations; but has some difficulty finding cross-cultural context information.

A student demonstrates a low level if he / she shows a minimum amount of knowledge in the field of information retrieval of cross-cultural topics in the field of fitness industry and uses them in the educational process to perform specific research tasks; does not seek to master and use new ways of searching for information, but uses the usual search; experiences significant difficulties in finding information in a cross-cultural context. The results of the pedagogical experiment are shown in table 1.

Table 1. Levels of formation of research competence in future specialists in fitness and recreation

Levels	Statement				Forming				Dynamics of change	
	CG		EG		CG		EG		CG	EG
	man	%	man	%	man	%	man	%	%	%
high	19	16,96	22	18,18	20	17,86	36	29,75	0,89	11,57
average	42	37,50	45	37,19	45	40,18	56	46,28	2,68	9,09
low	51	45,54	54	44,63	47	41,96	29	23,97	-3,57	-20,66
Total	112	100	121	100	112	100	121	100		

As can be seen from table 1, in EG the high level increased by 11.57 %, while in CG – only by 0.89 %, the average level in EG increased by 9.09 %, and in CG – only by 2, 68 %, the low level in EG decreased by 20.66 %, and in CG – only by 3.57 % (Fig. 2).

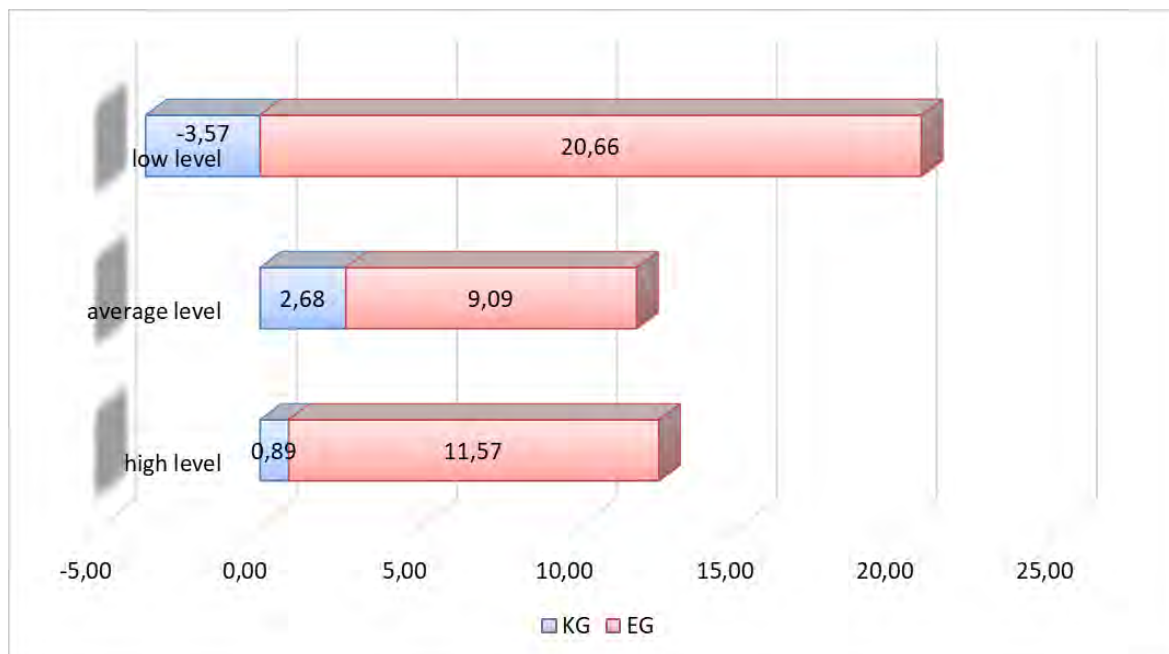


Fig.2: Dynamics of changes in the levels of formation of research competence in future specialists in fitness and recreation after the introduction of the subsystem of resource-oriented learning

Statistical analysis by Pearson's criterion χ^2 shows that the indicators of the observational experiment in determining the levels of formation of research competence in future specialists in fitness and recreation CG and EG do not differ significantly ($\chi^2_{emp} = 0.06 < 7.81$). At the same time, after the experiment $\chi^2_{emp} = 9.69 > 7.81$, which indicates that the significant difference obtained in EG in comparison with CG is a consequence of the introduction of the experimental subsystem of resource-oriented learning.

3. CONCLUSIONS

Thus, the developed subsystem «Resource-based learning of future specialists in fitness and recreation» occupies a particularly important place in the system of cross-cultural training of specialists in fitness and recreation, as it reflects

the tendency to shift the emphasis from transmission models of education to more personal and practice-oriented, in which the student is responsible not only for the search, processing, analysis of information from various information resources, but also for the independence of decision-making to expand their knowledge, the need for continuous acquisition of cross-cultural knowledge in the fitness industry, the development of cross-cultural competence. Introduction of pedagogical technologies of resource-based learning, involvement in the search for cross-cultural knowledge in the field of fitness industry not only of scientific and pedagogical staff of the HEE, but also librarians, will significantly expand the information field and tools for information retrieval, the possibility of convenient organization of their own educational process (choice of basic tools, teaching methods, development of skills to produce ideas, establish links between information from different sources, skills to see the problem from different points of view and solve it), will provide a focus on lifelong learning and professional self-improvement of the future specialist in fitness and recreation, which focuses on global fitness trends.

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