

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

5,300

Open access books available

130,000

International authors and editors

155M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.

For more information visit [www.intechopen.com](http://www.intechopen.com)



## eLearning and Phantasms

M.sc. Ivan Pogarcic and B.sc. Maja Gligora Markovic  
*Polytechnic of Rijeka, Business Department*  
51000 Rijeka,  
Croatia

### 1. Introduction

None of the phenomena created within human activities cannot be qualitatively analysed if isolated from its environment. Reason of its appearance is regularly a consequence of influencing the observed segment of universal system upon its environment and/or inner interaction between its own segments. Further on, every phenomenon is regularly positioned in space and time that determine its dimensions as basis for measuring its influence over the environment. The process rarely includes timely and spatially independent phenomena. Naturally, the component of time can be observed and comprehend in different manners. The same can be applied on component of space especially if space indicates its location concentration and specificity. The third dimension of analysis is pragmatic nature of phenomena, respectively absolute and relative capacity of its usability observed from user's standing point.

Considering the above stated, learning as human activity or a specific phenomenon also requires detailed and comprehensive valorisation. From historical point of view, learning has been changed and developed thorough time in different forms, applicable according to momentarily conditions, circumstances and disposition of elements that define learning at specific moment of time. From primitive modes when student simply imitates teacher or gains knowledge and skills upon his own experiences, learning has been modified and developed to modern forms recognisable upon class/grade articulation, connections and relationships between elements. The basic elements that make a crucial axis are nevertheless student and teacher. All other elements are determined and subordinated to them. These other elements are still important up to a certain level, especially learning contents. Together with learning contents, student and teacher also determine learning goals. System defined in such mode simultaneously determines and is determined or interdependent upon environment in which learning is being performed. Only with this environment respectively context in which learning is being performed the concrete forms of learning's realisation will be defined. Learning can be differently treated dependently upon angle of its analysis.

However, every frame of analysing learning as phenomena has necessarily included validation of all factors due to creating a comprehensive overview of relationships, activities or any other initiating elements. Holistic approach to learning as phenomena is a combination of both verification and validation of learning as phenomena, but also of the individual elements that comprise learning. Absence of validation of any element that

comprises learning or factors which define its realisation cause incomplete picture and basis for invalid comprehension of learning as a complex phenomena. This paper defines all inaccurate conceptions and thesis of learning and its determinants as phantasms. Accordingly, a phantasm connotes desirable, but from certain reasons, unrealised form of certain phenomenon/a. ([wordnetweb.princeton.edu/perl/webwn](http://wordnetweb.princeton.edu/perl/webwn), visited 30.VI.2010.). It is important to mention that desirable form of realisation can exist only when circumstances which enable its full realisation are being removed or neutralised. Therefore, a learning phantasm cannot be constrained only to a wrong conception respectively mental illusion of realistic circumstances. Though Platon's definition of phantasm is more strict and restricted to sensibly distorted perceptions of phenomena, for this paper's purpose other impassive factors have been embedded as well.

## 2. Learning, paradigms and phantasms

Learning itself is a complex phenomenon. Term phenomenon is here used as preliminary term since learning can be observed from different point of views. Alteration of attitudes indicates different characteristics of learning with emphasis put on some of them. Further analysis will try to define and describe learning in different ways. Intention is to form an integral approach respectively consideration of more relevant factors which define learning regardless to stronger attendance of traditional or modern doctrine such as eLearning or mLearning. Hence, by changing approach to observing and analysing, learning can be treated as:

- System
- Process
- Method
- Technique
- Model

Can one of these approaches be neglected and what are the consequences? Holistic approach requires consideration of all relevant facts due to insuring the highest level of learning quality. Insisting on integration and polyvalence in analysis is basis used in this paper for observing wrong anticipations about learning, especially eLearning. As phenomenon learning has been changing during the time and has developed to different forms by tracking changes and growth of general human knowledge through usage of accomplishments in technique and technology whether as supporting instruments or basic objects of interest. Technology and technique consequently regained the more important position in learning's realisation. Consequences of including technology in the process have besides advantages and benefits also brought specific problems that can influence learning's quality.

Another important fact should also be taken into consideration. In general, learning is a formal realisation of educational process respectively gaining knowledge and skills. Articulation of such realisation has special importance both for individual and whole society where it has been realised. With this in mind, it should be said that governments or administrative bodies regulate learning as activity through their legislation. This assumes certain consensus of whole society considering content, form and mode of realisation, and especially consensus in defining goals that should be reached. Aims set whether by

individual or society are mutually supplementary. This process at the same time requires institutionalism of learning and education in shapes that ask for such a consensus.

Time period of considerable development of computer technology and applicable software is short and abound with line of important accomplishments. A need for automation of simple tasks which frequently repeat at same pattern is strong reason for fasten development of automation and computer technology in combination with need for processing a huge quantity of data or complicating the processing and calculation in a short period of time. Speed of changes and frequency of accomplishment in this field require appropriate moderations in all activities that have implemented computers in their business. More frequent ICT application in learning requests alterations that will change learning considerably, but these changes should not harm the quality of learning. Quite contrary, these alterations should increase a quality of learning. ICT usage demands their understanding and possession of specific information competencies that indirectly puts learning participants into unfavourable position and sometimes it complicates learning. ICT application and change of learning's realisation modes demand readiness of all subjects included in learning to willingly accept that mode. In other terms, a critical mass should accept new mode of learning and validate respectively confirm all characteristics of such organised learning. A structure of individuals who will accept this moderation is naturally heterogeneous and they can be classified according to their nature and willingness to accept eLearning. They can usually be distributed in five groups: innovators, early supports, early majority, late majority and sceptics or indecisive (Zemsky, 2009). Each of mentioned groups own in a certain way defined and accepted mode of thinking and anticipating. That is the most important characteristic of a group. The recent literature frequently, though without a precise determination, uses a term paradigm. Though the concept is not new just Thomas Kuhn in 1962 used term paradigm in theoretical discussions about development of science and technology. Literature provides many different interpretations of this term. The most common definitions imply paradigm as frame of thinking and believing that interpret phenomenon or reality. Mentioned definitions have nevertheless general character. More detailed definition of a paradigm implies: „A paradigm is a constellation of concepts, values, perceptions and practices shared by a community which forms a particular vision of reality that is the basis of the way a community organises itself."(Kuhn, 2009) Kuhn used in his definition a general term of society though after he had insisted on differentiating normal and revolutionary science. This attitude was confirmed within ICT field since speed and development moderate a classic meaning of term evolution and revolution.

Acceptance of paradigm and its application is not just declarative though the realisation is usually kept on a level that makes no difference. Interpretation of paradigm and its acceptance and application also imply a subjective aspect. Individual will usually interpret it the way it suits him in certain circumstances when trying to apply generally accepted rules. However, eLearning requires also a different approach in all phases starting with planning up to realisation, so the problems must emerge. If an emphasis is put on individual approach to student and teacher respectively learning contents, then their specificities are important and should be taken into consideration. If one considers all other specificities of eLearning, divergence from concrete paradigm leads to distorted conceptions and mistakes that could have irreparable consequences. Every such deviation is in this paper imposed as phantasm. The fact that is perceptible in realisation is a possibility of conflict between

paradigms. (Hesselgrave, 2006) Conflict can be initiated by different factors. Without detailed definitions of individual paradigms indicated by (Hesselgrave, 2006), paper further on considers a projection of specific paradigm on eLearning and it will try to describe connection between conflicts of paradigms and wrong perception of eLearning that can refer to phantasm.

Which proclaimed characteristics of eLearning can be basis for wrong perception or wrong definition of eLearning itself? Conditionally more important characteristics of eLearning can be defined since their inaccurate perception and treatment can lead to wrong perception or even more rigid, wrong foundations for application of eLearning. These are:

- Phantasm of time independence
- Phantasm of location/physical independence
- Phantasm of transferring quantity into quality
- Phantasm of communication integrity
- Phantasm of availability
- Phantasm of evolution
- Phantasm of holistic approach
- Phantasm of general usage

Each of these mentioned concepts requires careful analysis of connections to general form of eLearning's realisation and elaboration of characteristics that determine or can determine specific forms of realisation. Each of mentioned concepts determines definition according to eLearning as phenomenon since they are interconnected.

### **3. eLearning is/not ..... !?**

Recent practice has proved that introduction and implementation of ICT in learning is a complex process that requires team approach. At the same time, the process treats ICT as technology that supports educational process. However, technology as such alternates the structure of process. Form and intensity of influence and modification are evident both in learning and learning environment. A carrier of learning activity – teacher, in opposition to traditional role is put in moderated position that requires additional or modified activities. Barycentre of a system is moved from his position to student's or content's position. Besides standard methodical, didactic and pedagogic knowledge and skills, teacher should also possess technological knowledge and specific skills in ICT application. Since teacher is a part of team, other team members should as well be trained in ICT application.

Usually team includes three to five persons who in cooperation with teacher coordinate preparation of individual eLearning elements (s11). These are instructional and graphical designers and different field's programmers (Caplan, 2005). Number of team members is not fixed and usually depends upon course itself and institution where it is being prepared. For example, graphic designer and programmer – multimedia author can be the same person in an institution, if that person owns required knowledge and skills (Caplan, 2005). According to Caplan (Caplan, 2005) a team leader should be instructional designer.

Teacher is considered a field expert or content expert. His jurisdiction includes definition of learning outcomes, preparation of learning materials and responsibility on author's level. Instruction designer should have knowledge relevant for learning methodical important in choosing the strategy of performing and applying educational technology. Graphical

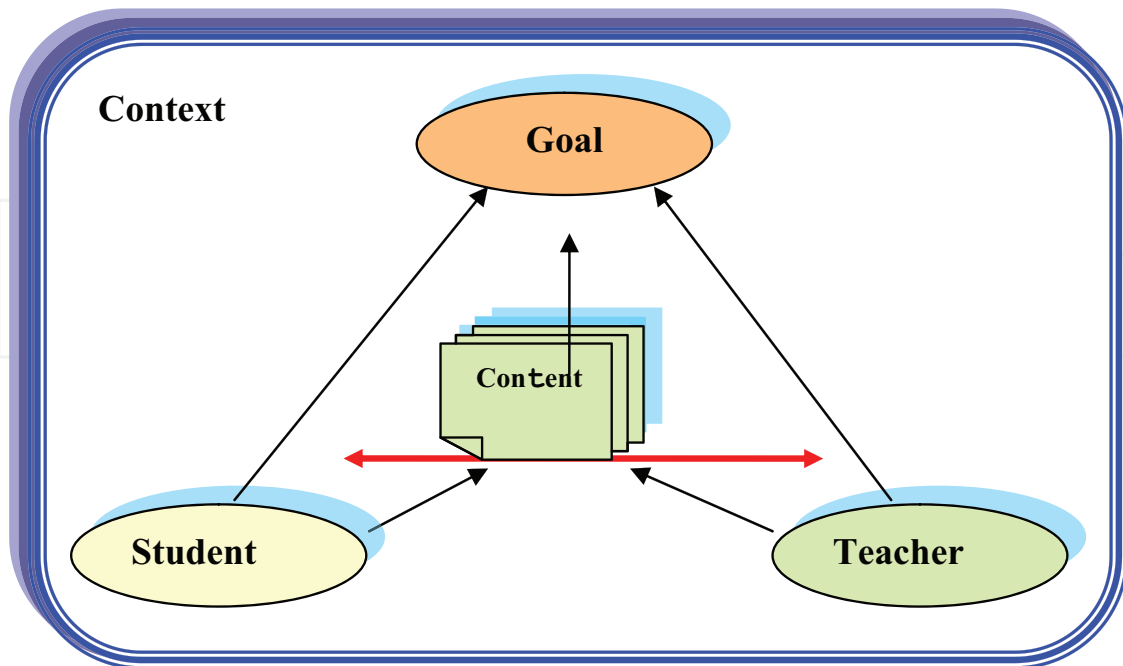


Fig. 1. Modified Pratt's model of learning (Authors)

designer, programmer and web designer are authorised for realisation of users' interface in compliance with good practice and necessary conditions.

Learning supported by ICT can be realised as hybrid learning and pure online learning. Both forms should support different learning and teaching styles. User's interface is realised in web environment so the creation of patterns for learning's realisation is one of the most important eLearning's team assignments. Different applicative software is used in designing the patterns and complete courses. Realisation of eCourse demands specialised applicative solution known as Learning Management System. For example, LMS Moodle is open type software that can be upgraded since author's additions and solutions can be implemented. Moodle is an acronym of Modularly object-oriented dynamic educational interface and is considered ad open code project, so the insight and moderation of application's original code moderation is possible in order to adjust system to own needs (Bosnić, 2006).

### 3.1 eLearning as system

System is a general concept and has an abstractive definition that can be concretised in specific frames. Generally system is defined as an assembly of interrelated elements or segments that make unity trying to realise its activities. Some authors emphasize a need for some sort of surveillance or feedback connection. Real system is part of actuality and its reality is usually determined by certain level of its importance for users. At the same time, eLearning represents a system that has a tendency of realising a-priori defined goals. According to one of common classifications, learning in general and eLearning as well can be observed as dynamic system. Specificity of dynamic systems is resources' control that enables monitoring the system's condition and more importantly, the existence of feedback relationships as mode of controlling the behaviour of system's elements and controlling the

performances of the complete system. All described elements of eLearning are mutually connected and control of learning goals' realisation is ensured through observing the conditions of individual elements and usage of available resources. Learning can be defined as business system as well. Exact definition of business system puts emphasis on final business products, goods and services that bring profit. From that aspect learning can be observed as system, respectively a business system. Basic elements of learning and location of its realisation can be determined by vectors  $E = (S, T, Co, G, Cx, L, Tm)$  (Pogarčić et al., 2008). The first five components of vectors are entities of Pratt's learning model (Pratt, 2003) while last two define time and location of realisation. Interdependence of elements in time and space is obvious and it defines structure and quality of learning. System's functioning is defined by system's structure and its position in environment.

However, business function can connote performing professional duties and activities within a certain profession, but also it may relate to occupation and usage of services. That's one reason more to observe learning as a completely specific business system. Teacher is performing role of a service provider, students becomes service' user, while at the same time roles are not strictly divided. When the position of learning content is observed, it is easily to notice its bivalency. Learning content respectively learning itself is manufacturing resource, though it can also be a final product. Within a context of specificity, picture becomes clearer. Albeit differences in learning performed in kindergarten and at doctoral study are significant, both activities succeed learning as abstractive form of the same system. Importance of learning as business system becomes even more highlighted when giving importance to a lifetime education. All the above mentioned refers also to eLearning as a specific form of learning.

### 3.2 eLearning as information system

It is not difficult to prove that learning is an information system. According to definition, information system is a system that assembles, handles, saves and distributes necessary information to all business system's users who have corresponding rights of an organisation that requires that information together with appropriate authorisation. Usually terms information system and digitally supported information system are used wrongly as synonyms. Another opinion is that of information system as data picture of a business system's process realised through models of data, processes and users. This definition is pragmatic and includes the most factors necessary for a valid valorisation of information system.

Usually when defining information system one claims that information system is a part of business system. Relationship between these two terms is actually symbolic. Information system cannot exist independently, but is connected to business system instead. Purpose of information system is to support a realisation of business processes and a complete business function. Within eLearning frames this connection is obvious: eLearning owns information dimension integrated in realisation of educational process as business activity.

To what measure is learning an information system and to which business system it belongs? Learning is a system that all required information divides into two groups: information subjected to process and resources for shaping the final product of learning - certified attendant/student/pupil and information essential for functioning of learning as a system (in certain way additional or service information). The usual process of collecting

and saving required information, which represent learning contents, also has its own specificities. Learning contents and their adjustment to applicable forms are prerequisite to functioning of learning as a system. Processing the mentioned information is also specific in time and space. In traditional learning the organisation of learning/information processes requires spatial and time articulation. Simultaneously time doesn't have a same meaning for teacher and student, respectively time as a concrete moment of realisation in some institutional frames such as classroom has the same meaning for teacher and student, while time differentiates by its meaning from the aspect of age. Special specificity refers to saving and preserving information since the final goal is their implementation by students respectively student's understanding and remembering. More important is active application of exploitations in everyday working and life activities. Formal preservation of learning contents is an important activity but it represents a minor problem.

### **3.3 eLearning as process**

By definition process is an assembly of connected activities used for realisation of certain goal in combination with usage of specific resources (material, financial, machines, employees, information) during a certain time interval (e.g. studying, listening the lectures, preparing the graduate thesis, elaborating the same etc.) Learning as process is defined by its basic elements (Pratt, 2008): student and teacher gathered around content, motivated and directed towards the same cause. The goal is to adopt content through different functions and interaction of basic elements as fast and efficient as possible respectively to adopt necessary knowledge and to gain certain skills. Even though the goal is mutual, both teacher and student approach it from different aspects. Learning is a complex process that embeds several simple processes, phases and actions. Structure of a learning process can be observed on micro and macro level. To macro structure of learning process important are basic (or general) components and determinants of typical structures of learning and teaching situations (adopting the knowledge, practicing, evaluation etc.) that depends upon legitimacy and logic of learning and teaching processes. Micro structure is determined by concrete situation, content, goals and assignments. ICT implementation moderates learning as process. Traditional learning for elementary unit and concrete situation occupies learning hour. Within these frames learning as process is being structured and monitored while resources are at the same time temporally immanent and location-concentrated. In eLearning this organisational term does not represent a basic situation.

### **3.4 eLearning as technology, technique or method**

Learning is realized through processes of learning and teaching. Every such process implies communication between teacher, attendant and content. Articulation of communication requires application of certain techniques and methods. Alteration or highlighting of one element's role or change of their relationship can essentially change mode of teaching/learning. Since these two processes comprise learning, their change in approach to learning or teaching changes learning itself. Term technology is wide and dependable upon a concrete situation. Usually technology refers to usage of different tools and procedures that improve certain process and ensure more qualitative results and complete goals. If a teacher includes educational technology in the process of learning, then other elements of



educational system will not change. Shape of connections between elements will change as well as their mutual interaction. By introducing the ICT into educational system basic terms of education usually get prefix "e" – electronic or more recently "m" – mobile. Actually, an assembly of electronic tools, methods and algorithms is directly connected to learning as process within new technological frames. eLearning recontextualizes learning process. Recontextualization is discernible already at the level of programs and it becomes more developed when it approximates more complex shapes. Complete process of learning is realized through new forms and it loses its former static characteristic.

Learning can also be analyzed as assembly of techniques respectively methods that are used in realization of a learning process. ICT implementation, especially from aspect of different program solutions makes eLearning, from methodological point of view, more interesting and acceptable than line of traditional methodic approaches and solutions.

### **3.5 eLearning as model**

Education represents a specific form of human activity, so consequently, learning as a realisation of same activity also becomes specific. This is even more obvious when considering specificity of frames within which learning is being realised. Perhaps not the most sensible, but certainly most detailed form of analysing learning's characteristics is treating it as a model.

Specification according to model in compliance with any model's definition requires neglecting its determined characteristics or at least abstracting or simplifying system up to a level where it can be independently run. Basic characteristic of a model is its capability of imitating the real-time system in different situations. Its basic purpose is to simulate realistic situations possible in system's functioning and making decisions that are applicable in concrete situations. Simulation is a process that enables imitation of a real-time system regardless to time or location of its realisation.

Learning plan and program can be observed as a specific model of an educational system which has to satisfy the same basic postulates as any other model. Same conditions could be defined for eLearning as a form of education. Traditional form of learning plan and program doesn't consider completely all factors which can emerge during realisation.

Basic characteristics of a qualitative model are comprised in its ability to replicate a real-time system at any possible modification of executive factors so to ensure an overview of system's structure respectively the conception of its structure. However, the most important characteristic of any model is its anticipation or ability to predict situations that already haven't been realised. Since eLearning or to be more precise, eCourse is designed as ICT "product" it has certain static characteristics which a-priori restrict realisation. When these boundaries are set by content, goals or restrictions which refer to student or teacher, then they should be considered as specificities. However, qualitatively prepared eCourse has a purpose of realisation, even in unpredictable situations that can, along with small modifications, be accepted as a qualitative realisation.

eCourse can also be treated as a software solution. In that case, its testing as a final product is essential due to verifying all three above mentioned characteristics of a model. Students' success defined as a final goal of course mainly depends upon quality of a model that is aligned with described characteristics. ELearning is an exclusive area where model has to be used as a real-time system in all of his performances.

#### 4. Paradigm as cause of phantasm

A book entitled "Paradigms in conflict" (Hesselgrave, 2006) confronts paradigms which author recognizes within modern social frames. Though book considers reflections of Christian doctrines up to a present moment that also implies certain restriction of applicability, frames can also be applied to other areas which register any kind of human mind's activities. Learning is, without any doubt, a field where individual supported by other persons and specific means shapes himself for the future. This moderation also comprehends cognitive aspect respectively moderating the awareness of oneself and one's possibilities. In momentarily circumstances of accomplishments and fast changes this can no longer be analysed as one-time basis process, but instead as continuing process defined by individual's needs. The process is today usually categorized as lifetime learning.

Such process connotes a possibility of education and qualification without the usual boundaries. ICT application and possibilities that follow it through web and similar forms mainly remove such boundaries. Possibility of using the computer network implies a possibility of approaching knowledge sources embedded in specific forms adjustable to individual's needs or those of a group with similar demands.

Within these circumstances learning transforms from traditional forms to forms adjusted to conditions mutual to all activities that have implemented ICT. To put in usage the applicative software solutions alludes much more than using the application as learning medium or tool. Web as a global "class" puts eLearning to a position it belongs to – place of productive activity which can define its value as any other product placed on market. This is where the real problems emerge and they require a complete definition respectively a holistic approach to eLearning as realisation of education respectively as a system, process, method or technology. Placing the individual towards such forms of learning requires his acceptance of paradigm already supported by other students who share activities defined in lectures.

eLearning and possibilities that it offers puts in front of individual a dilemma of paradigm's independence and respecting tight rules set by one who plans learning and its goals. Web, on the other hand, neutralizes power of independence in a way that it allows an individual a possibility of choosing online courses which mostly suit and in the best possible way ensure goals aligned with his needs. Misunderstanding of such possibilities leads to wrong conceptions about eLearning that will be elaborated in a paragraph referring to phantasms.

Possibilities of web and eLearning provide one more advantage in comparison to traditional forms of learning. For example, hybrid learning also includes ICT so restrictiveness of traditional learning becomes reduced. Important advantage of eLearning is probability of so-called peer-to-peer communication that enables abandoning "eClass" no matter how much it can be virtualised by dimensions. However, paradigm of "common land" – peer-to-peer environment imposes a caution that has to follow qualitatively organise eLearning. As a product formed and put within frames of eBusiness every eCourse or other eForm demands protection of copyrights that belong to the author.

Holistic approach to preparation and realisation of eLearning or some of its forms is the most important precondition of its success. However, at such planning of eLearning and treating its particular elements that comprise its essence, sometimes it is necessary to determine sequence and/or priorities of certain activities. Though it is necessary to

determine sequence or priorities for competitive activities in their realisation, still holistic approach should be represented regardless to significant divergences.

#### **4.1 Paradigm as cause of phantasm**

Are phantasms mistakes, misconceptions or just wrong conceptions?

##### **4.1.1 Phantasm of time independence**

eLearning is proclaimed as timely independent process. Term time independence should be considered extremely carefully. When within eCourses attendants are advised that learning process is not timely defined it basically means an attendant can freely decide when he will learn. Individual component is nevertheless expressed in a bit "distorted" light. Truth is that eCourse's realisation plan has to precisely emphasize how much time is required for certain content, but student is not imposed with schedule which determines a sequence of adopting the content. This trap is usually noticed in high number of attendants who give up courses or achieve bad results in the end.

Time in eLearning should be treated as polyvalence. The first treatment requires a definition of time's quantity necessary for adoption and realisation of content. That period has to be static and appropriate to predictably average attendant. The second treatment is more complex and includes time of communication on all communication levels that exist in eLearning (see table). This time has also static character. Finally, real time independence of eLearning is restricted by already described conditions and it has a relative character. Simply be said, "one can learn whenever he wants to in comparison to eCourse's duration, but in line with schedule of one's other assignments". Other characteristics of time such as age of attendants are not analysed in this paper.

##### **4.1.2 Phantasm of location/physical independence**

Conception of physical independence is extremely phantasm-characteristic. Namely, slogan of location or localization independence of eLearning is strictly connected to existence of network infrastructure, web and Internet approach. True, there is a possibility of Intranet and creation of locally restricted networks, but even then realisation is conditioned by different factors.

Assumption is that certain society owns arranged infrastructure with tendency of global networking. Moment that is exceptionally important in this treatment is safety of network and communication. To describe it scenically "the crush of Internet within eLearning and earthquake within traditional class do not have the same circumstances". Phantasm of location independence should still be observed with much caution.

##### **4.1.3 Phantasm of transferring quantity into quality**

This kind of articulation overwhelmingly reminds of some Marx's philosophical approaches but it exceeds those frames. Hypothetically it can be foreseen that specific area or specific subject in a certain period of time can be supported by relevant number of qualitative eCourses when browsing web. Certainly, the choice of courses belongs to individual/attendant and is strictly determined by his possibilities. Since eLearning becomes eBusiness it can be assumed that financial preconditions will determine criteria and

range of acceptable forms. In conditions of levelled prices this certainly can impose a problem, if no coordination on a higher level of decision making.

#### 4.1.4 Phantasm of communication integrity

The next assumption that frequently leads to wrong conceptions of eLearning is conditionally said “assumption of communication integrity”. This phantasm is a direct consequence of wrong assumption considering location independence.

Communication integrity or better yet completeness connotes undisturbed communication between elements of eLearning. Stricter form implies existence of willingly communication between elements shown in Fig. 2.. From psychological point of view willingly communication can be treated as necessary communication that underlines phantasm of complete communication in eLearning.

	Teacher	Student	Content	Goals	Context
Teacher	indirectly directly actively /passive	directly actively	directly	indirectly actively	indirectly actively
Student	directly actively	indirectly directly actively /passive	directly	indirectly actively	indirectly passively
Content	directly actively	directly actively	directly indirectly	indirectly	indirectly
Goals	indirectly actively	indirectly actively	indirectly actively	indirectly conditionally	indirectly likely
Context	indirectly directly	indirectly indirectly	indirectly	indirectly	indirectly

Fig. 2. Determination of eLearning according to communication between elements(Auth)

#### 4.1.5 Phantasm of accessibility

Accessibility connotes two dimensions: time and content accessibility. Time accessibility is conditioned by reliability of network in local and international level. Both reliabilities are conditioned while level of reliability is inversely relative to phantasm’s level in both situations.

#### **4.1.6 Phantasm of revolution**

Trend of ICT development and involvement in all activities, learning as well, leaves an impression of necessity for technical facilities, especially in computers. ICT are essential facility in learning, but form of learning that will be applied should be precisely defined according to specificities of certain situation. ELearning can be preferred as executive form due to line of its own characteristics that are advantage in comparison to other forms of learning. Location independence of eLearning allows attendant to perform his assignments at home. That possibility drastically reduces costs of learning both for institution and attendants, so the continuance of eLearning's application can be anticipated. The process will probably lead to disappearance of other learning forms. Therefore eLearning should be observed as evolutionary form of traditional learning. Hybrid form of learning is the most expected form in future. Regardless to velocity of changes, eLearning cannot be regarded as revolution in education. Especially since changes in all aspects of traditional learning do not emerge simultaneously and at same pace, especially in fields of methodic, didactic, pedagogy and psychology.

#### **4.1.7 Phantasm of general applicability**

Though computers as ICT segment have found a wide application in all activities, it is not possible in learning programs of certain courses or parts of those courses. Where manual skills or motor capabilities are required, contents of that type are hard to qualitatively express by some sort of eForm. Also, when physical model is required or simulation by physical model, eLearning is not appropriate. Some contents require detailed and complex preparation so they are demanding in time and finances. Wrong concept of general applicability therefore becomes a phantasm that leads to extensive deadlines of preparation or spending more financial means than anticipated.

#### **4.1.8 Phantasm of holistic approach**

Necessity for team work and team approach demands certain level of common knowledge and common concept about goals of specific activity. Even if there is a consensus between team members regarding the concept of final goals that are to be realised through preparation of eLearning, still misunderstandings can emerge in comparison to attendants. Since eCourse is prepared carefully and planned as reusable model, its static segment should be carefully determined. On the other hand, it is necessary to upgrade contents and adjust them with modern cognitions. Holism assumes comprehensive attitude towards phenomenon and treating all its parts as integrity. Treating some part or element separately, without observing connections and influences to other elements and over the other elements, almost always leads to mistakes. Mistakes can be overlooking or neglecting important facts which can condition realisation.

Position of teacher in eLearning has been significantly modified since he is required additional skills and capabilities concerning ICT. Already a wrong judgement or self-evaluation of his capabilities can diminish chances for success of eCourse. On the other hand, a part of responsibilities that can be left to other team members frequently loose pedagogic-psychological support. Valorisation and validation of content which will be included in course represent sensitive assignment due to a huge choice of disposable prepared forms, so this can lead to undesirable results.

Still, the most sensitive part remains attendants' evaluation of success since basic goal is certification of users and evaluation of their success in course. Since through these eCourse activities authority is being returned to teacher or a content expert, preparation of tools and modes for evaluation of attendants once again requires comprehensive approach where one shouldn't neglect postulates of good pedagogic-psychological practice.

## 5. Conclusion

ICT application in learning has a vital importance for all human activities. The final implementation of computers, whether as learning subjects in learning or education in general is timely dissonant. Preparation and execution of eCourse assumes certain level of information-science education that can be provided through specific form of learning. Considering their high financial value and general treatment of formal learning as activity, computers are relatively late included into the learning process. Only the first level of software's development, liberalisation and conscience of necessity and importance of open platforms has enabled learning to possibly apply ICT in preparation and realisation. Velocity of changes and achievements in ICT field open a wide range for possibility of their implementation. Possibilities provided by web, globalisation of business and market connectivity provide a possibility for placing eLearning as a product perhaps for the first time in a way that proves truly economic value of that activity.

However, velocity also brings a risk that can be noticed in superficiality or in "market language" education is put in a situation where it is observed as "bofl" – goods of bad quality. Quality of learning content has a crucial importance in achieving a goal – good educated and certified attendant. Certainly, one shouldn't forget the value and importance of other elements, persons and learning forms in the process.

Insuring quality of (e)Learning is precondition of a final goal – qualitatively educated attendants – and consequently ensuring all benefits that can use to individual or a society as whole. Therefore, in the complete process of preparing and realising eLearning as educational form special attention should be given to treating all facts that could in any way influence quality. The final goal isn't, though it is not forbidden, to create a brand in educational eContents. Finally, all national universities have tried to ensure a top quality in education. If in global frames global eInstitutions of higher education do emerge, one should consider a quality in all levels of realisation. Phantasm is not necessarily negativity if treated as measure of imperfections in planning and/or realising the education through eLearning as one form of it.

## 6. References

\*\*\*; [wordnetweb.princeton.edu/perl/webwn](http://wordnetweb.princeton.edu/perl/webwn)

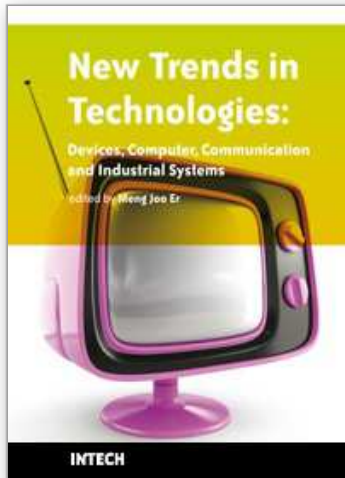
Zemsky, R.; (2009). *Making Reform Work: The Case for Transforming American Higher Education*, Rutgers University Press, ISBN-10: 0813545919

Kuhn, R.; (2009). *The Structure of Scientific Revolutions*, Books LLC, ISBN-10: 1443255440

Hesselgrave, D.J.; (2006), *Paradigms in Conflict*, Kregel Academic&Professional, USA, ISBN 978-0-8254-2770-1

- Caplan, D. (2005); Development of online courses, *Edupoint*, 40(V), downloaded on 20th April 2010 from <http://www.carnet.hr/casopis/40/clanci/2>
- Bosnić, I. (2006); Moodle: Seminar textbook. downloaded on 20th April 2010 from [http://www.open.hr/e107\\_files/downloads/Moodle\\_prirucnik.pdf](http://www.open.hr/e107_files/downloads/Moodle_prirucnik.pdf)
- Pogarčić, I.; Šuman, S.; Žiljak, I. ; (2008) eLearning as an Information Process // *RECENT ADVANCES IN EDUCATION and EDUCATIONAL TECHNOLOGY, Proceedings of the 7th WSEAS International Conference on EDUCATION and EDUCATIONAL TECHNOLOGY (EDU'08)* / Subhas C. Misra, Harvard University, USA (ur.). Venice, Italy, November, 2008: WSEAS Press, 2008. 283-289
- Pratt, D. D. (2003): Good teaching: one size fits all? U: An Up-date on Teaching Theory, Jovita Ross-Gordon (Ed.), San Francisco: Jossey-Bass, Publishers.

IntechOpen



## **New Trends in Technologies: Devices, Computer, Communication and Industrial Systems**

Edited by Meng Joo Er

ISBN 978-953-307-212-8

Hard cover, 444 pages

**Publisher** Sciyo

**Published online** 02, November, 2010

**Published in print edition** November, 2010

The grandest accomplishments of engineering took place in the twentieth century. The widespread development and distribution of electricity and clean water, automobiles and airplanes, radio and television, spacecraft and lasers, antibiotics and medical imaging, computers and the Internet are just some of the highlights from a century in which engineering revolutionized and improved virtually every aspect of human life. In this book, the authors provide a glimpse of new trends in technologies pertaining to devices, computers, communications and industrial systems.

### **How to reference**

In order to correctly reference this scholarly work, feel free to copy and paste the following:

Ivan Pogarcic and Maja Gligora Markovic (2010). eLearning and Fantazms, *New Trends in Technologies: Devices, Computer, Communication and Industrial Systems*, Meng Joo Er (Ed.), ISBN: 978-953-307-212-8, InTech, Available from: <http://www.intechopen.com/books/new-trends-in-technologies--devices--computer--communication-and-industrial-systems/elearning-and-fantazms>

# **INTECH**

open science | open minds

### **InTech Europe**

University Campus STeP Ri  
Slavka Krautzeka 83/A  
51000 Rijeka, Croatia  
Phone: +385 (51) 770 447  
Fax: +385 (51) 686 166  
[www.intechopen.com](http://www.intechopen.com)

### **InTech China**

Unit 405, Office Block, Hotel Equatorial Shanghai  
No.65, Yan An Road (West), Shanghai, 200040, China  
中国上海市延安西路65号上海国际贵都大饭店办公楼405单元  
Phone: +86-21-62489820  
Fax: +86-21-62489821



© 2010 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the [Creative Commons Attribution-NonCommercial-ShareAlike-3.0 License](#), which permits use, distribution and reproduction for non-commercial purposes, provided the original is properly cited and derivative works building on this content are distributed under the same license.

IntechOpen

IntechOpen