

**DCCD 2020****Dialogue of Cultures - Culture of Dialogue: from Conflicting to Understanding****PREPARING STUDENTS FOR CROSS CULTURAL  
INTERACTION: MODULAR AND DISTANCE LEARNING  
TECHNOLOGIES**

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***Abstract***

The article aims to study modular technologies in the framework of preparing university students for cross-cultural interaction. In this regard special attention should be paid to distance learning due to the updated requirements for the educational process at universities. Theoretical analysis shows that the modular approach is one of the relevant ones. It is a unified system that provides the individualization of training when each student can be independent in selecting the content of training, its development, based on personal characteristics and educational needs. In accordance with this approach a full-fledged online module should include instructive, informational, communicative and reflective parts. This strategy gives teachers an opportunity to build the online educational process more efficiently focusing on the personal significant results. The study also reveals the strategy of web-video conferences and webinars organization using BigBlueButton. This plugin provides the best direct communication tools and their use in the process of developing cross-cultural communication competence. The practical part of the research is based on the assessment of distance learning module created as a part of the course 'Methods of Teaching Foreign Languages' for university students. The results of our experiment show that properly constructed learning path enables university students to complete the course successfully. Thus, the organization of distance learning has a huge potential for the development of cross-cultural communication competence. University students obtain more opportunities to master their language skills and develop the ability to interact with the representatives of other cultures.

2357-1330 © 2020 Published by European Publisher.

**Keywords:** Interaction, modular technologies, distance learning.



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## 1. Introduction

In the age of informatization new forms, methods and technologies are being searched for the effectiveness in training future specialists. Innovations in the development of mankind caused by the precepts of a post-industrial, informational and post-informational society have left no one behind: digital economy, open administrative environments and creative digital performances are being formed and the digital path of education development has been determined (Tareva, 2018). In this regard, distance learning technologies are highly relevant in the framework of preparing for cross-cultural interaction. They enable university students to develop their personal growth and provide quality education. Mahlangu (2018) says: "Distance learning can benefit universities because it can bring an element of flexibility in the learning process by the use of technologies, and interdisciplinary approaches to teaching and learning. The use of technologies and interdisciplinary approaches are key factors in distance education in higher education" (p. 23). Modern teaching tools based on interactive technologies have paved the way to a new type of interaction with the representatives of other cultures. Under these circumstances educational information is a source of information and provides information interaction in the process of the dialogue of cultures (Artyukhina et al., 2014).

Moreover, this method of teaching has certain advantages such as an individual approach to each student, the ability to work with materials at a convenient time, the possibility of interactivity using multimedia information and quick feedback. Another advantage that can be associated with distance learning is the possibility of modular organization of distance programs. It allows the learner to create his own path of self-development (Karnoy & Kuzminov, 2015; Roshchina et al., 2018; Zakharova & Tanasenko, 2019).

## 2. Problem Statement

The problem of modular learning is one of the most popular and recognized teaching techniques of developing cross-cultural communication competence nowadays.

Analysis shows that the modular approach was formed during natural evolution of education and it results in a long search for the most effective interactive methods of educational activity.

Modular training was first used in practice in the seventies of the last century by Postlethwait et al. (1972), Goldshmid and Goldshmid (1972) and Russell (1974). According to this concept the part of the training material is used as an independent topic and freely integrated into the curriculum. The modern concept of modular learning is based on the person - oriented approach. Each student can be independent in the selection of the learning content based on personal characteristics and educational needs. In practice, modular technology is the way of implementation of person - oriented approach into training (Jutsevičienė, 1989).

The essence of teaching based on modular technology includes autonomous methodological units (modules), the content and volume of which vary and depends on the student learning profile differentiation and didactic goals. A module can consist of one or many educational units, which represent the amount of knowledge and skills in order to perform a specific task (Jutsevičienė, 1989).

In other words, modular training is the process in which the student's competence is the goal of teaching. In this connection online modular course creation plays a key role in the context of preparing students for intercultural interaction. The competence can have a complex structure in which educational tasks are divided into subtasks, as well as activities imply specific steps-actions. Thus, each competence is characterized by a definite set of skills to master this kind of activity.

Summarizing all above-mentioned, it can be concluded that the modular approach is a unified system of determining goals, selection and organization of educational material and technological support that guarantee an efficient means of learning (Kochneva, 2010).

In this regard, we can formulate a problem: how can modular training be integrated into the distance learning environment, providing an individual approach to each student.

### **3. Research Questions**

As practice shows learning management systems and educational platforms have been widespread. Alex Shortsleeve (2018), an e-learning specialist says: "Learning Management Systems have been around for almost two decades, but have become more prevalent due to the expansion of the Internet and to the growth of for-profit colleges and universities. They are used to house information and create opportunities for individuals to learn" (para. 3). William Fenton (2018), a specialist in research and education software points out that "learning management systems and educational platforms can help schools, colleges, and universities develop, assign, and track online classes and student outcomes" (para. 1). In this regard the Moodle remote system is particularly relevant. The system implements "pedagogy of social constructionism". This philosophy is focused on the organization of teacher and student interaction though it is used for traditional distance learning courses, as well as in full-time study (Gilmudinov et al., 2008).

It is a simple system which is focused on collaborative learning technologies. In particular, it enables to regard the process of learning as solution of joint educational problems and exchanging knowledge. Undoubtedly, the modular approach requires a new designing of results in education and its management mechanism.

The following discussion will focus on the description of online module created as a part of the course "Methods of Teaching Foreign Languages" at university. The choice of the course was determined by the need to fill in the insufficient amount of teaching hours for mastering cross-cultural communication competence, which, in conditions of academic mobility, plays a key role for both today's student and tomorrow's teacher.

### **4. Purpose of the Study**

The article aims to reveal modular online training strategies in the process of intercultural communication training.

### **5. Research Methods**

In accordance with this goal, research methods were defined: analysis of psychological and pedagogical literature, observation of the pedagogical process and experiment.

Successful e-learning course includes instructive, informational, communicative and reflective parts (Banks, 2018; Campbell, 2018). The instructive part of the module is represented with a brief annotation, which should be done accurately. Bogdanova and Fedoseev (2010) point out the quality of the annotation determines the ability of students to evaluate the course's potential utility. In addition, this part contains instruction that represents general algorithm of actions. It is necessary to formulate accurately the educational goal, associated with a definite competence. The flow of training material, indication of feedback, monitoring and evaluation system are presented below. All this create the prerequisites for the subsequent perception of educational information. It should be noted that the information part depends on the objectives of the course and the time for its study and may include theoretical and practical parts.

The theoretical part of the module includes material for independent study: lectures, presentations, diagrams, tables and video materials. In addition, this section provides links to educational resources on the Internet, the careful selection of which will save the student from wasting time. It allows to link the course with the best world information sources.

Kuksa et al. (2011) note that the study of theoretical part should not limit further professional development of the student, but only gives an incentive for the development of new heights in a specific subject area.

The practical part focuses on the formation of professional competence in a specific subject area. It contains three level tasks: practical tasks and exercises that should be done according to a strictly defined algorithm, nonalgorithmic exercises and creative practical tasks that require the knowledge workshop in unusual situation.

The communicative part is represented by forum or chat for discussion related to mastering the course. In order to maintain a dialogue with students, the teacher should carefully formulate questions. The main disadvantage of distance learning is the passivity of students, visibility of activity through the preliminary distribution of questions and speeches, and the absence of a truly creative discussion.

As a rule, the teacher puts the questions making students to think in advance. They begin with the words "why", "why", "how", "what are your suggestions", "what will your decision be about", and etc., which imply a detailed answer in a free form. It allows to increase the activity of forum or chat participants and assess the level of competence.

The reflective component is the final part of any course. Reflection helps a student in a system of modular online learning to realize what he has done and what he has learned and to formulate key problems and ways to solve them ("A New Pedagogy is Emerging...", 2018). Moreover, reflection helps understand at least three aspects: practical (What is done? What is the main result?), technological (In what way?) and world outlook (Why am I doing this? Is the result consistent with my goals? What changes may happen to me or may happen?) (Domansky, 2015).

Considering different strategies of distance learning it should be noted that new approaches are being actively created: "Today, advanced Internet technologies as well as different types of applications associated with these technologies render distance learning an excellent alternative to traditional education, thereby leading to the creation of virtual learning approaches" (Alalshaikh, 2015 p. 74).

One of the strongest aspects of Moodle is a wide range of possibilities for communication. In particular, the BigBlueButton plugin can be integrated into the system of learning as the most effective

technical tool to illustrate the use of modular technologies for the formation of cross-cultural communication competence. It is an open source web conferencing system for online learning which has a number of didactic opportunities. Rob Nettleton (2010) says: “This is an incredibly exciting opportunity for teachers and researchers to try out a whole new style of hybrid teaching, whether or not you have experience teaching online or would just like to introduce an online component” (para. 1). Moreover, it provides feedback (interactivity) and enhances the educational and cognitive activities of students (Konysheva, 2016).

The name of this educational technology comes from the concept that starting a web conference should be as simple as pressing a metaphorical big blue button. The project started in Carleton University in 2007 by Hoddinott and Alarm (2007); under the supervision of Tony Bailetti (Bailetti & Hoddinott, 2007). BigBlueButton (2020) supports audio and video, slides, presentations with extended whiteboard capabilities (pointer, zooming and drawing), public and private chat, screen, online polls and recordings for later viewing. Therefore, it can be used as any part of the online learning course.

The system works with the following users:

A viewer is a user (the student) who can chat, send/receive audio and video, respond to polls, display an emoji (such as raise hand), and participate in a breakout room.

A moderator (instructor) has all the capabilities of a viewer, the ability to mute/unmute other viewers, restrict viewers from doing private chat, and assign anyone the role of presenter who controls the presentation area (“A New Pedagogy is Emerging...”, 2018).

The user interface looks coherent and is represented by the following windows by default: ‘Chat’, ‘Webcams’, ‘Audio’, ‘Polling’, ‘Breakout Rooms’, ‘Shared Notes’, ‘Emojis’, ‘Multi-User Whiteboard’.

The Chat is intended for exchanging messages between participants in web-based communication. It can be used to welcome participants, ask the speaker a question, speak out on the topic of the meeting and post interesting information.

It is also possible to go to a private chat, where you can exchange private messages with a student selected from the list. Messages will be visible only to the assigned student. Also, during online communication, the participants in the session in the “Shared Notes” have the opportunity to create a common block of notes on the issues discussed at the online meeting.

Another tool for engaging video chat participants in a collaborative effort is the ability to make a poll. The presenter can initiate a poll during the video-communication session. He should create a poll slide in advance on presentation page and upload this file. The Live Results dialog box shows the results in real-time. The moderator has the opportunity to see how the participants are responding, and who has not answered yet.

The moderator also has the opportunity to put students into Breakout Rooms for team collaboration. The educators can make discussions and upload presentations for sharing with others. The participant will be invited to the designated group after the formation the room for a group work. When the participant moves to the breakout room, he cannot access the main audio and video conference. After clicking “Join Session”, the participant joins the assigned group. A new tab with a video conference for this group opens. The group will work during the time set by the moderator. The moderator sees all existing breakout rooms and can join the selected room or listen to the audio discussion.

It should be noted that in order to make the webinar lesson effective the teacher should study his target audience and their individual perception characteristics of educational information. Taking into account various groups of student’s peculiarities (visuals, audials, kinesthetics), the teacher should pay attention to the choice of training material, its design, presentation logic and audiovisual support (Puchkova, 2016).

## 6. Findings

Thus, in the course of our research we revealed the peculiarities of a modular training course which are in a targeted didactic impact on students. The online module created on the basis of the structure and methods represented above was completed by 4-year students who studied Teacher Education (profile “Foreign language”).

The results of our experiment showed that the students carried out tasks with enthusiasm. They actively participated in web conferencing, discussions and polls. During the educational process they had more opportunities to build their own educational path. Thus, using BigBlueButton (2020) positively affected the entire process of forming key competence. The following table shows the relationship between the parts of the created course and its content (Table 1).

**Table 01.** “Big Blue Button” in online learning

Parts of online course	Instructive	Informational	
		Theoretical	Practical
1. Types of tasks			1.1., 1.2., 1.3.
2. Didactic features of online course	2.1., 2.3.	2.2., 2.3.	2.1., 2.2., 2.3.

- 1.1. Tasks according to a given algorithm;
- 1.2. Generalizing tasks without an algorithm;
- 1.3. Creative tasks;
- 2.1. Feedback;
- 2.2. Intensification of educational and cognitive activities;
- 2.3. Visualization of educational material.

Thus, the result of our study is a specially created training course, within the framework of which it is possible to organize web-video conferences and webinars using BigBlueButton, which enables students to master the knowledge, skills and abilities that ensure the achievement of an adequate level of cross-cultural communication competence. From the point of view of substantive components and didactic opportunities of the course Big Blue Button is universal. It can be used to build other distance learning courses, taking into account the undetected features of this open source web conferencing system in the course of the study of a separate online course.

## 7. Conclusion

Theoretical and practical analysis shows that distance learning organization has enormous potential for developing students' cross-cultural communication competence. Properly constructed learning path enables university students to complete the course successfully. Optimization and individualization of the educational process does not limit the possibility of preparing a specialist of a modern level, ready for an informatically saturated work with a large component of creative independent activity in the process of building a culture of dialogue. In this regard teaching based on the modular approach guarantees undergraduates' mastering of language skills. Web real-time communication using BigBlueButton makes it possible to build the educational process more effectively focusing on personal significant results formation expressed in the ability to interact with other cultures.

It results the formation of self-education skills. The whole process is built on the basis of conscious goal-setting and reflection with a hierarchy of short and long-term goals. The awareness of educational activities transfers the teacher from the mode of informing to the counseling and management ones.

## References

- A New Pedagogy is Emerging... and Online Learning is a Key Contributing Factor. (2018, March 07). *TeachOnline.CA*. <https://teachonline.ca/tools-trends/how-teach-online-student-success/new-pedagogy-emerging-and-online-learning-key-contributing-factor>
- Alalshaikh, S. (2015). Cultural Impacts on distance Learning Styles, and Design Quarterly Review of Distance Education, *16*(3), 67-77.
- Artyukhina, M. S., Artyukhin, O. I., & Kleshnina, I. I. (2014). Apparalnaya sostavlyayushhaya interaktivny`x tehnologij obrazovatel`nogo naznacheniya [Hardware component of interactive educational technologies]. *Vestnik of Kazan State Technological University*, *8*, 308-315.
- Bailetti, T., & Hoddinott, R. (2007, September). Open Source Assets. Technology Innovation Management Review. <http://timreview.ca/article/75>
- Banks, K. L. (2018). Identifying Online Graduate Learners' Perceived Barriers to Their Academic Success: A Modified Delphi Study, Fostering Effective Student Communication in Online Graduate Courses (pp. 193-224).
- BigBlueButton: Open Source Web Conferencing. (2020, February 20). <https://docs.bigbluebutton.org>
- Bogdanova, D. A., & Fedoseev, A. A. (2010). Cifrovye obrazovatel`ny`e resursy`. Kogda zabyvayut o kachestve... [Digital educational resources. When they forget about quality ...]. *Systems and Means of Informatics*, *20*, 199-208.
- Campbell, J. L. (2018). Instructional Activities, Online Technologies, and Social Community in Online Graduate Students Courses. Fostering Effective Student Communication in Online Graduate Courses (pp. 102-118).
- Domansky, E. V. (2015). Prostranstvo refleksii my`shleniya i soznaniya: metodologicheskie orientiry` dlya pedagoga [The space of reflection of thinking and consciousness: methodological guidelines for the teacher]. *Historical and socio-educational thought*, 18-30.
- Fenton, W. (2018, January). The Best (LMS) Learning Management Systems. <https://www.pcmag.com/roundup/336308/the-best-lms-learning-management-systems>
- Gilmudtinov, O. H., Ibragimov, R. A., & Tsvilsky, I. V. (2008). E`lektronnoe obrazovanie na platforme Moodle [Education on the Moodle Platform]. KSU.
- Goldshmid, B., & Goldshmid, M. L. (1972). Modular Instruction in Higher Education. Center for Learning and Development McGill University.
- Hoddinott, R., & Alarm, R. (2007, July). Lead Projects. Technology Innovation Management Review. <https://timreview.ca/article/98>

- Jutsevičienė, P. A. (1989). *Teoreticheskie osnovy` modul'nogo obucheniya* [Theoretical Foundations of Modular Learning]. Vilnius.
- Karnoy, M., & Kuzminov, Y. I. (2015). Onlajn-obuchenie: kak ono menyaet strukturu obrazovaniya i e`konomiki universiteta. Otkry`taya diskussiya [Online learning: how it changes structure of University education and economics. Open discussion]. *Questions Education*, 3, 8-43.
- Kochneva, E. N. (2010). Modul'no-kompetentnostny`j podxod k sozdaniyu professional'ny`x obrazovatel'ny`x programm v sisteme srednego pedagogicheskogo obrazovaniya [The modular competency-based approach to creating professional educational programs in the system of secondary pedagogical education]. *Vestnik of Krasnoyarsk State Pedagogical University*, 3, 47-53.
- Konysheva, A. V. (2016). Vebinar kak setevaya forma organizacii uchebnoj deyatel'nosti studentov [Webinar as a network form of organization of student learning activities] (pp. 86-90). *Concept*. <http://e-koncept.ru/2016/76018>
- Kuksa, V. N., Maksimova, T. F., & Sedinko, A. M. (2011). *Instrukciya po sozdaniyu struktury` kursa ili modulya distancionnogo obucheniya* [Instructions for creating the structure of a course or module for distance learning]. Novocherkassk.
- Mahlangu, V. P. (2018). The Good, the Bad, and the Ugly of Distance Learning in Higher Education (pp. 17-29). *Trends in E-learning*.
- Nettleton, R. (2010). *BigBlueButton*. <https://carleton.ca/edc/2010/bigbluebutton-2/>
- Postlethwait, S. N., Novak, J. D., & Murray, H. T. (1972). *The Audio-Tutorial Approach to Learning Through Independent Study and Integrated Experience*. Burgess Publishing.
- Puchkova, E. S. (2016). Osobennosti podgotovki materialov prepodavatelyami pedagogicheskix vuzov dlya provedeniya vebinarov s uchetom osobennostej individual'nogo vospitaniya uchebnoj informacii studentami [Features of the preparation of materials by teachers of pedagogical universities for webinars, taking into account the peculiarities of individual perception of educational information by students] (pp. 16-22). *Vestnik of RUDN*.
- Roshchina, Y. M., Roshchin, S. Y., & Rudakov, V. N. (2018). Spros na massovyie otkrytye onlayn-kursy (MOOS) [Demand for massive open online courses (MEP): the experience of Russian education]. *Issues of education*, 1, 174-199.
- Russell, J. D. (1974). *Modular Instruction*. Burgess Publishing Co.
- Shortsleeve, A. (2018). Learning Management Systems: what they are, and why you might want one. <https://www.freecodecamp.org/news/learning-management-systems-what-they-are-and-why-you-might-want-one-9bc28186e395/>
- Tareva, E. G. (2018). Cifrovaya e`poxa i pedagogicheskie professii [The digital age and the teaching profession] (pp. 85-90). *Vestnik of Moscow City Pedagogical University*.
- Zakharova, U. S., & Tanasenko, K. I. (2019). MOOK v vy`sshem obrazovanii: dostoinstva i nedostatki dlya prepodavatelej MOOK [MOOC in higher education: virtues and disadvantages for teachers]. *Education Issues*, 3, 176-202.