Features of the Modern Information and Educational Environment in a Cross-Cultural Context

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Abstract

In this work, we have described the possible options for organizing constructive learning within the space of educational cross-culture, the possibility of personalizing the educational environment of the student. Of course, informatization allows the development of technologies that will simplify the teacher's work over time: these are recommendation services that analyze the cultural and cognitive profile of the student and issue recommendations for building work with him; cultural online assimilators for teachers and students planning to immerse themselves in a foreign language or multicultural educational environment, mobile applications, IEE (Informational educational environment) and LMS with adaptive content and interface, taking into account the individual characteristics of the student, and much more that has appeared and will appear in educational practices in the very near future. In fact, global education combines various educational systems and models based on differentiated cultural, worldview, religious, philosophical, and value pictures of the world. Today, many teachers experience some difficulties working in a multicultural environment. This tends to be associated with culturally specific educational practices that most educators are not familiar with. Of course, in this situation, it is simply necessary to develop the direction of cross-cultural didactics in the process of online teaching, thanks to which it will be possible to make the learning process in a multicultural environment more comfortable and effective for all participants.

Introduction

Thanks to globalization and the presence of information technology in our life, the education process has become open and mostly accessible to all. The number of academic mobility programs and student exchanges is increasing, the number of users of online courses and distance educational programs is growing. In the roadmaps of many universities, the priority is to increase the number of foreign students by 2020.

In essence, this means that the educational space is becoming multicultural: an increasing number of people have the actual opportunity to learn using the educational resources of other cultures, one can even talk about the emergence of the so-called educational cross-culture space. The transition to the 4 + 2 university education system also led to the emergence of a professional cross-culture, when a student has the opportunity to continue his studies in a specialty that was not previously available.

Today, many educators are experiencing real difficulties working in a multicultural classroom. This tends to be related to culturally specific educational practices that most educators are not familiar with. Of course, in this situation, it is simply necessary to develop the direction of cross-cultural didactics, thanks to which it will be possible to make the learning process in a multicultural environment more comfortable and effective for all participants.

In fact, global education unites various educational systems and models, which are based on differentiated cultural, ideological, religious, philosophical, value pictures of the world. The influence of culture on education is undeniable. The culture of each country is reflected in the educational process and largely determines it, which in turn entails the specificity of educational content, goals, values and objectives of education, teaching methods, pedagogical discourse, the specifics of building an educational trajectory, etc.

The educational process in a multi-cultural environment

The development of the information environment initiated the emergence of a multicultural educational environment, which entailed a certain kind of systemic changes, which, one way or another, will be reflected in the transformation of the elements of the organization of the information and educational environment (IEE). This applies to both the traditional learning format and online educational practices. There are a number of characteristic features for a multicultural educational environment that do not take place in monocultural environments: non-identical professional thesaurus, various familiar models of communication with the teacher, the specificity of the representation of educational information and educational content, the specificity of decision-making, attitude to the implementation of creative tasks in the learning process, ambiguous understanding of educational tasks, terminology, preferred type of test and measurement materials, etc. [Taratukhina, 2016, 2020].

Cross-cultural didactics is a theory of teaching in a multicultural environment. The subject of cross-cultural didactics will be the educational process, organized in a multicultural educational environment, methods and forms of its organization. The development in the field of cross-cultural multimedia didactics is also based on research on the specifics of cognitive activity in different cultures, ways of framing educational information, culturally-specific methods and didactic teaching methods that determine a differentiated approach to organizing the educational process, problems and features of constructive transfer knowledge in a multicultural environment, possible changes in the "design" of the educational environment for working with a multicultural audience.

The main questions of a constructive approach in the field of educational cross-culture will be

posed as follows:

- − how to create conditions for self-development and self-construction of a student in the information field of educational cross-culture;
- − how to provide and maintain motivation (feedback mechanism);
- − how to ensure the constructive activity of the teacher in the field of educational cross-culture;
- − the main question is how to minimize culture shock and semantic distortions in the communicative space of educational cross-culture?

The educational process in a multi-cultural environment is carried out at several levels:

 1) the level "person-person" (face-to-face communication),

 2) the level of "human-information educational environment (IEE)" (distance or "mixed communication").

Solving the problem of the specifics of relaying educational content at each of these levels for a multicultural audience is an urgent task.

At the "human-IEE" level (distance or blended learning), methods and techniques of interactive didactic support of students will be of great interest. At this level, it is also important to take into account the cultural and pragmatic aspect in designing the structure and content of the interface of electronic pages and teaching materials, taking into account the choice of adequate multimedia technologies and teaching methods for different cultural groups and learning styles. ITS should allow building and recording individual educational tracks of students: a set of mastered competencies, progress in learning, recommended courses.

We see the criteria by which a multicultural IEE should be built as follows:

- − communication criterion (transformation of traditional forms of communication in the "teacher - student" system, taking into account the individual characteristics of students);
- − methodological criterion (the emergence of culturally adaptive methods of working with educational information);
- − content criterion (differentiation and possible heterogeneity of educational content in the educational process);
- − information criterion (development and use of educational resources), considering the cultural specifics of perception and work with information.

Table 1 - Adaptive and invariant segments of the organization of the educational process in a multicultural educational environment

Adaptive segment of the educational process	Invariant segment of the educational process
Preferred style of educational communication	Requirements for the relevant, in a specific ITS, academic language should be well spelled out at all levels
Teamwork, Individual Work, Teaching Methods, Educational Content	Methodological recommendations for the implementation of all types of academic reporting should be well spelled out
Tasks (creative and reproductive and their ratio)	Discipline Glossary
Educational coaching (pedagogical support)	Semantic maps of academic disciplines

Adaptation is the adaptation of educational information, methods and control and measuring materials to the specificity of the student (adaptation of educational tasks for different cultural groups), as well as the compilation of culturally-specific basic terminological dictionaries for the discipline, considering the ambiguity of terminology in different languages (Table 1).

Accordingly, constructive educational activity in multicultural IEE will be built according to the

following algorithm.

    1. Drawing up a cultural and cognitive profile of a student or audience.

    2. Based on the cultural and cognitive profile, general guidelines for the organization of educational communication will be derived. This information will help the teacher to design the design of the course and educational tracks of students and the specifics of communication in the "teacher-student" system.

    3. Culturally-specific student models are deduced and relevant teaching methods, types of educational content, test materials, etc. are selected.

    4. Methods and tools of information and communication technologies (ICT) are selected that are relevant for representatives of different cultural groups.

    5. In the case of distance learning, we have developed a list of recommendations for the creation of a culturally specific user interface and culturally adaptive educational content.

At this stage we claim that the developments in the field of learning theory in a multicultural environment-a cross-cultural didactics are absolutely essential. In our view, cross-cultural didactics consists of the sections that investigate:

− Objectives and values of education in different cultural groups.
− General peculiarities of cognitive activity in different cultural groups.
− Learning styles in different cultures.
− Common features of teaching methods and test materials in different cultural groups.
− Peculiarities and problems of pedagogical discourse (in particular, academic writing) in a multicultural environment.
− Developments in the cross-cultural media didactics sphere.
− Issues and peculiarities of constructive knowledge transfer in a cross-cultural educational environment.

The Methodical Peculiarities of the Education Process Organization in a Multicultural Environment

So, IEE is influenced by participants in the educational process: their national and professional culture, and the environment itself influences the formation of both the educational process as a whole and its individual components: it determines the type of communication between the participants, methods and tools of training, etc. Despite the fact that in the conditions of the information society, IEE also experiences the influence of external factors caused by the globalization of the educational space, it retains unique characteristics inherent only to it (national culture, for example, when teaching students from China, many teachers are faced with features that determine the criteria the quality of academic writing in Chinese pedagogical culture is "imitation of the style of the master", which, in turn, in Western culture is regarded as plagiarism), under the influence of which it was formed and continues to develop. However, with the emergence of multicultural environments, it became necessary to create more personalized methods of working with students, since it is a difficult task to unify teaching, learning, educational content, etc. in a multicultural audience. Accordingly, it is necessary to develop IEE using the capabilities of ICT and develop an automated system of recommendations for the teacher on organizing the educational process with representatives of different cultural groups, considering specific cultural characteristics [Vas'kovskii, Nadeinskii, 2018; Farkhadov, Khayitova, 2019].

For a multicultural educational environment, it is important to have multilingual teachers and multilingual glossaries of academic disciplines. Online lecture materials of the best practitioners in this field can be additionally included in the learning process [LMS ICS RAS, www].

A multicultural educational space is essentially an educational cross-culture: it is a space that includes a set of heterogeneous information and pedagogical environments that are in a state of interaction in the form of educational communication and educational activities and whether or not they have the property of "diffusion". In this context, one of the tasks of cross-culture didactics is the selection of methods and ways of organizing the educational environment, with the help of which the goals of the task of upbringing and education of the individual can be realized.

In this context, one of the tasks is the selection of methods and organization of the educational environment, with the help of which it is possible to realize the goals of the task of upbringing and education of the individual, in connection with which we pose the following questions:

1. Change of the teacher's status due to the primacy of electronic systems (can a computer replace a teacher?);

2. What are the basic principles of constructive learning in a cross-cultural environment;

3. Is the diversity of forms and methods of teaching in a cross-cultural environment a legacy of national forms and methods of teaching or a selection of universal teaching aids?

4. In the context of educational cross-culture, should emphasis be placed on specific or invariant learning content?

In the fully developed cross-cultural (multicultural) educational environment it is necessary for methodologists and teachers (tutors) to take into consideration of such factors as: different from each other «cultural world views» of different nations; non-identical educational models in different countries with different objectives of training and values; and as the result – differentiated ways of framing of educational information and different dominating methods of training. To take into account factors specified above and some other factors when developing and implementation of educational programs is possible only for an expert in education with developed cross-cultural competence. To raise the level of cross-cultural competence the teacher (tutor) can work with the education in the sphere of cross-cultural communication, training, different adaptation simulators and etc. It is obvious that the competence of teachers and tutors should be hinged on the following parameters: differences in cognitive images of the world; differentiated strategies of work with information; specifics of educational communication (discourse and methodological features); types of educational content and etc. It is necessary to take into account the fact that the culturological aspect in pedagogical activity of the teacher becomes more important because of the co-existence of different national educational systems and their products in international academic environment.

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According to the implement an individual approach to learning, it is initially necessary to determine

the optimal learning model for each student to model his professional future. This can be carried out in the "person-to-person" format (with the help of the institution of tutoring (educational coaching or consulting) or in the "human-system" format with the help of various kinds of intelligent tutoring systems and services.

Technologies can contribute to more constructive learning and individualization: cultural indicators can help adapt the content and interface of an educational resource to the cultural specifics of the student, ways of organizing content and interface on open educational resources of different cultural groups, LMS of different cultural groups, etc. This chapter also shows the dependence of the choice of multimedia technologies in educational practices, depending on belonging to a cultural group

Of course, informatization makes it possible to develop technologies that will simplify the teacher's work over time: these are recommendation services that analyze the cultural and cognitive profile of the student and issue recommendations for building work with him; cultural online assimilators for teachers and students planning to immerse themselves in a foreign language or multicultural educational environment, mobile applications, ITS and LMS with adaptive content and interface, taking into account the individual characteristics of the student, and much more that has appeared and will appear in educational practices in the very near future.

References

1. Alekseicheva E.Yu. (2021) Gumanizaciya obrazovaniya kak sposob sozdaniya gumannogo budushchego [Humanization of education as a way to create a humane future] Metodologiya nauchnyh issledovanij. materialy nauchnogo seminara. / Ser. «Biblioteka Masterskoj orgdeyatel'nostnyh tekhnologij MGPU». [Methodology of scientific research. materials of the scientific seminar. / Ser. "Library of the Workshop of organizational activity technologies of MSPU". Yaroslavl]. pp. 131-135.

2. Alekseicheva E.Yu. (2021) Mnogomernoe obrazovanie: vybor ili predopredelennost' [Multidimensional education: choice or predestination] Metodologiya nauchnyh issledovanij. materialy nauchnogo seminara. / Ser. «Biblioteka Masterskoj orgdeyatel'nostnyh tekhnologij MGPU». YAroslavl' [Methodology of scientific research. materials of the scientific seminar. / Ser. "Library of the Workshop of organizational activity technologies of MSPU"]. Yaroslavl. pp. 201-204.

3. Alekseicheva E.Yu. (2019) Nepreryvnoe obrazovanie v kontekste global'nykh trendov razvitiya ekonomiki vpechatlenii [Life-long learning in the context of global trends of the development of the experience economy] Novoe v nauke i obrazovanii. Sbornik trudov mezhdunarodnoi ezhegodnoi nauchno-prakticheskoi konferentsii. Otvetstvennyi redaktor Yu.N. Kondrakova. M.: OOO "Maks Press". [The International Annual Scientific and Practical Conference "New in Science and Education", organized by Jewish University. Ed. by Kondrakova Yu. N. Moscow: MAKS Press] pp. 5-15

4. Alekseicheva E.Yu. (2021) Sovremennye podhody k organizacii kreativnogo obrazovaniya [Modern approaches to the organization of creative education] Metodologiya nauchnyh issledovanij. materialy nauchnogo seminara. / Ser. "Seriya «Biblioteka Masterskoj orgdeyatel'nostnyh tekhnologij MGPU». Vyp. 2" Moskovskij gorodskoj pedagogicheskij universitet (MGPU). YAroslavl' [Methodology of scientific research. materials of the scientific seminar. / Ser. "Series "Library of the Workshop of organizational and activity technologies of MSPU". Issue 2" Moscow City Pedagogical University (MSPU). Yaroslavl] p. 215-219

5. Alekseicheva E.Yu. (2020) Formirovanie kompetentnostej budushchego v otkrytom obrazovanii [Formation of future competencies in open education] Razvitie cifrovyh kompetencij i funkcional'noj gramotnosti shkol'nikov: luchshie praktiki distancionnogo obrazovaniya na russkom yazyke / Materialy Mezhdunarodnogo pedagogicheskogo Foruma. Pod redakciej M.M. SHalashovoj, N.N. SHevelyovoj [Development of digital competencies and functional literacy of schoolchildren: best practices of distance education in Russian. Materials of the International Pedagogical Forum. Edited by M.M. Shalashova, N.N. Sheveleva]. pp. 15-25

6. Farkhadov M.P., Khayitova S.K. (2019) How a Multilingual Remote Teaching System Can Take into Account the Specifics of National Education. *Proceedings of the 2nd International Conference on Education Science and Social Development,* 298, pp. 230-235.

7. *LMS ICS RAS*. Available at: https://lms.ipu.ru/ [Accessed 12/12/2022]

8. Taratukhina Yu.V., Avdeeva Z. (2020) *Pedagogika vysshei shkoly v sovremennom mire* [Pedagogy of higher education in the modern world]. Moscow.

9. Taratukhina Yu.V. (2016) *Teoriya i praktika kross-kul'turnoi didaktiki* [Theory and practice of cross-cultural didactics].

Moscow.

10. Vas'kovskii S.V., Nadeinskii L.A. (2018) Postroenie sistem obucheniya s primeneniem sovremennykh mul'timediinykh i rechevykh tekhnologii [Building learning systems using modern multimedia and speech technologies]. *Neirokomp'yutery: razrabotka, primenenie* [Neurocomputers: development, application], 1, pp. 35-43.

Особенности современной информационно-образовательной среды в кросс-культурном контексте

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Аннотация

В данной работе мы описали возможные варианты организации конструктивного обучения в пространстве образовательной кросс-культуры, а также возможные на сегодняшний день способы персонализации образовательной среды обучающегося. Безусловно, информатизация позволяет развивать технологии, которые со временем упростят работу преподавателя: это рекомендательные сервисы, анализирующие культурно-когнитивный профиль ученика и выдающие рекомендации по построению работы с ним; культурные онлайн-ассимиляторы для преподавателей и студентов, планирующих погрузиться в иноязычную или поликультурную образовательную среду, мобильные приложения, ИОС и LMS с адаптивным содержанием и интерфейсом, учитывающим индивидуальные особенности учащегося, и многое другое что появилось и появится в образовательной практике в самое ближайшее время. Глобальное образование объединяет различные образовательные системы и модели, в основе которых лежат дифференцированные культурные, мировоззренческие, религиозные, философские, ценностные картины мира. Культура каждой страны отражается в образовательном процессе и во многом его определяет, что влечет специфику содержания образования, целей, ценностей и задач образования, методов обучения, педагогического дискурса, специфики построения образовательной траектории и т.д. Сегодня многие преподаватели испытывают некоторые затруднения, работая в мультикультурной среде. Это связано с культурно специфическими образовательными практиками, с которыми большинство педагогов не знакомы. Несомненно, в этой ситуации просто необходимо развивать направление кросскультурной дидактики в процессе онлайн преподавания, благодаря чему можно будет

сделать процесс обучения в мультикультурной среде более комфортным и эффективным для всех участников.

Ключевые слова

Процесс обучения, мультикультурная среда, критерии современной образовательной среды, индивидуальный подход, педагогика.

Библиография

1. Алексейчева Е.Ю. Гуманизация образования как способ создания гуманного будущего // Методология научных исследований. материалы научного семинара. / Сер. «Библиотека Мастерской оргдеятельностных технологий МГПУ». Ярославль, 2021. С. 131-135.
2. Алексейчева Е.Ю. Многомерное образование: выбор или предопределенность // Методология научных исследований. материалы научного семинара. / Сер. «Библиотека Мастерской оргдеятельностных технологий МГПУ». Ярославль, 2021. С. 201-204.
3. Алексейчева Е.Ю. Непрерывное образование в контексте глобальных трендов развития экономики впечатлений // Новое в науке и образовании. Сборник трудов международной ежегодной научно-практической конференции. Ответственный редактор Ю.Н. Кондракова. 2019. М.: ООО "Макс Пресс". 2019. С. 5–15.
4. Алексейчева Е.Ю. Современные подходы к организации креативного образования // Методология научных исследований. материалы научного семинара. / Сер. "Серия «Библиотека Мастерской оргдеятельностных технологий МГПУ». Вып. 2" Московский городской педагогический университет (МГПУ). Ярославль, 2021 С. 215-219
5. Алексейчева Е.Ю. Формирование компетентностей будущего в открытом образовании // Развитие цифровых компетенций и функциональной грамотности школьников: лучшие практики дистанционного образования на русском языке / Материалы Международного педагогического Форума. Под редакцией М.М. Шалашовой, Н.Н. Шевелёвой. 2020. С. 15-25
6. Васьковский С.В., Надеинский Л.А. Построение систем обучения с применением современных мультимедийных и речевых технологий // Нейрокомпьютеры: разработка, применение. 2018. № 1. С. 35-43.
7. Таратухина Ю.В., Авдеева З. Педагогика высшей школы в современном мире. М., 2020. 217 с.
8. Таратухина Ю.В. Теория и практика кросс-культурной дидактики. М., 2016. 265 с.
9. Farkhadov M.P., Khayitova S.K. How a Multilingual Remote Teaching System Can Take into Account the Specifics of National Education // Proceedings of the 2nd International Conference on Education Science and Social Development. 2019. Vol. 298. P. 230-235.
10. LMS ICS RAS. URL: https://lms.ipu.ru/