

ACADEMIC E-LEARNING DILEMMAS

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***Abstract:** The paper pays attention to the most crucial problems connected with implementing and carrying out e-learning classes at the university. Problems related to preparing and conducting e-courses are especially referred to. There have been described crucial issues that need to be coped with while taking care for the quality of academic distance methodology. The subject matter of presented issues results from the author's numerous research results obtained during her professional responsibility as the manager of the team for the e-learning implementation at the University of Dąbrowa Górnicza.*

Key words: generation, education, academic e-learning

INTRODUCTION

Nowadays distance learning is experiencing its renaissance. It is happening thanks to the development of the Internet, which has opened new opportunities for education. In modern times distance learning is understood as a process of teaching and learning that is carried out in a situation when its participants are separated by a spatial distance. The process is implemented synchronously and asynchronously. The Internet is a means by which the obstacle of distance between the educational process participants is overcome. The network most important strengths which decide its special usefulness in the development of distance learning are as follows:

- possibility of using accessible information resources;
- possibility of sending information in various forms (multimedia transmission, multi-code transmission);
- speed of information transmission;
- interactivity (mutual communication with recognition of subjectivity of all participants of the communication process);
- accessibility 7 days a week and 24 hours a day.

Thanks to these properties, it is possible to overcome barriers and meet educational aspirations of people who function in locations that are distant from educational centers.

The term “e-learning” has obtained many synonyms, among which the most frequent are the following examples: e-education, remote education, teaching by network and many others. In this paper these notions, although they differ in their meaning, will be treated interchangeably because all of them refer to the network education.

Speaking about academic e-learning, we think about benefiting from distance learning courses that are placed on the dedicated e-learning platform. The method of implementing courses on the platform depends on many factors: (Figure 1) i.e.

- university distance learning implementation procedure, which is determined by the university development strategy;
- applied e-learning courses implementation model, which must be designed in such a way that the performance of educational objectives is optimal.

The final result determines many important issues i.e.

- university procedures referring to the quality of e-learning courses,
- acceptance of the e-learning courses model by academic teachers,
- method of creating and delivering e-courses

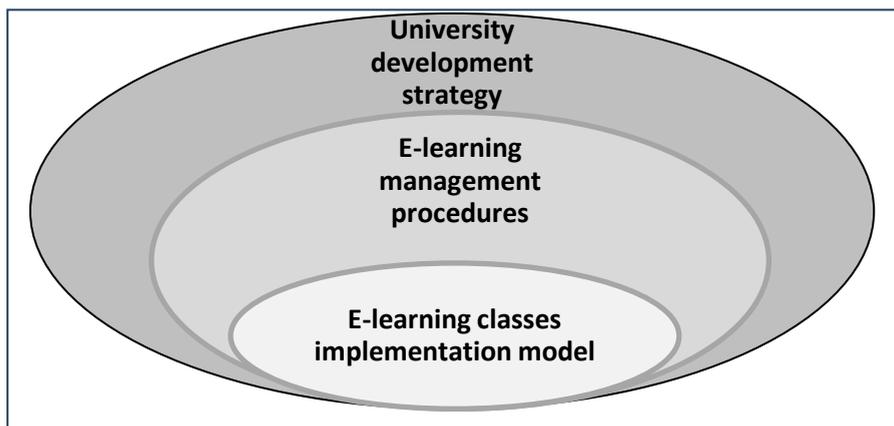


Figure 1. Structure of implementing e-learning classes at the university

Source: own study

Inclusion of e-learning classes in the university teaching process requires elaborating a separate case study in the form of a feasibility study. It constitutes a specific project of activities that takes into consideration the university specificity. The case study must follow the organization development strategy and must be the strategy’s inseparable element. On the basis of this, there should be defined procedures of distance learning classes’ management. The procedures are as follows:

- planning the scope of e-courses within the teaching process (a department responsible for arranging the process);
- administering the e-learning platform;
- cooperating with academic teachers in the scope of creating and delivering e-courses;
- implementing the quality of teaching procedures.

However, during the process of designing the e-learning classes model, apart from defining the structure of courses and adopting the convention that ensures the implementation of a teaching process in combination with the existing traditional forms of academic teaching, the following problems should be noted:

- to what extent do the existing rules of academic teaching implementation take into account the new actions strategies (learning, problem solving) that refer to the generation functioning in a digitalized world and how should the adopted so far organizational solutions change?
- in what way will the adopted new teaching model permit developing the potential of young people (creativity, time and knowledge management, ability to cooperate, ability to solve problems)?
- to what extent do the university classes prepare people for LLL-Life Long Learning in the digital world?

1. C GENERATION AT THE UNIVERSITY

Classical approach towards the implementation of a teaching process requires taking into consideration many integral components that interact with each other synergistically. There are among them the following elements: teaching objectives, content of education, applied forms and methods of teaching, teaching media as well as knowledge and assessment control rules. Their formulation and their rational selection have to ensure the achievement of educational outcomes in the form of defined competences. Apart from the above mentioned factors, planning the teaching process requires taking into account additional circumstances. They refer to participants who take part in the teaching process and the nature of an environment where these participants function. This knowledge determines the further design of the teaching process.

Knowledge concerning the action strategy, which has been created by young people within their computerized life, has become the key element. Owing to this, it is possible to understand mechanisms of learning which young people use, and to plan educational situations adequately in order to achieve the hierarchically top educational objectives. This knowledge is the elementary determinant that is applied to plan and undertake any actions connected with education (Bloom 1984; Niemierko 2002).

Civilizational change has resulted in creation of a new type of society. The modern generation of students is called the C generation (R. Friedrich, M. Peterson and

others 2010). Researchers, while preparing the characteristics of such a generation, use three adjectives: *connect, communicate and change*. Young people, who were born after 1990 and who do not know the world without new technologies, conventionally belong to this community. These technologies are not new to them because they have accompanied them since they were born. These technologies have been around them and will always be (Morbitzer 2012). Most experts think that this group membership depends not on the age but on upbringing in the digital reality or on possessing features of “digital natives”. It is possible to belong to a Y generation and to identify with the C generation. Differences probably result not from the date of birth but they are related to the moment when the Internet and social media have become an inseparable part of life of a given generation.

The characteristic feature of the C generation is constant experimenting and this way young people obtain knowledge and experience. Having access to many sources of information, young people often construct their knowledge about the world in a syncretic manner. Shaping their own identity, they search for balance, homeostasis, which gives them the feeling of security in a constantly changing world. It would be possible to assume that this eclectic approach to information constitutes the value that is based on openness to new solutions, creativity and innovativeness. However, without having the appropriate level of digital literacy, the effectiveness of activities in the framework of the network may be low.

Thanks to the continuous activity on the Internet, the C generation is characterized by the feeling of independence that provides the sense of autonomy, perpetration and control over individual actions, including learning. Such attributes as: the speed of information exchange, making decisions, multi-threading activities and resourcefulness constitute a derivative of a network activity.

Young people’s active functioning in circumstances of a constant change causes the deprivation, and even rejection of existing traditional models of learning and problems solving. These models seem to be anachronistic and not adapted to present days. At the same time, very quick access to information, possibility of interacting and mobility as well as easiness in time and spatial boundaries crossing, which is very distinct for the cyberspace, favour creating new strategies of problem solving, encourage to cooperate, increase motivation to undertake various activities connected with creating own knowledge.

In view of the specificity of young people’s functioning in a cyberspace, it is not possible to omit the above mentioned fact with reference to planning and constructing the teaching process. In a situation when the cyberspace has opened new opportunities for distance education, knowledge on the C generation is a very crucial factor for people responsible for designing the distance learning process. It is necessary to realize the differences referring to young and older generations functioning as well as to understand the mechanism of changes. This phenomenon was noted by Mark Prensky (2001) many years ago. He distinguished the generations of Digital Natives and Digital Immigrants.

The key task of education is preparing the young generation for functioning in the world, which we still do not know, which is being created and which will be created by young people. How young people will be prepared for this task and how education will fulfill its fundamental objective depend on the quality of work of the whole community of teachers and lecturers.

Unfortunately, applying information technology in academic education induces more often pejorative connotations. Undoubtedly, easy access to information, possibility of obtaining quick information exchange can foster the negative network behaviour such as: reproduction, plagiarism, superficial analyses or even fraud. Occurrence of such adverse phenomena encourages the academic staff to implement new methodological solutions that take into consideration the application of modern technologies into the teaching process. However, the dynamism of civilization transformations and expansion of new media in the society life induce nowadays the reflection concerning the academic education, especially in the field of methods and forms of teaching.

The modern teaching model that refers to the constructivist concept (Bruner 1987) clearly defined tasks belonging to students and teachers. Distance education perfectly follows this standard treating the e-course as a learning environment and assigning a teacher the education organizer objectives. At the same time the connectivist concept (Siemens, 2005), which underlines the human activity in a learning process via the network, strongly influences modern e-learning. It is possible to formulate a thesis that the major-related teaching outcomes obtained by students strongly depend on the adapted teaching model, including the distance learning, as well as on the active participation of students and academic teachers. More often within the higher education institution didactics, there appear elements of gamification or Project-Based Learning methods.

Organization of the distance learning depending on preparing strategies, procedures and a model of distance classes constitute challenge to university authorities as well as to the team responsible for the e-learning implementation and management of the distance learning process. However, there appears the most difficult problem, which is the preparation and management of e-courses because these activities require a direct involvement and high activity of the academic staff.

2. DESIGNING AND PROVIDING E-COURSES – CHALLENGES TO ACADEMIC EDUCATION - EVALUATION OF RESEARCH RESULTS

Thinking about academic e-learning, it is necessary to consider the model of academic classes implemented in this format at the very stage of designing them. Within most university solutions, blended learning is applied. This model matches advantages of distance learning and traditional instruction. At the University of Dąbrowa Górnicza three types of e-learning courses have been applied. They

constitute enhancement of traditional academic forms of teaching and they are as follows: e-lecture, e-classes and e-seminar. They differ in their structure depending on educational objectives.

Adopting such a solution has been justified in some aspects:

- academic teachers and students are accustomed to the classic academic forms of teaching (lecture, classes, seminar);
- organization of a course of study and implementation of study fields standards.

Adopting such a model has enabled the gentle inclusion of e-learning classes into the university didactics.

The key significance for the teaching process effectiveness is provided by the concept of teaching objectives implementation as well as the concept of defined major-related teaching outcomes achievement in the framework of a given study course. So, the overarching objective is connected with the precise clarification: what changes have to be made in knowledge, abilities and attitudes of students with reference to key competences and a student's profile of a given study field (specialty) and in connection with National Qualifications Framework. The crucial fact should be emphasized. At the University of Dąbrowa Górnicza, although the general structure of an e-course has been defined, every academic teacher possesses possibilities of introducing his own original methodological solutions and deciding on the method of the e-course implementation. Work on the course is run with the cooperation with an e-course methodologist, whose task is to support and assist academic teachers.

The following assumptions have been accepted during the procedure of designing e-courses provided in the form of blended learning:

- e-courses should constitute an integral part of classes implemented in the framework of a given course, hence there is a need to extract a scope of a course content that is provided in the format of distance learning;
- the basis of a course is the preparation of a scenario that takes into consideration the division of a course content between both forms of teaching as well as the scenario should exactly define the course applied methods of teaching, methods of a course content presentation, a system of control and assessment of knowledge, moreover, interactions occurring among the complementary teaching process participants during traditional classes.

Methodological flexibility has been maintained while e-courses are designed. It is based on ignoring, in justified cases, the university's adopted e-course model. It depends on the model type. This exception involves the case of the implementation of such methodological solutions as gamification. Preparing e-courses for the C generation students is a big challenge to course creators. Functioning in Web 2.0 shaped in young people some expectations towards the method of presenting

information that is accessible on the network. The key role is played by multimodality and a speed of information transmission as well as broad opportunities of interactions. Constructing a community of people learning via the network has caused the fact that nowadays we speak about the 2.0 e-learning, within which a person running classes, apart from making educational content available, opens the space devoted to a cooperation debate. It is expected that a person who runs classes will become a moderator and a trainer unleashing students' potential, who will inspire them to undertake effective actions and who will take care of the quality of education, motivate and support. Modern application of Web tools such as: an educational blog, RSS, bookmarking, screen casting, podcasting or a wiki environment within the academic education, significantly brings closer the academic didactic situations to the environment of the C generation functioning.

At the University of Dąbrowa Górnicza evaluation research is provided systematically among academic teachers and students who are involved in e-learning classes that are provided via the Moodle platform. The classes aim at researching the level of academic teachers' and students' satisfaction resulting from the participation in this form of teaching (stage I). Owing to obtained responses (feedback), it is possible to increase the e-courses quality systematically (stage II). All e-learning courses (e-lectures, e-classes, e-seminars) are submitted for evaluation. Elements of phenomenographic research are used in the research. They constitute an integral part of permanently implemented action research. In the academic year 2015/2016, the research conducted via the e-survey, which was addressed to students and academic teachers involved in e-learning, were carried out. The e-survey consisted of trigger questions, by means of which answers describing problems that usually accompany the implementation of e-learning classes as well as suggestions of these problems solutions were obtained. In this way, 26 academic teachers and 50 students, who were randomly selected and who represent all study fields at the Faculty of Applied Sciences, were researched. In view of the size of the paper, only chosen research results are provided.

3. E-LEARNING IN THE OPINION OF STUDENTS

Results of research conducted among the University of Dąbrowa Górnicza students entitle to formulate the following conclusions:

- It is essential to divide the e-course, which includes a specific range of learning content, into the so called "pills of knowledge". Students' time devoted to realization of separate modules should not exceed 20-30 minutes. Clear manner of formulating the learning content, its transparent schedule and presentation, have turned out to be very important for students.
- According to students the learning content included in an e-course should be presented in accordance with this content's nature. Hence, there is a

need to provide diversification in the content presentation (however, many forms of presentation of the same curriculum elements without specific justification should not be applied). Functioning in an image culture, students preferred the multimedia transmission in the form of screen casts and podcasts.

- Majority of researched students think that the most effective forms of motivation to study within an e-course are: referring to practice, applying the problem method and designing the appropriate activities enabling cooperation and discussions on optimal solutions. Presenting a problem i.e. in the form of a question or a task to fulfill aroused their interest, encouraged them to search for answers and created opportunities of individual learning. At the same time all these elements enabled cooperation. Such a form of classes helped increase the learning process participants' involvement. Consequently, students were able to reach higher stages of obtaining teaching objectives.
- According to students, the essential elements of e-courses are the interaction tools (problem forums, workshops, video conferences, webinars and others), which make it possible to exchange information among participants of a teaching process actively and multilaterally. They give opportunities to contribute to the content of an e-course.
- Students think that control and knowledge assessment are crucial elements of every e-course. In the case of e-lectures, control and knowledge assessment mainly provide the knowledge organization, focus attention on the most important problems and in consequence provide better exam preparation. However, during classes these elements provide the current and final control. According to the researched students, the waiting time for the task estimation provided by a teacher and obtaining feedback are important factors referring to the students' assessment. It should be noted that these elements of distance learning implementation impact essentially the dynamism of learning within an e-course. They mobilize participants to maintain regularity in the e-course implementation according to the established and adopted schedule of e-course classes. In order to ensure the highest effectiveness of e-courses, it is important to obtain students' approval referring to the rules of assessment. Clear and unequivocal definition of requirements and unchangeable rules of assessment during classes' implementation are golden rules.
- Planning studies within e-learning, and so, time management devoted to learning seem to be a big problem for all participants of the teaching process. Students think that possibilities of using the 24/7 platform may facilitate the learning process and make it more difficult at the same time. This way decreasing its effectiveness is observed. A good practice that is recommended to students is establishing their individual calendar consisting of a plan of convenient time devoted to the e-course tasks fulfillment with reference to the schedule presented by a teacher.

- Students' presented comments provide a very valuable research material enabling the improvement of the university adopted solutions in the scope of the academic e-learning. These comments constitute the exemplification of the C generation expectations.

4. E-LEARNING IN THE OPINION OF ACADEMIC TEACHERS

Usually the academic teacher responsible for the participants' work organization within the e-learning course is the key person. The method of distance learning implementation depends mostly on his competences. The fact that the e-course completion demands of academic teachers permanent improvement of their didactic abilities, including the cooperation with the e-learning methodologist as well as a platform administrator, is worth emphasizing.

In Poland the following models of creating and implementing the e-learning classes have been agreed:

- Lecturers prepare scenarios of the e-course implementation cooperating with an e-learning methodologist. Next, people responsible for the e-learning implementation create an e-course and position it on the platform (usually they are the workers of a unit managing e-learning). The course is run by a team consisting of a trainer (a person in charge of the coordination of students' activities) and a teacher (a consultant, a course supervisor).
- Lecturers use the platform with the implemented e-course editor according to the accepted model. They create and provide classes for students under the supervision of the e-learning center functioning at the university.
- Lecturers prepare e-courses on the basis of adopted standards; position them on the platform and conduct. All activities are fulfilled with the support of an e-learning methodologist and an e-learning platform administrator (solution accepted at the University).

All the presented solutions require academic teachers' preparation in the scope of methodology (construction and rules of providing e-courses), organization and technology (rules of the platform functioning, tools used to create an e-course, rules of the e-platform classes' implementation). It should be underlined that the introduction of e-learning into the university teaching process is a complex operation requiring special involvement of thoughtful actions. Preparing and running an e-course is a huge challenge to teachers. Their activity differs significantly from the one that occurs during providing classes by means of classic forms of academic teaching. Functioning in a created "virtual classroom", they are obliged to control and coordinate the work of students, to motivate, to inspire through solving problems, to assess, to encourage to be active and cooperative. The teachers' role changes in comparison to the one that results from the traditional academic teaching.

Changing the method of delivering classes as well as the specificity of a tool, which the e-learning platform is, require additional involvement of the e-course authors in the scope of acquiring new competences referring to preparing and running distance learning. These elements constitute the significant factor demotivating the implementation of e-learning classes. Understanding the essence of change referring to the method of running didactic classes, which take into consideration the cognitive and constructivist assumptions, was significantly difficult. Teachers participating in the implementation of e-learning courses clearly underline the fact that the teaching process in such a form is time consuming and laborious. However, over time, when teachers notice advantages of e-learning, they willingly undertake next challenges in this scope. The biggest expectations were formulated by them in relation to the university department that is considered to be an organizational, methodological and technical support.

CONCLUSION

E-learning courses implementation requires strategic planning because it constitutes the crucial element of academic teaching. The quality of conducted e-learning classes, similarly to regular meetings, influences the quality of education at the university. Implementing and improving this form of education enlarges the development of mobile technologies significantly. Dissemination of e-learning (mobile learning), has increased the universities' interest in all forms of Internet forms of teaching. However, shaping the educational process participants' new competences in the scope of teaching and learning is more important.

Unfortunately, due to the novelty of adopted methodological solutions, specificity of e-learning as well as requirements that this form of education has to meet, they have not already been enthusiastically accepted by the academic environment. It is a very inconvenient situation because expectations of the C generation towards the educational process, which is implemented via the network, as well as predictions referring to the education development on the basis of the Internet, clearly indicate the necessity to expand the distance learning teaching method.

Contemporary academic teaching is constantly changing. Modifications in the scope of forms and methods of education in the context of modern educational objectives are required. Application of modern methodological solutions such as: leading education, game-based learning, problem-based learning (Web Quest, case-study, design thinking) etc. They foster students' increase of interest in the learning process, motivate, teach the cooperation and "healthy competition" as well as provide auto-reflection and self-improvement.

It should be emphasized that the input and the scope of work, which must be involved in the preparation of a good e-course in accordance with adopted standards, usually exceed the academic teacher's possibilities. The most common

mistake occurring in the academic environment is treating distance learning materials similarly to a multimedia presentation.

What is the direction of academic education? It is hard to say. Maybe soon university laboratories will see glasses that make it possible to move to a virtual world. Then the expanded reality will become universal. Maybe in lecture rooms devoted to provide demonstrations and simulations of various phenomena, holograms will be used and smart boards will replace the traditional ones (as it is at schools at the level of primary and secondary education)? It would seem that new technological and methodological solutions should enrich the academic methodology without redundant inertia. But on the other hand, it is not so clear. In the meantime universities will be entered by the C Generation.

Quality of academic distance education depends on many conditions. One of them is the issue of organization, including the most crucial procedures of e-learning functioning at the university. Also, the responsibility of individuals involved in the process of distance learning implementation, motivation systems, control of the course of procedures implemented according to the adopted strategy and finally the multilateral evaluation are crucial as well. Development of e-learning at the university requires also systematical innovative actions that would improve the opportunities of educational purposes feasibility.

It is possible to say that the variety of opportunities of the educational process organization in the digital world can make the modern educational process designers free from the negative impact of the technological determinism. This bold statement results from the fact that the variety of solutions with the application of modern technologies let us focus attention on teaching objectives (learning outcomes) and select such methods and tools, which enable to reach these goals, including the students' activities on the network. The above mentioned conditions determine the selection of a course structure and its manner of implementation.

Referring to the research results conducted at the University of Dąbrowa Górnicza, it is possible to define the main areas that influence the academic e-learning quality. They are as follows:

- Selection of a platform enabling the effective implementation of educational objectives;
- Flexibility of distance learning forms that have been adopted at the university and that are integrated with traditional forms of academic teaching;
- Maturity and variety of methodology; permanent improvement of academic teachers abilities in the scope of modern methodological solutions (with reference to the constructivist and connectivist theories);
- Consideration of diversified forms of communication in e-courses on the basis of experiences obtained in social media; benefiting from ingenuity and inventions of the educational process participants;

- Management of distance learning processes; preparation and application of evaluation procedures; monitoring of learning systematically.

But cooperation of the e-learning classes' administration unit with e-course teachers and with students at every stage of the e-learning implementation is the most crucial.

Long ago we gave up the computer-aided education that was implemented on the basis of programmed teaching schemes. New technologies have created completely different opportunities of students' educational process implementation. Methods of including students' abilities into the e-learning teaching process depend on the general concept of e-learning implementation at the university and on lecturers' e-competences as well as on understanding the change and openness to new solutions. Conducted research confirms that students expect changes. They hope that suggested e-learning classes will meet standards, which they are accustomed to using the Internet every day.

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