CREATING A "VIRTUAL COMMUNITY" THROUGH "ON-LINE" INTERACTION BETWEEN PARTICIPANTS

Zoran Zdravev Solza Grceva

ABSTRACT

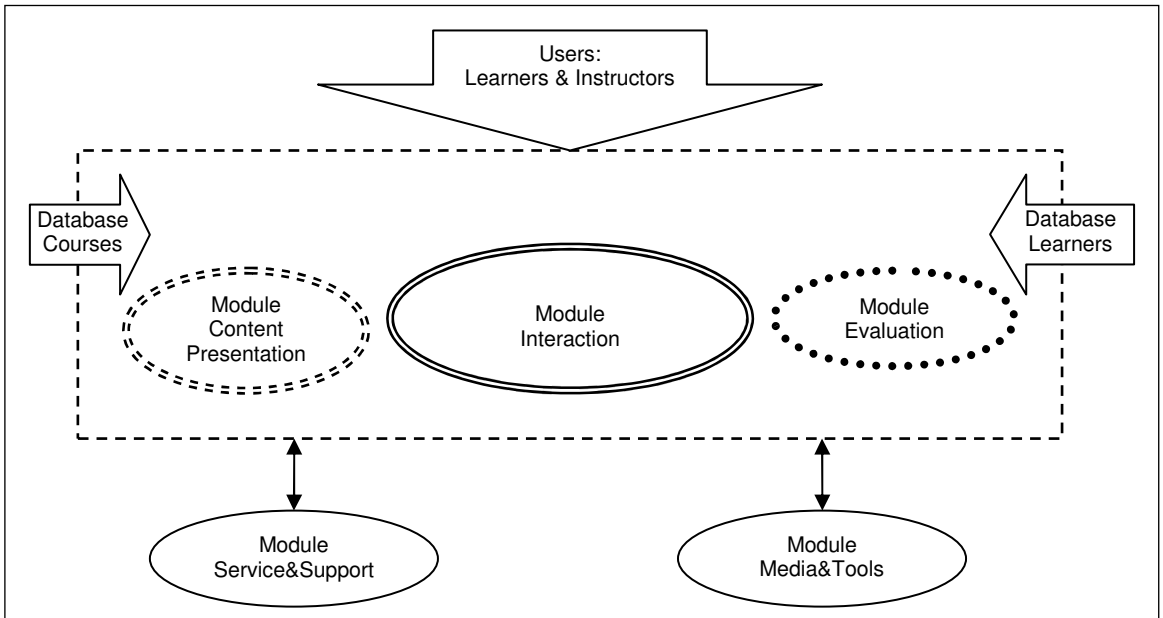
In this article a concept of pilot "Interaction Module" is shown for the implementation of ICT into a potential system of Web Based Distance Learning environment – WBDEE. The main task of this model is to create a "Virtual Community" in which few types of "Virtual Rooms" are shown. The Rules of interaction and communications (learner-content, learner-instructor, learner-learner and learner-interface) are given. Developing strategies and techniques for establishing and maintaining "learning communities" among learners separated by space and/or time are shown.

1. INTRODUCTION

The concept of "Distance Learning" has a very broad meaning on the aspect of used technologies. So, at the begging of the 21th century whenever you mention Distance Learning you always think of a computer, Internet and Web technology. The challenge to integrate Information and Comunications Tehnologies - ICT in the educational process of all stages of education, is an enormous potential benefit [1], [3],[7].

In general, Web Based Distance Education System is presented as a system with three levels. The first level presents standard loging into the system with determination of the users rights. In the second level, depending on the user rights we access to appropriate interfaces and third level is Web Based Distance Learning Environment – WBDEE [6].

The basic concept of the model WBDEE is based on mutual communication of the three main modules Content Presentation, Interaction and Evaluation, on the Database "Learners", Database "Courses" and Learners-Instructors Interface and supported from modules Service&Support and Media&Tools [6].



BASIC CONCEPT OF THE WB-DEE

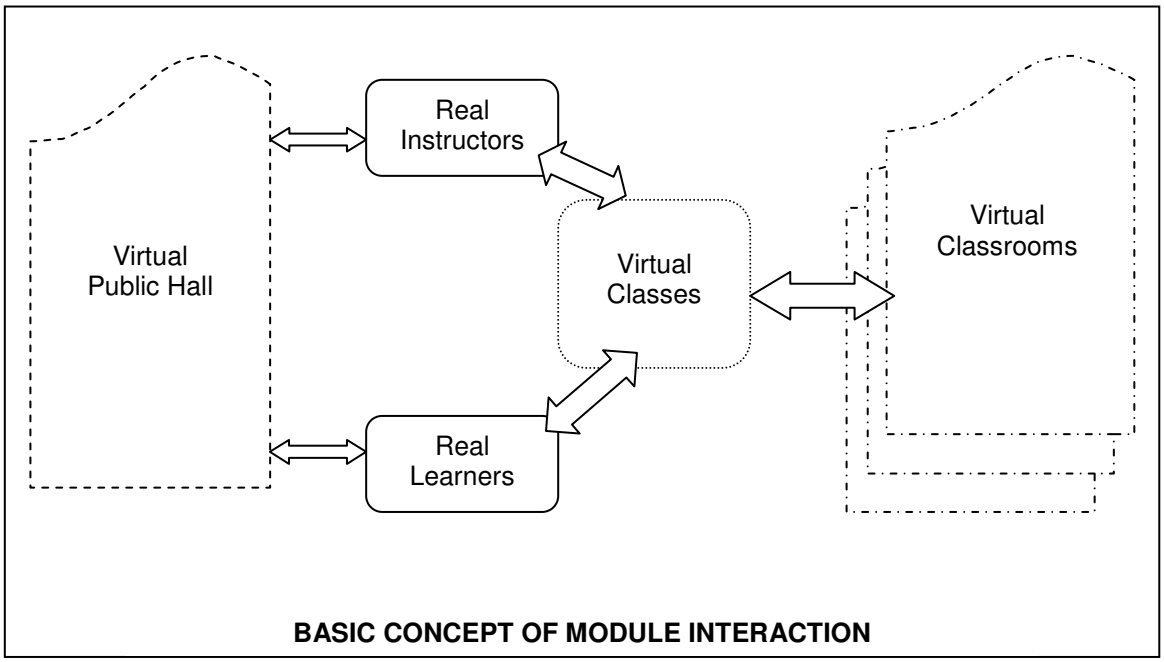
In this article a concept of simplified environment for development of Virtual Community through "Module Interaction" is presented. At this stage the role of teacher is moving from provider of knowledge to facilitator of learning process and the role of learner is moving from passive to active learner. It results into a possibility when students feel that they are part of a community of learners and they are more apt to be motivated to seek solutions to their problems and to succeed. Developing strategies and techniques are presented for establishing and maintaining of “virtual learning communities” among learners separated by space and/or time.

2. CONCEPT OF MODULE INTERACTION

When learners interact with one another, with an instructor, or with ideas, new information is acquired, interpreted and made meaningful. There is no difference if these interactions are face to face or are through ICT. Our intention is to make community where interactions through ICT will become as natural as face to face interactions [1].

If it is supposed that there are four actors into our "Virtual Community" and they are involved into the system (Learner, Instructor, Staff and Guest), only two of them (Learner and Instructor) have an active role into learning process. Staff can help only for administration and Guest can only observe learning environment. According to that, to implement successful and effective learning environment we must provide four types of interactions at least [3], [6]:

- learner-content (L-C),
- learner-instructor (L-I),
- learner-learner (L-L) and
- learner-technology (L-T), meaning, learner-interface(web).



BASIC CONCEPT OF MODULE INTERACTION

In order to provide these interactions in our "Virtual Community", "Virtual Rooms" named "Public Hall" and "Classrooms" are implemented:

- Classroom – there are more: *Classroom* 1, *Classroom* 2 … *Classroom* N, in which the members of only one learners-class have access, as well as, the class instructor.

- Public Hall – there is only one hall (room) in which all learners and instructors will have access to the system

Also, there are sub-Communities into "Virtual Community":

- Learners – *Learner 1, Learner 2 to Learner N*, there are many learners like entities.
- Instructors – *Instructor 1, Instructor 2 to Instructor N*, there are many instructors like entities
- Classes - *Class 1, Class 2 to Class N*
  - Each learner can be a member of one or more classes;
  - Each class can be facilitated only by one instructor,
  - Each instructor can facilitate more classes.

3. CONCEPT OF "VIRTUAL PUBLIC HALL"

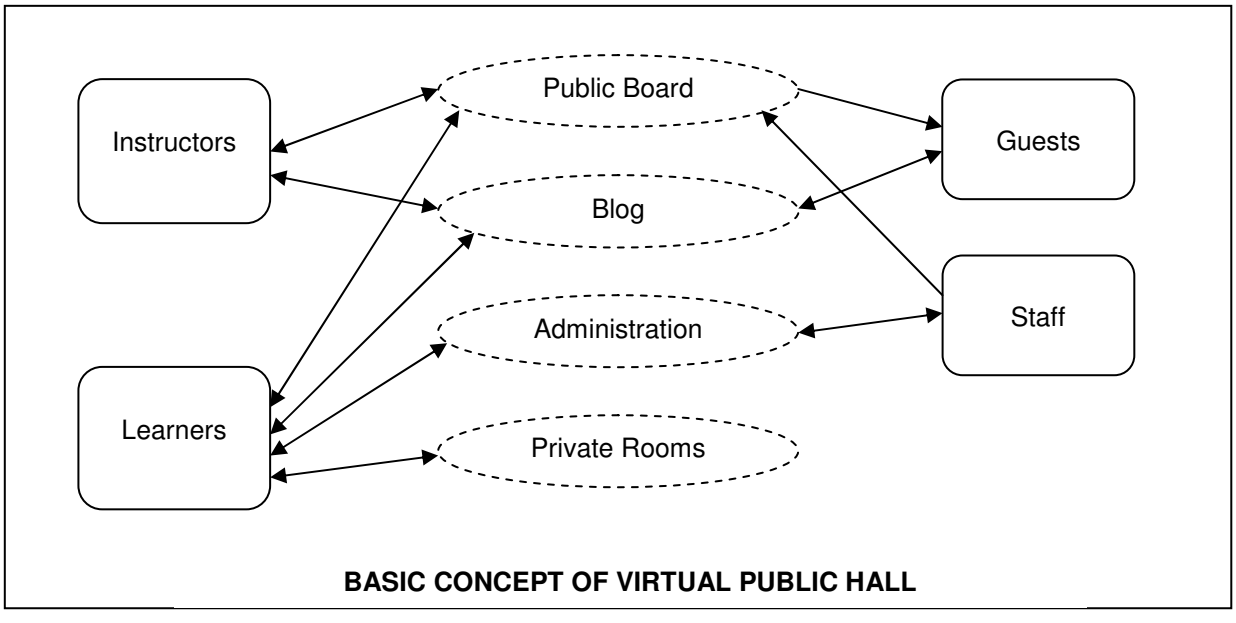
There is only one hall (room) in which all learners and instructors will have access in the system.

In the Public Hall there are four virtual rooms:

- Public information board – on which important information for all community appears and information for individuals like advertisements similar as the faculty information board.
- Administration Room – for administrative communication with the staff about administration.
- Faculty Blog (weblog) Room - all learners and instructors can log and take active participation in the Blogs, to read and write.
- Private Room – communication between two learners which is not available for other learners and instructors of whichever class.

In each of these Virtual Rooms as communication technology are used: e-mail, chat, audio-video conference and web based discussion forum. In order to provide all these communications there should be communication between learners and interface i.e. the learners should have enough technology knowledge to use it. So the interaction learner-technology (L-T) is present in all Virtual Rooms.

Guests can also access in the Public Hall to observe learning community, and Staff to provide necessary information and service for function of all system.



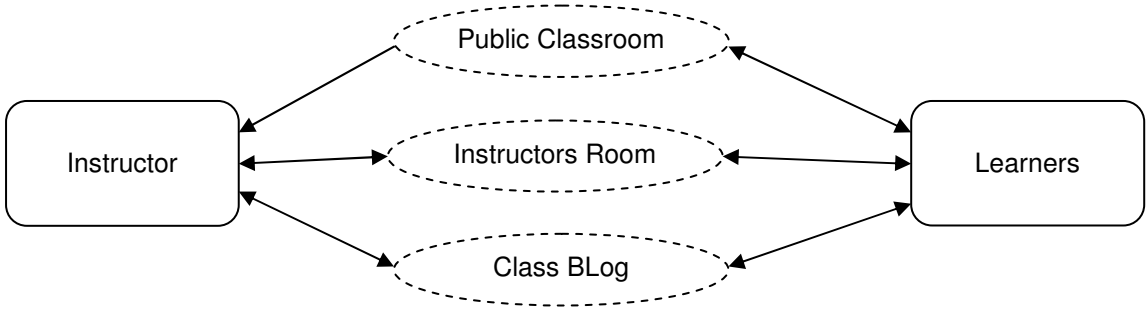
BASIC CONCEPT OF VIRTUAL PUBLIC HALL

4. CONCEPT OF "VIRTUAL CLASSROOM"

Classroom – there are more: *Classroom* 1, *Classroom* 2 … *Classroom* N, in which the members of only one learners-class have access through sub-Community "Class", as well as the class instructor. As in the "Public Hall" communication technology such as: e-mail, chat, audio-video conference and web based discussion forum can be used in the "Classroom" as well. Learners are obliged to communicate with computer interface (Windows, Web etc.) i.e. the learners should have enough technology knowledge to use it. It means that the interaction learner-technology (L-T) is present in all stages of Virtual Classroom.

In each Classroom there are:

- Public Room – in which there is public communication among all learners of the class including the instructor.
- Instructors Room – where direct communication (consultation) among the instructor and the learners is available.
- Class BLog (weblog) Room – where all learners of the class including the instructor can log, read and write blogs.



BASIC CONCEPT OF VIRTUAL CLASSROOM

5. TYPES OF INTERACTION BY VIRTUAL ROOMS

The Interaction learner-content (L-C) is performed in the Classroom-Public Room, Classroom – Instructors Room, and in Class Blog Room. The Interaction learner-instructor (L-I) is available in Classroom-Public Room, Classroom – Instructors Room, and if needed in Administration Room. Interaction learner-learner (L-L) is performed on all levels except in Administration Room and Instructors Room. The interaction learner-technology (L-T) is present in all Virtual Rooms.

VIRTUAL PUBLIC HALL	TYPES OF INTERACTION
Public information board	L-T L-L
Administration room	L-T L-I
Public Blog Room	L-T L-L
Private Rooms	L-T L-L

VIRTUAL CLASSROOM	TYPES OF INTERACTION
Public Class Room	L-T L-C L-I L-L
Instructors Room	L-T L-C L-I
Class Blog Room	L-T L-C L-L

6. CONCLUSION

In this article creating a "Virtual Community" through module "Interaction" within Web Based Distance Education Environment WB-DEE is presented. The concept of the module "Interaction" is shown, where different "Virtual Rooms" are presented. Interactions learner-content (L-C), learner-instructor (L-I), learner-learner (L-L) and learner-technology (L-T) are implemented. Interaction L-T is very important because it is used on all stages and into all Virtual Rooms. This expresses the importance of ICT literacy, as well as willingness to accept ICT, as an educational technology.

REFERENCES

[1] Haddad, W.; Draxler, A. (2002). **Technologies for education – potentials, parameters, and prospects**. UNESKO – Paris & Academy for educational Development – Washington DC

[2] Kimovski, G.; Trajkovic, V.; Davcev, D. (2001). **Virtual Lerning System,** In Proc. Of the 2001 Information Resources Management Association International Conference, Toronto, Canada

[3] The Pennsylvania State University (1998). **An emerging Set of Guiding Principles and Practices for the design and Development of Distnce Education.**

[4] Sherrry, L. (1996). **Issues in Distance Learning**. International Journal of Educational Telecommunication, 1 (4), 337-365

[5] Trajkovic, V.; Davcev, D.; Kimovski, G.; Petanceska, Z. (2000). **Web – Based Virtual Classroom,** Santa Barbara, California, USA. In Proceedings of the TOOLS 34, July 30 – August 4, 2000

[6] Zdravev, Z; Grceva, S. (2004). **Emerging model for a Web Based Distance Education Environment –WBDEE,** Edrene, Turkey, International 2. Balkan Educational Sciences Congress, October 8-10,2004

[7] Zdravev, Z.; Grceva, S. (2003). **Modern trends in using computers and Internet in distance learning technology,** Vospitanie, 4/5**,** 152-162

Authors:

Zoran Nikola Zdravev, MSc, Assistant,
Tel. +389 70 210 074, zoran.zdravev@pfst.ukim.edu.mk

Solza Dimitar Grceva, PhD, Docent, Professor of Information Technologies
Tel. +389 2 3127 274, sgrceva@pfst.ukim.edu.mk

Faculty of Pedagogy “Goce Delcev” Stip, University of “Sts. Cyril and Methodius”, R.Macedonia Tel. +389 32 391 589