E-LEARNING VERSUS BLENDED-LEARNING IN HIGHER EDUCATION

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Abstract: The present contribution summarizes the results of a pilot research organized within the framework of Romanian research project eMulticult, financed through the national budget for research and innovation.

The research team has developed various training modules for foreign languages learning and for increasing the trainees’ intercultural sensitivity through better intercultural communication skills. These modules have been designed as specific e-content resources and implemented through a virtual platform. During one month, the students interacted with the virtual platform for knowledge acquisition, reflections on self-behaviour and self evaluation. Simultaneously they participated also to the in-class education process for validating their knowledge and particular understanding. The participants to the pilot blended-learning programme, have been invited to express their opinion on the e-education process. The results of the survey aiming at revealing the trainees’ perception on the benefits of the blended-learning are presented in this article.

Keywords: e-Learning, blended-Learning, intercultural sensitivity.

I. E-EDUCATION METHODS IN HIGHER EDUCATION FOR THE DEVELOPMENT OF THE INTERCULTURAL COMMUNICATION COMPETENCES

The higher education has to cope with the actual challenges of the global knowledge society and to redefine its paradigms according to the new profile of the global citizen. The main characteristics of the global knowledge society consist in the intensive knowledge use and creation, and the development of the open space based especially on web interactions. In this new created context the foreign languages skills (at least two foreign languages besides the mother tongue) and the intercultural communication skills stand for important assets for interacting with various economic and social environments, either directly or through the virtual space. This is the reason conducting to the idea of a research project focused on finding specific educational methods for efficiently teaching the foreign languages and developing the intercultural communication skills. The eMulticult research project proposed new models adapted to the teaching/learning requirements related to the communication in a global space and a methodological approach based on new e-education paradigms. The knowledge global economy relies on open spaces where various languages and cultures are present, interacting intensively. The global open space is characterized by cultural overlapping and interactivity, where, besides the cultural mixtures, there are also cross-cultural bridges among actors with different cultural identity [10]. Another important feature of the open global space stands for the intensive use of the virtual space, cutting across national boundaries and creating new social and professional communities.

In this perspective, the higher education system has to take into consideration the knowledge global citizen’s profile and to find new solutions for developing the competences required on the global labour market. Beside the specific professional competences, the education has to focus on the intercultural communication competence, as a key success factor for the global citizen, and to integrate the intercultural dimension in the educational processes [8]. In line with these requirements, the
academic area should reconsider the importance of the foreign languages and their cultural elements applied in a socio-economic context. The academic area should be more responsive to the global space requirements and to match the educational processes with the workplace needs. The main goal stands for repositioning the intercultural dimension in the language teaching in order “to develop learners as intercultural speakers or mediators who are able to engage with complexity and multiple identities and to avoid the stereotyping which accompanies perceiving someone through a single identity” [3].

Finding better and flexible e-education solutions represents another goal of the research. The design and the implementation of the e-content adapted to the English language learning in a multicultural perspective and the development of adequate attitudes and behaviour in line with each cultural dimension represented the main concern of the research team. The e-courses have been delivered using a virtual platform. The access has been provided for the teachers, tutors and students (50 students). The students have been enrolled in the pilot programme on a voluntary basis. The students enrolled in the pilot programme have been trained to use the platform and to follow independently the e-learning courses. The pilot learning programme lasted one month, each week the students having also one in-class course, besides the self-learning process. Finally, a pilot survey has been conducted in order to evaluate the effectiveness of the blended-learning process and the students’ opinions towards the e-education process.

II. E-CONTENT DESIGN FOR FOREIGN LANGUAGES LEARNING AND INTERCULTURAL SKILLS DEVELOPMENT

The eMulticult project addresses the actual students’ needs to cope with the plurilinguism and interculturalism challenges and offers a conceptual and practical framework for the development of specific educational programs delivered as blended-Learning programs.

In order to identify the opinion of the students and non-students concerning the most appropriate learning processes related to foreign languages and the intercultural sensitivity development, the research team conducted two surveys in the first phase of the project. The first survey was conducted during 10.01.2008 and 28.02.2008, involved 94 subjects and aimed at identifying the perception of the students and potential students/trainees concerning the eLearning processes. The analysis of the survey revealed that 94.6% of the sample are interested in participating to the e-learning courses for foreign languages and intercultural dialogue. The most important motivation for choosing the eLearning courses is represented by the accessibility to the structured information (58.4% of the respondents) and the flexibility of the learning programme (31.5% of the respondents). In the same time, the subjects considered that the direct interaction with the professor/tutor is useful (35.1%) and very useful (57.4%). The second pilot research was conducted during 02.12.2008 - 09.01.2009, involved 153 subjects and had as main goal to establish the importance of the cultural sensitivity for a better interaction in a multicultural environment. The spectrum of the research subjects covered students of foreign languages and foreign economic relations departments from Romanian major academic centres, MA’s Romanian students which study abroad, employees of multinational companies in Romania and participants to professional development continuous education courses for foreign languages acquisition. Age, profession, levels of education and various occupations of subjects increased the diversity of perception. The questionnaire focused on the determination of the interaction and adaptation manner of citizens in a multicultural environment, through identification of elements which could facilitate intercultural dialogue, as well as the accuracy of understanding of multicultural environment concepts. The explorative analysis for establishing perception and behavioral elements, revealed a stratification of the sample on two lots, as it follows: lot A – people that are integrated in a multicultural environment, representing 52.9% of the sample, and lot B – people that are not involved directly in a multicultural environment. Aiming at conclusive results, a heterogeneous sample was selected, taking into account the profession, age, occupation or socio-profesional group. The most important results of this survey refers to:
the auto-defining capacity, absolutely necessary in the context of globalization, (the answers to this question shows that 77% of the respondents can define themselves, and have generally an idea/opinion versus the ethnic group they belong to);
the positive perception of the differences (72.8% from the lot A, and 59.7% of lot B);
the capacity to understand the others’ behaviour (91.3% from lot A, and 88.1% from lot B);
the utility of the organizational culture elements (97% of the respondents of the lot A grant a higher importance to knowing elements of cultural organization, of specific elements of oral/written communication, as well as of cultural values that could generate different interpretation; answers of the lot B score 18.1% lower).

The hypothesis regarding the intercultural sensitivity is confirmed, because over 90% of the cases, interest was displayed in understanding different behavior and availability to accept other cultural values. An increased sensitivity was displayed by the lot A, demonstrating the importance of the intercultural dialogue for the people living or working in a multicultural environment.

For identifying the main instruments considered necessary in a foreign language learning process, for facilitating integration in a multicultural environment, answers to the specific questions were analyzed, and the following conclusions have arisen:

- 71.24% consider very useful specific oral/written communication elements;
- 47.71% consider very useful static/dynamic images which could shed light on stance and behavioral elements based on specific cultural values;
- 57.52% consider to be useful cultural organizational elements presented comparatively for different cultural contexts.

The analysis of the answers obtained to this question indicated that the majority (over 70%) declares unequivocally the importance of knowing specific oral and written communication elements for a better and easier adaptation to a multicultural organizational context. The results of the two surveys guided our research team in the training engineering processes aiming at designing the educational model, the pedagogical methods and the specific tools to be implemented through the virtual educational platform.

The e-content courses have been designed according to the four dimensional model addressing foreign languages knowledge, communication, cultural approach, intercultural approach and organizational culture. The model was designed according to the Ulla Lundgren’s view as a trivalent model [7]. It was complemented with the organizational culture perspective, according to the Hofstede’s view. The research took into consideration the specific Geert Hofstede’s approach regarding the interactions between national cultures and organizational cultures [6]. Hofstede has demonstrated that “the national and regional groupings affect the behaviour of the organizations” [6]. The educational model aims at a facilitating the acquisition of the intercultural communication competences and the smooth insertion in a specific organizational culture. The structured model articulates Bloom’s and Anderson’s taxonomies [2] related to the cognitive dimension with the Krathwohl’s taxonomy concerning the intercultural sensitivity [11]. The conceptual model is represented in the Figure 1.

![Figure 1. Conceptual educational model](image_url)

The conceptual model has been transposed into concrete e-content structured on various themes, related to the foreign languages learning and skills and attitudes development, according to
specific business cultures and organizational environments. The main issues related to the e-content scenario address the specific content, the methodic approach, the interactions, the support and the evaluation. The specific content represents business oriented topics. The methodological approach, according to the Anderson’s & Krathwohl’s taxonomy, varies from the constructivism (understanding and consolidating), to collaborative learning (application) and learning by problem solving (evaluation) and learning by projects (knowledge generation). The implementation followed the asynchronous approach. Various tools for languages teaching and learning have been integrated, including a reading robot, in order to develop the specific competences according to the Common European Framework of Reference for Languages: understanding, reading, speaking and writing competences [12]. The goal of the pilot project consists in achieving the C1 level starting from the B1 level. Each learning unit has its independence, being designed according with its goal and objectives, integrating texts in a structured or unstructured form, images, exercises, problem solving and project development challenges. Each learning unit integrates structured and unstructured information as it is presented in the Figure 2 and 3.

![Figure 2. Structured information](image1)

![Figure 3. Unstructured information](image2)

Various sets of exercises are integrated to the learning units, as it is presented in the Figure 4.

![Figure 4. Interactive exercises](image3)

The e-content development followed a scenario carried out by the teacher with the support of the e-content designer. The scenario was designed according to the competences and skills acquisition aimed by each learning unit. The e-content has been delivered through an online educational platform, enabling free access for the students, teachers and tutors.

![Figure 5. Educational platform interactions](image4)
The digital educational platform represents an open space for various actors’ interactions, including researchers and practitioners, who can play the role of contributors or beneficiaries as well.

III. PILOT SURVEY RESULTS CONCERNING THE BLENDED-LEARNING PROCESS

After the implementation of the pilot learning system, the research team observed that the students were interested also in classical education process, i.e. the in-class learning. In respect to their needs, after the e-learning module, the students have been involved in face-to-face classes. A final survey has been carried out in order to have the students’ feedback related to the whole process and to validate the research team’s approach.

The 50 participants to the pilot online learning module have been asked to fill in the questionnaires. From the total number of the participants, 41 have participated to the survey. The most important results of the survey revealed that 70.7% of the respondents considered that the blended learning system is more appropriate for the foreign languages learning than the e-learning system.

Concerning the quality of the learning units, according to each participant’s perception, the clarity of the objectives, the lexical presentation, the exercises, the debates themes, and the projects proposed have been considered important and very important for the learning process (the favourable appreciations represent approximately 66%), as it is presented in the TABLE 1.

<table>
<thead>
<tr>
<th>Code</th>
<th>Components</th>
<th>Very useful</th>
<th>Useful</th>
<th>Medium</th>
<th>Not so useful</th>
<th>Not useful</th>
<th>Non answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Clarity of the objectives</td>
<td>7 17%</td>
<td>20 48%</td>
<td>9 23%</td>
<td>4 10%</td>
<td>0 0%</td>
<td>1 2%</td>
</tr>
<tr>
<td>b</td>
<td>Comparative lexical presentations</td>
<td>7 17%</td>
<td>19 47%</td>
<td>11 27%</td>
<td>2  5%</td>
<td>1  2%</td>
<td>1  2%</td>
</tr>
<tr>
<td>c</td>
<td>Exercises</td>
<td>7 17%</td>
<td>18 44%</td>
<td>13 32%</td>
<td>1  2%</td>
<td>0  0%</td>
<td>2  5%</td>
</tr>
<tr>
<td>d</td>
<td>Debates themes</td>
<td>11 27%</td>
<td>17 42%</td>
<td>10 24%</td>
<td>1  2%</td>
<td>0  0%</td>
<td>2  5%</td>
</tr>
<tr>
<td>e</td>
<td>Projects proposed</td>
<td>8 20%</td>
<td>15 37%</td>
<td>11 27%</td>
<td>4 10%</td>
<td>0  0%</td>
<td>3  6%</td>
</tr>
</tbody>
</table>

Related to the ways of interaction, the students appreciated that the characteristics of the web environment represented a real support for the learning process. The majority of the respondents (between 53% and 83%) considered the web environment a helpful and very helpful tool for the learning process (TABLE 2).

<table>
<thead>
<tr>
<th>Code</th>
<th>Components</th>
<th>Very helpful</th>
<th>Helpful</th>
<th>Medium</th>
<th>Not so helpful</th>
<th>Not helpful</th>
<th>Non answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Real environment simulation</td>
<td>19.51%</td>
<td>34.15%</td>
<td>34.15%</td>
<td>9.76%</td>
<td>0.00%</td>
<td>2.44%</td>
</tr>
<tr>
<td>b</td>
<td>Team work facilities</td>
<td>19.51%</td>
<td>34.15%</td>
<td>21.95%</td>
<td>12.20%</td>
<td>7.32%</td>
<td>4.88%</td>
</tr>
<tr>
<td>c</td>
<td>Information search facilities</td>
<td>41.46%</td>
<td>41.46%</td>
<td>7.32%</td>
<td>7.32%</td>
<td>0.00%</td>
<td>2.44%</td>
</tr>
<tr>
<td>d</td>
<td>Auto-evaluation and quick results analysis</td>
<td>29.27%</td>
<td>39.02%</td>
<td>21.95%</td>
<td>2.44%</td>
<td>4.88%</td>
<td>2.44%</td>
</tr>
<tr>
<td>e</td>
<td>Independent work stimulation</td>
<td>29.27%</td>
<td>48.78%</td>
<td>9.76%</td>
<td>9.76%</td>
<td>0.00%</td>
<td>2.44%</td>
</tr>
</tbody>
</table>

The most important facilities provided by the e-learning process stand for: the autonomy, the flexibility, the efficiency, the attractivity. The students’ decisions in favour of the online learning are presented in the TABLE 3.

<table>
<thead>
<tr>
<th>Code</th>
<th>Components</th>
<th>Very Important</th>
<th>Medium</th>
<th>Not so</th>
<th>Not</th>
<th>Non</th>
</tr>
</thead>
</table>

TABLE 3. Online learning
In favour of the face-to-face educational process, the students mentioned the utility of solving unclear issues, validation of own perception, the teacher’s support, the class atmosphere, as it is illustrated in the TABLE 4. The students consider the teacher’s support for the in-class process very useful, as mediator and trainer.

**TABLE 4. In-class learning**

<table>
<thead>
<tr>
<th>Code</th>
<th>Components</th>
<th>Very useful</th>
<th>Useful</th>
<th>Medium</th>
<th>Not so useful</th>
<th>Not useful</th>
<th>Non answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Unclear things solving</td>
<td>26.83%</td>
<td>56.10%</td>
<td>4.88%</td>
<td>0.00%</td>
<td>7.32%</td>
<td>4.88%</td>
</tr>
<tr>
<td>b</td>
<td>Direct interactions</td>
<td>29.27%</td>
<td>48.78%</td>
<td>9.76%</td>
<td>7.32%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
<tr>
<td>c</td>
<td>Enlarging the perspective on the topics addressed by the online learning unit</td>
<td>36.59%</td>
<td>36.59%</td>
<td>19.51%</td>
<td>0.00%</td>
<td>2.44%</td>
<td>4.88%</td>
</tr>
<tr>
<td>d</td>
<td>Validation of the own perception</td>
<td>36.59%</td>
<td>31.71%</td>
<td>24.39%</td>
<td>2.44%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
<tr>
<td>e</td>
<td>Atmosphere created by the teacher</td>
<td>41.46%</td>
<td>31.71%</td>
<td>17.07%</td>
<td>4.88%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
<tr>
<td>f</td>
<td>Stimulation of exercises solving by suggestions and indications</td>
<td>51.22%</td>
<td>31.71%</td>
<td>9.76%</td>
<td>2.44%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
<tr>
<td>g</td>
<td>Teacher’s support as mediator</td>
<td>26.83%</td>
<td>56.10%</td>
<td>9.76%</td>
<td>2.44%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
<tr>
<td>h</td>
<td>Teacher’s support as trainer</td>
<td>36.59%</td>
<td>46.34%</td>
<td>9.76%</td>
<td>2.44%</td>
<td>0.00%</td>
<td>4.88%</td>
</tr>
</tbody>
</table>

Despite the initial approach of the pilot project oriented towards the exclusive use of the web space in the educational process, the final survey demonstrated that the blended learning represents an adequate methodology for the foreign languages learning and teaching.

**IV. CONCLUSIONS**

The portal promotes a democratic education approach bearing in mind the mother tongues, the languages of the minority or marginalized linguistic communities, immigrants’ languages, early study of foreign languages, the development of a plurilinguism that would facilitate the access to international relations. The designed educational model emphasizes on treating the learners as problem-solving persons, by involving them in real-life situations and supporting the collaboration for problem solving. The portal provides also the assessment and testing tools for a self-evaluation and for the final certification, tracking the progress of the individual educational progress. The portal
encourages also the wide participation and contribution, concerning the production of the digital content and the intercultural dialogue. The innovative approach of the project consists in using the virtual environment and the digital content for foreign language knowledge improvement, mentality & attitudes changing, and tolerant behavior development, as main premises for a good social and individual communication and living.

In addition to the e-learning platform, the pilot project has been extended with in-class lessons, as the students clearly required. The students understood very well the advantages of both systems and prefer to have a mixed approach in order to benefit from the advantages of both systems. Though the initial hypothesis of the project was the delivery of the educational services through the virtual platform, the implementation of the pilot demonstrated that the e-learning should be complemented with the face-to-face teaching process.

References