Developing Pedagogical Competence Students Through Blended Learning

Margarita Pehlivanova¹, Zlatoeli Ducheva¹

(1) Technical College of Yambol, Gr.Ignatiev str. 38, Yambol, Bulgaria
margopehlivanova@abv.bg, zl.ducheva@abv.bg

Abstract
The modern school is seen as vital space, where teachers should create optimal conditions for the development of intellectual, social, emotional and other components of the personality of students. It’s changing the nature of the activities of teachers, increasingly they fall in different socio-educational situations, which require teamwork and highly developed vocational educational and individual skills. Training in Pedagogical practice of students carries out the connection between theoretical knowledge and the formation of an individual pedagogic style and behavior in a real school environment. Questionnaire research with graduates, teachers and interviews with the students indicate that blended learning as a flexible type of training improved students e-skills, developed the communication skills and skills in team work, reflection, critical thinking, making effective and adequate decisions in educational process. Integrative nature of the blended learning enables an adequate preparation of students - future teachers for adjustment to pedagogical community and activities to reduce stress situations.

Key words: blended learning, Pedagogical practice, e-learning for teacher’s education

1. Introduction
Studies of various authors and a review of the literature shows that since the mid 90's to present days have observed an accelerated development of various models and forms of education – traditionally, e-learning, blended learning. The international experience, and the results of our research over the past five years show that lecturers and students prefer blended learning as a new type, which expands possibilities for connection between lecturers and students, diversified school environment, provide more choice to search for information and use of traditional and interactive teaching methods. The most common definition of blended learning is a combination of face-to-face instruction combined with computer-mediated instruction to facilitate interactive and reflective higher-order learning (Dziuban, C. D., Hartman, J. L., & Moskal, P. D. 2004; Graham, 2006).

Blended learning is about a mixture of instructional modalities, delivery media, teaching methods, and web-based technologies (Graham, 2006). Blends of instructional modalities usually include a balanced mixture of onsite, web-based, and self-paced learning (Rossett, Douglis, & Frazee, 2003).

We accept, that in this type of training a substantial part of the activities are moved online, and the time, traditionally spent in-class is reduced, but not completely eliminated. The purpose of these hybrid courses is to join the best characteristics of teaching in class with the best features of online training for the promotion of active, self-directed learning opportunities for students with added flexibility (Garnham & Kaleta, 2002).

Computer-based technologies can be used to selectively present case studies, development of lessons, self-analysis of different types of lessons. The involvement of students in this type online school activities show that changed character of the work in school from presentation format to interactive methods of learning also (discussions, debates) (Mayer, 2003).

The combination of training modalities usually include balanced elements of learning in place with self-dependent pace and web-based learning (Rossett, Douglis, & Frazee, 2003).
2. Organization and Analysis of the Research

For evaluation of the quality and importance of blended learning for the professional and pedagogical realization of students we use questionnaire for the quality of training in the Technical College - Yambol. Were tested 60 graduate students in 2009 and 104 graduates in 2010 regular and extramural studies. The questionnaires were not anonymous. Respondents have sufficient knowledge and social experience, to respond objectively. In presentation we put the accent on the attitude and willingness to continue learning, assessment of the developing character of the training at the College and the quality of the preparation for professional realization. We are analyzed results for Subject Motor Transport and Agricultural Machinery (on a regular and extramural studies), separately since all receive Pedagogical qualification and are realized and as lecturers instructors for preparation of drivers of motor vehicles.

The school educational practice of students is integrative discipline, which carries out the connection between theory and practice, the construction of pedagogical competencies in a real and virtual school environment. The traditional training face to face developed oral speech, skills for the interpretation of non-verbal expressive resources and emotions. In the process of business and interpersonal communication in class students acquire skills not only for speech and non-verbal communication. They used different behavioral reactions in various situations, form skills for self-reflection, control and improvement of body postures, gestures and facial expression.

Future teachers will be implemented in centuries of information and communication technologies, which require the construction of the e-skills. The change of the nature and character of the teaching, in which shall be carried out learning through experience and use of social experience required from the teacher critical thinking, empathy and communication skills. Because training in school required and presumed focus on the individuality of each student, students must develop management skills. They will identify the objectives, ways and means of interaction, will comply changing conditions of the educational environment and will carry out continuous monitoring and self-control on the training quality.

In the blended learning in Educational practice are developed modern approaches and technologies for individualized and interactive process. We use educational situations, aimed at certain specific needs of lifelong learning, for the assessment of the training and learning ecology (Wenger and Ferguson, 2006; Moebes S., St. Weibelzahl, 2006).

<table>
<thead>
<tr>
<th>Studying</th>
<th>Learner Self-Navigation</th>
<th>Practicing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books, articles, guide</td>
<td>Authentic tasks</td>
<td>Role play</td>
</tr>
<tr>
<td>References</td>
<td></td>
<td>Projects</td>
</tr>
<tr>
<td>White Papers</td>
<td></td>
<td>Case studies</td>
</tr>
<tr>
<td>Asynchronous content</td>
<td></td>
<td>Peer discussion</td>
</tr>
<tr>
<td>Job aids</td>
<td>Glossaries</td>
<td>Discussion forums</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content Focus</th>
<th>Delivery Focus</th>
<th>Experience and Practice Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAQs</td>
<td>Classroom lectures</td>
<td>Experiences</td>
</tr>
<tr>
<td>Synchronous content</td>
<td></td>
<td>Diagnostic labs</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Reviews/discussions</td>
<td>Practice labs</td>
</tr>
<tr>
<td>Videoconferencing</td>
<td>Guided Navigation</td>
<td>Mentoring/Tutoring</td>
</tr>
<tr>
<td></td>
<td>Coached</td>
<td>Experiments</td>
</tr>
</tbody>
</table>

Figure 1. Learning Ecology Matrix (Wenger & Ferguson 2006)

For this purpose in design of the lessons in the Pedagogical practise, we use elements of Learning Ecology Matrix. The base-teacher and the lecturer specify with students the time, the
place, the conditions and the topic from the educational content. The base-teacher inform students via e-mail or face to face about the place of the topic, didactic purpose and tasks, the type lesson, didactic materials and tools described in the annual distribution.

Indicate the role and importance of the topic and lessons for developing of knowledge and skills of students and the relationship with the previous and following topics and lessons. The lecturer provides examples of variations in the structure of lessons with the necessary scientific, psychological, pedagogical and methodological literature. In the first independent development of plan-conspectus, where the student has a lower level of autonomy, a lecturer submit sent ready an indicative plan-conspectus, who also serves as an algorithm used for the work of students. In the discussions face to face in a virtual environment the goals are operationalized, are considered typical for the training and of the school life pedagogical situations and the model of communication and behaviour by which they can be resolved. We use authentic pedagogical cases and scenario of a school’s life, simulation games and work in team headed by professor. The professional role of the University lecturer will definitely continue to enrich and change in conditions of online and mixed school environment. It is necessary to develop skills for instruction, numerous styles for teaching, the organization of the school environment, includes increased the importance of teachers.

In the preliminary activities include students - and another double, which will perform the role and functions of an observer, an analyst and controller. In this way are being developed at least two scenarios for the implementation of the lesson. Students are formed skills for different approaches to the same topic, an opportunity for comparison of different combinations of activities, methods, and other pedagogical techniques.

Since the results and the quality of training in school depend on the work of pedagogical team, we form at the students skills for partnership and cooperation. The initial development of a plan-conspectus and scenario would be sent to the base-teacher, lecturer and the other two colleagues. In this way training and trainees can work with its own pace, to make additional consultation on scientific problems, pedagogic theories and to consider further in-depth its advice and recommendations.

In support of a more effective and interactive training in Pedagogical practice, to improve skills for guiding discussion, giving opinions and estimates developed on the assignments of other participants in the group not only through e-mail, but directly - in the chat-forum. This will facilitate the formation of skills in a team work, which implies general purpose, achieved through the efforts of the whole group and individual assignments and responsibilities of each member.

![Figure 2. Development of important skills through blended learning](image-url)
The graduates understand new necessities and expectations of society towards profession of teacher. They realize that the new roles of expert, mentor and counselor, vocational adjustment and career development require lifelong learning. There is a positive trend in the majority students of the both graduates to acquire a higher educational degree. Is a relatively small percentage of the Willingness in 2009 to change their specialty, and in 2010 there is no graduates, which shall be reoriented to another profession.

![Figure 3. Willingness of students to continue education](image)

More active use of asynchronous and real-time discussion will enable more shy students to be more actively involved and to overcome their discomfort. Blended learning allows students to improve their knowledge and skills to work in a virtual environment to develop skills for critical analysis of information and situations allowing them to formulate and take tactical and strategic decisions in their professional activities.

The different variants of a communication reflect some of the individual characteristics of students, associated with temperament, the level of communication skills and the willingness / unwillingness to be included in the discussions or business, active pedagogical communication. In discussions, part of the students expressed their preference to express their views or to discuss in oral form, as can further refine the statements and to report non-verbal means of communication.

Others who are more worrying, they prefer communicating by e-mail as they consider better position and its response to seek additional information and then send it to the lecturer and other participants in the group. Other prefer to work in a small group/team, because, when express their views it go on behalf of the group and the responsibility to the correctness is shared by all.

In addition to greater individualization, blended learning encourages increased affiliation, cooperation and connectedness. Strong side to the blended learning is that connects partners, activities and events. This type of training is a key tool for building of shared pedagogical understanding on a global basis. The nature of Pedagogical practice requires jump of practical educational activities, which prepare and carry out the inclusion in a real educational activities. In this type of training prepare a portfolio of the Work materials of each student in the group. In this way we developed skills for self-analysis and formation of an adequate and objective self-assessment of educational results. The evaluation is done with the preliminary specified and commended on such proposals criteria and indicators. The use of blended learning in Pedagogical practice improves the main competence of students and e-skills, which are obligatory prerequisite.
and condition for employment in the modern school. Applying a combination of traditional and e-learning improve the quality of training and developing professional and personal competence among future teachers. Possibilities of e-training apply as a priority in the preliminary preparation for lesson, the training in classroom in the form of role play and subsequent analysis make easier the formation of an adequate and individual pedagogic style in real situations.

Observations and assessments of the current educational practice shows that students develop better options on the plan-conspectus, increase the written culture, achieve a higher quality of the lesson project and lead more meaningful discussions on educational content and pedagogical technology.

We accept the opinion of Sands (2002) and Spika (2002) that in the blended learning, lecturer integrates online and work in audience. Graduate students indicate that increased opportunities for time management and independent choice of method and style of teaching work.

Part of the students does not have skills for the organization and distribution of the teaching time, which makes it difficult to develop in time final version of conspectus. Others find it difficult to work with new technologies and a third part does not take a final decision, because they are afraid of opinion of colleagues and lecturer’s assessment.

Thus ongoing Pedagogical practice prepares students to take an active part in training, to build skills for enhanced interaction with colleagues, lecturers and students, opportunities for continuous improvement and work in a real and virtual educational environment. Systematic observations, the combination of traditional and e-training, show enrichment of knowledge and development of professional conduct of students.

In the conduct of preliminary preparation, the development of a plan-conspectus and scenarios of the lessons we use mainly asynchronous ways of communication. After pre-reading and analysis of the student’s proposals and specified recommendations is possible to use and synchronous communication through ICQ or SKYPE.

In the implementation of Pedagogical practice with the students in extra-mural training we and the students prefer blended learning, since the educational content, the aims, the place of conduct and trained and pedagogical style are different for each student. This requires take into
consideration with the various pedagogical situations and school environment, opportunities for interaction lecturer - students, formation of its own pedagogic style, application of new flexible models of teaching and learning.

The video and conference links are difficult applicable at this stage because of technical and technological problems. The data from surveys show that part of the students do not have sufficient skills and Internet, in order to increase the proportion of synchronised communication.

3. Conclusions and Recommendations

In our activities we are witnessing, that the blended learning students easier learn and apply pedagogic concepts, and develop their written language culture and choice of an optimal combination of educational purposes, methods, tools and techniques.

In our future work will maintain contacts with workers as teachers for the exchange of innovation and good practices.

Will improving teachers and students skills for e-learning and technology.

Will promoting synchronous and asynchronous communication and discussions on issues of educational activities.

Will improving the technical and technological equip of teaching.

4. References