

# A study programme model based on the blended learning approach in the context of the Romanian academic environment

Corina Musuroi, Ioana Iacob, Alexandra Spataru

**Abstract**—This paper aims to describe a modern instructional design in which the instruction is provided by a transnational network of contributors including higher education institutions, as well as institutions from the socio-economic environment of applied, practical, experiential learning. We observed the transformations of the Romanian academic environment, the modifications of the student's profile and expectations, as a result of the tendency of harmonization with the European educational policies. We propose a model of a study programme based on a partnership agreement between academic institutions and non profit organization in the field of education. This model is a blended learning approach presented with its specificity.

**Keywords**—Instructional design, learning technologies, blended learning, e-learning, Romanian academic institutions.

## I. INTRODUCTION

In a fast changing world we need to rethink and restructure the educational system and the learning experience. The transformations in each sphere of life and the technological outburst from the past years have led to a change in the both students and teachers' needs. The Romanian university has to be prepared to adjust itself to the changing requirements of the community and of the labour market. In the recent years an increase of the preference for the distance learning system has become manifest, yet presenting many adverse consequences. Therefore the blended learning concept can be used as a powerful strategy to meet the present needs for flexibility within a complex and dynamic learning framework. The blended learning design is a modern approach that requires a change in attitude towards the learning experience by providing diverse opportunities for personal, academic and professional development.

Blended learning is the modern learning technology that

combines the traditional style of learning, inside the classroom, in the teacher's presence, with the modern style, based on the computer use, which unlike the first one is deprived of certain dimensions such as: place, time, study pace and work load per time unit of a certain learning activity. Therefore, two concepts are implied.

One is the e-learning, which regards the teacher as an instruction provider who is assisted by advanced computer techniques to deliver the information. The other is the workflow learning. This is related especially to the instruction receiver, the student who can manage the learning activity, according to his own needs, skills and individual organizational models. Some of the advantages of blended learning are the increased academic satisfaction, a more effective learning process, the increase of the performance, and the adaptability to the active pace of life.

Therefore, by applying the blended learning techniques, the instruction process at the level of higher education institutions can acquire new dimensions of time, space and learning content, increasing the addressability and the interaction between the instruction provider and receiver, namely the teachers and their students. The limits of a single institution, even of a single country's borders can be overcome, so that the curricula should be organized within the partnership between universities, at distance, for a large number of students, involving a rich educational offer.

Thus a modern learning design can be created, based on inter-universities communication networks. According to different needs, the socio-economic institutions may get associated as providers of non-formal learning, enhancing the practical content of the instruction process and the relation with the pragmatic needs of the community and of the labour market.

## II. THE NATIONAL AND INTERNATIONAL CONTEXT OF THE IMPLEMENTATION OF THE CREATED MODEL

The integration of the national education system in the European Union one together with the freedom of movement have led to the need for international recognition of the diplomas, respectively of the qualifications obtained through the completion of the curricula in the Romanian universities. This recognition is absolutely necessary to

Manuscript received May 9, 2011.

C. Musuroi is with the Tibiscus "University" from Timisoara, Faculty of Psychology, Lascar Catargiu str. No. 4-6, 300559 Timisoara, Romania (e-mail: [cormus1@yahoo.com](mailto:cormus1@yahoo.com)).

I. Iacob is with the Tibiscus "University" from Timisoara, Faculty of Computers and Applied Computer Science, Lascar Catargiu str. No 4-6, 300559 Timisoara, Romania (e-mail: [consulatm@yahoo.com](mailto:consulatm@yahoo.com)).

A. Spataru is with the Tibiscus "University" from Timisoara, Faculty of Psychology, Lascar Catargiu str. No. 4-6, 300559 Timisoara, Romania (e-mail: [consulatm@yahoo.com](mailto:consulatm@yahoo.com)).

provide the graduates a level of knowledge that enables them to continue their studies in higher education institutions throughout Europe or elsewhere, and that increases their employment chances throughout the European Union.

In this respect, the policy of the European Union indicates that it is not aimed to define a uniform national system of qualifications and therefore the recognition of the periods of study will not be achieved by standardization. The stated goal is to create a reference system and a translation system between different national systems so as to be possible to compare and transfer the qualifications. This system is the European Qualifications Framework.

Considering these provisions and its interests, Romania has chosen to follow the recommendations of the Parliament and of the Council of Europe on establishing the correspondences between their own system of qualifications and the European Qualifications Framework (EQF). This is reflected in the efforts to create the necessary legislative framework and in the changes the Romanian higher education system is experiencing during this period.

The first steps, particularly important, consisted in the adoption of the Bologna system, organized on three levels: bachelor, master's degree, doctoral degree, corresponding to the EQF 6-7-8 levels, respectively of the implementation of the transferable ECTS credits.

Currently we are in the process of the implementation of the NQF in the higher education system as a tool for defining these qualifications and for achieving the consistency between the qualification and title obtained at this level of study.

### III. THE CONTEXT OF THE DESIGN

The Romanian university educational system has undergone major transformations in recent years due to the increase in the number of students, to the increasing of their mobility, and of the demand for new forms of education. The emerging new Internet technologies and the need to adjustment to the educational requirements imposed by the European Union have also influence strongly the Romanian academic environment. A new student's profile has taken shape as a result of the dynamic life style, of the need to enter the labor market earlier. This new profile is also encouraged by the new interest in the student's diversity and in his inclination for a specific personal learning style.

The research shows that people have many different learning styles. Especially three of them are the best known more frequently addressed, namely the visual, auditory and kinaesthetic learning styles. Consequently an efficient modern teaching-learning process should aim to focus on the blend of these three learning styles in order to improve the student's level of performance and his satisfaction. Research shows that the blending of these styles will improve proficiency by 30 to 40 percent.

On the other hand it is noted an increased demand for the distance learning programme, determined by various social and economic factors. This type of learning form facilitates

the access to education and due to the developing of the IT infrastructure it could straightforwardly commute to an e-learning model. However the distance learning and e-learning may have many negative aspects. Firstly, the loss of the networking between students and teachers results in the impaired quality of the learning experience. To all this drawbacks the blended learning model seems to represent a powerful solution.

Also, Romania has to specifically fulfil some objectives according with the European Commission's proposals in the framework for Competitiveness and Innovation 2007-2013 to increase the penetration of the Internet services (organizations/population) and to develop the knowledge-based economy, by promoting research, innovation and by accelerating the development of the information society. Therefore there is a need to change the traditional academic learning model and to explore and capitalize the transformational potential of a blended learning approach.

The presented design has its formal support in the European policies related to the harmonization of the educational systems in the European Union countries in order to provide learning opportunities such as:

- Learning experiences in formal, non-formal and informal contexts, which are recognized and certified by documents obtained when graduating from the home university;
- Customizing the learning process according to one's own academic needs due to a flexible and diverse educational offer;
- Study mobility within an academic degree - bachelor / master / PhD' degree - and between them, based on the procedures for the study periods recognition and equivalence [1];
- Acquiring a qualification described through competences which meet the knowledge requirements on the labour market;
- Professional assistance and guidance;
- Modern instruction techniques, the blended learning design.

The implementation of such a model in Romania is founded on the changes made in the Romanian education system which started since the national education system joined the European one and since the adoption of the regulations regarding the management and functioning of the institutions providing education at this level:

- Developing the National Framework of Qualifications for the higher education system in line with the European Qualifications Framework;
- Creating the National Register of Qualifications for the Romanian higher education system as a tool for identifying, consulting and updating the attested qualifications contained in the offer of the higher education institutions in the country;
- Adopting the Bologna system with the three cycles of higher education qualification: bachelor's, master's

and doctoral degrees corresponding to EQF 6-7-8, respectively implementing the European Credit Transfer and Accumulation System (ECTS).

- Defining and certifying the qualifications included in the education offer of the higher education institutions. The applied methodology describes how knowledge and skills are acquired through learning, in the context of the subjects in the curricula, namely the mechanism by which the recognition of a qualification is given by the recognition of the study period and its content.
- The participation of the universities in the transnational student mobility programs (i.e. Erasmus) through which students can benefit from a study mobility or placement in a higher education institution in the European Union based on the cooperation agreements between the home university and the host university.

#### IV. THE INSTRUMENTS OF THE DESIGN

There are some instruments that can be useful in organizing the activities [2]:

##### 1. *Partnership agreements between transnational higher education institutions:*

In these agreements, the mobility is described quantitatively - how many mobilities and how long they will last. In the Erasmus Program these are well defined so that the study period may be up to one academic year (two semesters) and the placement period of 3-6 months, only once, during the complete academic studies (Bachelor-Masters-Doctorate). The mobility can be organized in other contexts, belonging or not to the LLP Program. The Learning Agreement - is an instrument of the Erasmus Program which can be adopted, in an adapted manner, in any student mobility program. This document provides information about the subjects the student will study at the host university. In order to make a study period effective and profitable financially, administratively and educationally, the minimum number of credits to be acquired during the transnational study period must be mentioned.

##### 2. *The development of the educational framework so that the blended learning techniques to be applicable.*

It can be done by:

- Organizing specialties within a transnational partnership, in which education and research institutions, as well as institutions from the socio-economic environment are involved.
- Modular organization of the packages of subjects.

##### 3. *The curricular harmonization of the subjects of the specialization concerned.*

It refers to the content, the learning period, the forms of learning, the workload, the time allotment on types of learning activities.

##### 4. *The existence of the factors of the Khan's Octagonal Framework [3], necessary to create the learning environment in the blended learning system:*

- The administrative and logistical capacity of the participating institutions of offering the learning technologies necessary for each mode of providing instruction.
- The implementation of the action strategies by knowing the learning needs, by setting goals, and analyzing the content.
- Providing the user the interface for each element of the "blended learning".
- The assessment capacity of the outcomes of the instruction provided through the blended learning framework.
- The ability to manage the instruction program based on the blended learning system, belonging both to the program leader institution and to the partners, in the complex context of the teachers and students' participation from higher education institutions from different EU countries.
- The compliance with ethical rules regarding equal opportunities, and equal rights for all the individuals regardless of their nationality, religion, etc.

Increasing the opportunities for effective learning through the blended approach demands the transformation and the redesigning of the traditional way of studying, teaching and learning. Both the instruction providers and students have an important part in this process. First the instructors have to make decisions about which content will be transferred to the online environment and how it will be presented. Also students have to find new learning and study strategies to adapt themselves to this enhanced learning environment. They have to acquire computer literacy and to develop ways of overcoming technical problems. Thus the blended learning approach modifies the roles of the agents involved in the learning process since they must make optimum use of this revolutionary method.

##### 5. *Identifying the learning dimensions approached in the blended learning framework.*

The blended learning approach is based on years of experience and it is a continuous process of developing and delivering new technologies and options. Blended learning is a mixture of learning programs based on different methods of providing information designed to meet the learners' needs both in terms of content, knowledge, and delivery method.

The key is to discover what form of technology is best fitting into a teaching-learning program.

Beyond the variety of media, whether it is mainframe-based, video-based, or web based the research studies highlight the importance of five factors: communication, collaboration, satisfaction levels, equity and autonomy of the student. It seems that the first three vary according to the levels of computer and Internet literacy and the findings show the importance of introducing modern computer technologies in schools. Regarding the last two factors students revealed that they considered themselves to be autonomous and equal in the blended learning environment more than in any other learning environment.

The mixture in the blended learning approach is made between the activities organized in antagonistic conditions which, by summation, would cover any student's possibilities of access to information and retrieval of information. Among these we can mention:

#### *Offline learning-Online learning*

This mixture represents the learning experience combining the classical learning form (offline) with the online learning modality. The offline learning is the traditional learning way, in the classroom, in the presence of the teacher who is the information provider. The online learning is actually a generic name representing an amount of teaching and learning activities that can be assisted by a computer connected to the Internet: the computer-based learning, Web-based learning, or Internet-based training [4], [5]. The online learning makes the computer and the network become the support for knowledge transfer and skills acquisition.

According to the teaching and learning requirements, the appropriate e-learning forms will be selected:

- Online tutorials and courses;
- Online evaluation questionnaires, and periodical tests;
- Elaboration of e-portfolios.

These types of learning represent the fundamental instructional support for a study program in partnership, in order to acquire the competences defining its qualification.

#### *Structured learning-Unstructured learning*

Structured learning is the type of learning that is supported by structured material prepared according to certain rules, with a certain purpose. It is also named formal learning and it uses classic courses, laboratory and seminar materials and resources: printed or digital books, guides, etc.

Unstructured learning occurs in unstructured learning contexts. They should be easily identifiable and approachable in the case of activities organized in partnership between the universities within such a learning model. These activities are events that can be organized in common during the periods of student and teacher's mobility such as: conferences, student symposia, round tables, meetings with the representatives of the partners from the socio-economic environment.

The "meetings" can also take place online, in the virtual space, via e-mail or other computer-assisted ways so that, through conversation, the student might acquire knowledge

that can become a source of information to be later accessed and used.

#### *Self-paced learning and collaborative learning*

It is a mixture of individual, independent learning, using e-learning technologies and collaborative learning. Self-paced learning involves the accumulation of knowledge guided by the receiver, the student, who studies following a predetermined schedule according to her own knowledge needs and organizational possibilities.

The collaborative learning involves the use of collaborative software that enables online interaction and exchange of ideas in a group of people who have a common task to accomplish. They have access to a collaborative virtual environment, to common information archiving system in which learning can be formal or informal, with the conscious or not conscious participation to the learning process [6]. Participants in this type of learning are related not by location, but by locating learning in time. Individuals, in this case, may be in different places, at a distance, being connected via the internet.

The alternation between the two types of learning is achieved when, after the independent study of certain concepts, their practical application is looked for in the others' experience, with all the possible consequences: risks, amendments, implementation errors, etc. Such an environment can be created and used by students from partner universities during the study periods in their own institution, due to the participation of the training staff from socio-economic institutions where the knowledge is implemented. Consequently, the pragmatic value of the acquisitions made in the blended learning framework is ensured and experienced directly.

#### *Synchronous learning and asynchronous learning*

Synchronous learning or real-time learning is the type of online learning in which students and teachers interact at a time, using the computer, without depending on each other in terms of the place where they are located. Synchronous learning can be done using the group chat, the web-site, and the video conferencing.

Asynchronous learning or anytime learning is the type of learning in which the student and the teacher interact by using technologies from different places at different times. This implies a virtual space for dialogue, where discussions are carried out by students' entering the debate, at different times. The interaction is of a longer duration, the learning environment is accessed at different times, but the degree of participation and the students' involvement in the process is of high intensity, with significant learning results for this method [7]. Also by this learning technique, the students can take up the learning tasks at a time established by each part and can solve tests within the evaluation activities, when they consider appropriate to do so.

The two forms of learning, distinguished by the factor of time, can complement each other, one bringing benefits when

the other is unsuitable. Thus, although the type of anytime learning may seem advantageous, there are some learning contexts that cannot be delivered in this manner. Presenting an interactive demonstration of a live experiment in any field, the type of relay interaction, passing from one student to the next one, in a conditional order, the comments moderated by the teacher can be developed only in the real-time video conferencing system.

The real-time learning system is thus mainly suitable for the teacher-student learning interaction while the anytime learning would be the method approached by students for instruction and evaluation according to personal constraints concerning time and working capacity.

#### *Custom content learning and Off the Shelf Content*

Custom content learning is accomplished by using in the e-learning process some instruction products that are technically and educationally adapted to the goals of the learning process, to the knowledge needs and to the students' receptivity conditions. The content presented must be appropriate, attractively presented and must engage both the teacher and his students in the learning process.

The efficiency of the learning process increases if these products meet several conditions:

- Use the bibliographic sources listed as references by the author of the course;
- Use offline training scenarios that facilitate the acquisition of knowledge (animation, contests, games, etc.);
- Promote interactive communication, exchange of ideas, pro and con debates among the participants in the learning process, students and teachers;
- Have an attractive design with an easy operating system;
- Are structured in phases and on learning tasks, according to the objectives of the presented lesson, in the general context of the goals of the course.

The Off the Shelf learning refers to the products with a generic content, dealing with a general problematic without customizing the content in order to respond to the learners' specific learning requirements and tasks. These generic contents may be customized when associated with the offline learning, especially in the classroom, or by using other online learning techniques such as simulation programs, video conferencing, and the website.

Developing these learning products is the task undertaken by the instruction provider. It must be accomplished in the stage of the course development, in a manner that will meet the learner's expectations.

#### V. DESCRIPTION OF THE QUALIFICATION

The description of the qualification obtained by the programme that was described is made in four stages:

- Stage I – the description of the curriculum through professional and transversal skills;

- Stage II - the identification of the correlations between the skills mentioned in the curriculum and the content areas, the study subjects and their corresponding credits
- Stage III – designing the curriculum of the study programmes in accordance with the competences that define the qualification,
- Stage IV - the development of the study programmes in accordance with the curriculum and the competences that define the qualification.

Therefore, according to this methodology, the qualifications, respectively the knowledge and the skills are acquired through learning, within the subjects from the curricula, meaning that a qualification is recognized by recognizing the study period and its content [8].

Each discipline is formally described by the study programme, in which the thematic content of the course, the study period, the obtained grade, the ECTS credits and the general and specific skills acquired are mentioned. These elements constitute the acknowledgement criteria of the studies.

##### *1. The thematic content of the course*

It is designed by the teacher tenure. It is updated annually in accordance with the progress made in the domain and in relation with the learning needs, in relation to the specified qualification. As a result, passing the exam certifies that the student has covered the subject in question, that he has been involved in learning activities by attending classes and during individual study hours, that he has obtained the number of credits assigned to the subject and he has acquired the aimed knowledge and skills.

##### *2. The workload*

It is described through the learning period reflecting the amount of effort that should be made to gain the knowledge described by the skills and abilities. Thus, this period is presented as a summation of the total number of hours specified in the curriculum, namely of the study hours in the institution and of the number of hours assigned for the independent study [9]. The latter, in turn, consists of the time period considered to be necessary for learning activities such as: studying the student book or the course support, studying the recommended minimal bibliography, doing homework: reports, essays, translations, online documentation, preparation of final examination, etc.

Since the allocation of time for study activities is one of the crucial criteria in the recognition of the learning process and of its outcomes it is desirable that the teacher tenure should assess correctly the allocation of time necessary to carry out these activities.

##### *3. Grade Scales*

Grades systems are particularly diverse, therefore this instrument for the recognition of the study period, and

implicitly of the acquired skills, requires the establishment of a correspondence between the grade systems.

For example German system uses a grading scale from 1 to 5, so that the highest score is 1 and the lowest score is 5. Minimum passing grade points is grade 4. Another particularity is that the grades have a decimal part also.

Interpretation is the following:

- Grade 1 – excellent
- Grade 2 – good
- Grade 3 – satisfactory
- Grade 4 – sufficient
- Grade 5 – insufficient

The conversion of the grades from a certain grading system into the German system is achieved by an established formula, namely:

$$GE G = 1 + 3 (\text{MaxG} - \text{ObtG}) : (\text{MaxG} - \text{MinG})$$

- GE G is the grade in the German system,
- MaxG is the maximum grade in the system to be converted.
- MinG is the minimum passing grade in the system to be converted.
- ObtG is the grade obtained in the system in which the conversion is made.

In this way, for a grade of 45 points in the French system, the grade in the German system is obtained as follows:

$$GE N = 1 + 3 (60-45) (60-36) = 2,9$$

The British degree classification system is a percentage grading scheme, with values between 0-100 percent:

- Maximum points: 100%
- Minimum points: 40%
- First class honours: 70% or more
- Second class honours – upper division: 60-69%
- Second class honours – lower division: 50-59%
- First class honours: 40-49%
- Fail < 40%

After 1968, the Italian grade range was established for values between 0 and 60, with the following grading scale:

- Maximum grade points: 60
- Minimum passing grade points: 36
- Excellent: 60
- Very good: 59-48
- Good: 47-42
- Sufficient: 41-36
- Insufficient: 35-0

The French grading system provides that the grades are from 1 to 20, and their interpretation is:

- Excellent: 16-20 points
- Very good: from 14 points
- Good: from 12 points
- Acceptable: from 10 points
- Marginal: from 8 points
- Passable: from 6 points
- Fail: from 3 points
- Null: 0-2, 9 points

In Romania the grading system is from 0 to 10 in following way:

- Excellent: 10
- Very good: 9-8
- Good: 7
- Sufficient: 6
- Insufficient: 5-1

#### 4. The ECTS transferable credits

ECTS was initiated in 1989 through a pilot project within the framework of Erasmus for facilitating the recognition of the period of study during student mobility. Later, this system became an instrument for quality assurance in the higher education system and it is used in the assessment and accreditation of the study curricula.

ECTS is a key element of the Bologna framework of the three cycles of higher education qualifications, in accordance with the European Qualifications Framework. Thus, the first two cycles have a stable number of credits assigned per semester and academic year. Granting of a number of credits for a subject is done according to the workload needed to fulfill the learning task and the expected learning outcomes.

Credits may be allocated for the entire study programme or for its components such as modules, course units, dissertations, internships, etc. The credits allocated for each component depends on the workload required to achieve the expected learning outcomes in a formal context, during a certain period of time. Credits can be obtained by achieving the learning outcomes in other learning contexts or in other periods of time (formal, non-formal, informal), after their validation by the evaluation and recognition of these learning outcomes by the higher education institution.

The credits of a study programme can be transferred to another one within a high education institution or between institutions. The condition is that, through an inter-institutional agreement, the institution which awards the title of graduation should recognize the learning outcomes and, consequently, the acquired skills.

ECTS functions are of accumulation and transfer. By the implementation of this system, the teacher-centered study programme was replaced by the student-centered programme, following his study interests in order to gain competences and qualifications. This modification of the instruction process was accomplished by the way in which the study programme regarding the learning outcomes and workload is designed, leaving the possibility of creating flexible learning ways.

Using the learning outcomes described by skills and abilities makes it possible to describe the qualification acquired through the study programme, and to facilitate its understanding by the student and employer, thus establishing a strong link between the curriculum and labor-market demands.

Defining and describing the qualifications obtained by attending a study programme is done by determining the competences, the knowledge and the skills acquired through learning by completing a certain workload and period of time.

Consequently, attending the program of study as defined by the curriculum leads to obtaining a certain recognized qualification.

With the participation in the student mobility study, attending a study programme do not automatically supposes just the gaining of the knowledge defined in the study programme of the home university. Students can gain additional knowledge through subjects they have chosen at leaving for the mobility, assessed by grades and credits.

Consequently, the same classification obtained by attending a study programme is described, from case to case, by the competences described by the two scales, plus the additional ones obtained by mobility. Most often this type of competences is on the border between areas, giving the owner the chance to reason and create in a different area from the one he has studied.

#### VI. A MODERN STUDY PROGRAMME MODEL IN TERMS OF BLENDED LEARNING APPROACH

According to the transformations of the educational system in Romania and to the changes of our society we propose a modern instructional design for a study programme in the field of science education and psychology.

The instruction is provided by a transnational network of contributors including higher education and research institutions, as well as institutions from the socio-economic environment of applied, practical, experiential learning. Concretely, the study programme is realised through a partnership agreement between two universities from Romania with their Faculties of Education Science and Psychology, an abroad University with the same profile and two non profit organisations acting in the field of education. The programme is addressed to the people who graduated a Faculty of Psychology or Education Science working in the educational domain.

The justifications of this specialized programme are:

- Improving the professional skills and knowledge of these professional categories.
- There is a significant request for specialists in this domain in the Romanian society.
- The Romanian directions in this field have to synchronise with the European trends in this educational area.
- There is a request to integrate the new practices and research developed worldwide in order to recover the scientific gap in this field.
- The number of participants involved in the lifelong learning programs in the educational area is increased due to the flexible and complex blended learning design.
- Developing a blended learning educational program based on the needs of the present practice adapted both to the professionals' specific interest and to the beneficiaries in the community.

- This program is time efficient and it offers time and space flexibility for the participants who have been already integrated in a working program.
- The possibility to offer practical applications and experience through cases analyses, simulations, debates, and permanent assistance of the instruction providers.
- Due to the partnership agreement, the nonprofit organizations ensure closer approach to the particular problems of the community.

The specific blended learning instructional design offers many opportunities for learning because [10]:

- It uses diverse facilities such as: on-line courses, on-line meetings, online feedback, discussion lists, video conferences;
- It provides teachers and students' internet pages, sharing resources and different communication facilities;
- It builds an efficient student-centred learning environment;
- It ensures security as the access to the portal is made on different types of users and different levels of access, depending on the user's needs.

Long term objectives are:

- The proposed programme has the character of pilot programme; therefore we aim to make our experience public and transparent in order to provide a useful model to be followed by other faculties and institutions in this field.
- Creating a more efficient general framework, flexible programs for developing long distance, and anytime learning;
- Developing the number of academic extensions in the region and increasing the long distance students number;

#### VII. DISCUSSIONS

Organizing a programme of study, particularly at the senior levels of the university education, the second cycle – master's degree and the third cycle – the doctor's degree, benefits at the European level from the legislative and administrative framework necessary for its construction as a transnational partnership between universities from the same fields of study and specialization and the socio-economic institutions on the labour market.

This programme can be managed so that the environment, the resources and the instruction and evaluation procedures might be designed, developed and implemented through a system with an instructional design based on the use of the computer and Internet.

In the model described, the computer assisted learning process is associated with the classical, face-to-face teaching, in the classroom, with the teacher interacting with his students [11],[12].

The combination of the two systems is possible, at the European level, due to the development of the student and teachers' mobility programs that financially supports, at least partly, these journeys for learning, teaching and training purpose.

Making an instruction design based on blended learning will necessarily cover several steps until its effective implementation.

- 1- Analyzing the curricula, from the whole to the parts. It involves the harmonization of the curricula among the partner universities, followed by analyzing the contents of curricula for which the new design will be applied. This analysis also regards other elements that give value to the learning process such as the allotted time, the sources of learning, the training activities, and the evaluation modalities.
- 2- Establishing the methodology and the products that can provide the instruction for each subject, taking into account the existing technologies in the partner universities and the opportunity of using "blended learning". The academic teachers teaching homologue courses in the partner universities will collaborate to establish the each one's role in the instruction process, which will be controlled so that a communication between students and teachers on both sides might exist.

For each didactic activity, the procedure by which the learning program is delivered will meet the following requirements:

- meets the learning objectives;
- efficiently uses the technical resources of the institution;
- shows a strategy to provide the information to ensure the achievement of the planned results;
- the learning contents are structured, each being assigned a certain way to be delivered to the student;
- the contents and the applied technologies to provide instruction guarantee the acquirement of the competences, skills and knowledge that define the qualification of the study program.

It is important that the procedure of managing the teaching and evaluation process should pursue to meet the generic descriptors and standards of the National Qualifications Framework matrix for higher education which can be summarized as:

- Level 1 Knowledge, understanding and utilization;
- Level 2. Explanation and interpretation;
- Level 3. Application, transfer and problem solving;
- Level 4. Critical and constructive reflection;
- Level 5. Creativity and innovation.

#### VIII. THE CHALLENGES OF BLENDED LEARNING

Blended Learning is an instructional model which represents a one of most powerful trends in the academic field reflecting the needs of our active and dynamic society. In Romania the implementation of this complex model is rather new and it still

raises a range of challenges. These are related to aspects such as:

- Managing the instructional complexity;
- Designing the educational model;
- Managing the roles and responsibilities of the people involved;
- Creating quality learning experience;
- Meeting expectations;
- Controlling costs.

These challenges should not be seen as drawbacks but as a way of improving the academic process and expectations also on the part of the instructional providers. They become actively involved in a new and challenging process that opens possibilities for professional self development. This student centred program is mostly beneficial to the students. Besides the knowledge in their field of study, the students will also achieve personal development, self-knowledge, self-management ability, sociability and self-esteem, and he will acquire responsibility.

The blended learning model represents a possibility for the higher educational system to keep pace with the today dynamic and flexible society meeting not only the needs of the community, but also the needs of each individual.

#### REFERENCES

- [1] J. F. Troha, "Bulletproof Instructional Design. A Model for Blended Learning", *USLA Journal*, vol. 16, nr.5, May 2002;
- [2] Singh. Harvey, Building Effective Blended Learning Programs, *Educational Technology*, Volume 43, Number 6, November - December 2003
- [3] C. Whitmyer, "Instructional Design for Online Learning", *Published by FutureU Press The University of the Future, LLC (aka FutureU™)*, 1999; pp 3-9
- [4] C. Whitmyer, G. T. Grimes, "Comparative features analysis of leading collaboration software", *Published by FutureU™ (www.futureu.com)* San Francisco, California, 2003;
- [5] K. Uenosono, S. Kaneko, T. Tachibana, A. Sato, M. Hashidate, A. S. Komiya, "CAI System to Identify Each Weak Part of a Student: A New Proposal of a Student Model and an Instruction Program", *International Journal of Education and Information Technologies*, Issue 1, vol. 3, 2009;
- [6] H. Singh, "Building Effective Blended Learning Programs", in *Educational Technology*, Volume 43, Number 6, November - December 2003 pp 2-4,
- [7] E. Stacey, P. Gerbic, "Effective Blended Learning Practices: Evidence-Based Perspectives" in *ICT - Facilitated Education, Information science reference*, New York, 2009 , pp.2-4
- [8] M. Suditu, E. Stan, C. Safta, C. Iurea, "From the Romanian National Framework of Qualifications to the implementation of Bologna Process – Romanian realities", in *NAUN International Journal of Education and Information Technologies* Issue 4, Volume 4, 2010, pp.224-231
- [9] I. Šimonová, P. Poullová, "Electronic education in the Czech Republic in 2003-10: development and students attitudes, NAUN *International Journal of Education and Information Technologies*, Issue 4, Volume 4, 2010, pp 214-223.
- [10] M. Tutunea, R.V. Rus, V. Toader, "Traditional Education vs. E-learning in the vision of Romanian business students", in *NAUN International Journal of Education and Information Technologies*, Issue 1, Volume 3, 2009, pp 46-55
- [11] L. Stanca, I. Pop, C. Felea, G. Chiș, H. Greblă, Blended Learning – A Viable Solution for the Romanian Academic Education, available at :<http://www.asecu.gr/files/RomaniaProceedings/60.pdf>
- [12] Y. Inoue, Cases on Online and Blended Learning Technologies in Higher Education: Concepts and Practices, Information science reference, New York, 2010