

The 8<sup>th</sup> International Scientific  
Conference Learning and software for Education  
Bucharest, April 26-27, 2012  
10.5682/2066-026X-12-032

**CHARACTERISTICS OF THE ONLINE LEARNING ENVIRONMENT  
ORGANISATION. TRADITIONAL AND ELECTRONIC TEACHING**

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**Abstract:** *In this paper, we highlight features of the organization of online learning environment by creating a relationship of interdependence between elements of direct, traditional teaching, face to face type, and features of electronic, virtual teaching.*

*Among the premises that we have in view, we highlight some measures and actions to implement the National Pact for Education, as the strategy for the development of education and research in the period 2009-2015, also stated in the National Education Law, no.1/2011: centring the curriculum on skills, considerably increasing curricular flexibility, introducing ICT as school subject and digitising the curriculum and creating a virtual school library, etc. Meanwhile, it is necessary to identify analysis tools for learning needs, the characteristics of students, so that the new curriculum to produce maximum cognitive profit for the students by creating an online learning community. Organizing educational activities refers to the specific methods of design and implementation of teacher-student interactions and of promoting certain types of collaboration between them in accordance with: ▪ the educational objectives pursued; ▪ the scientific content selected and processed in an accessible, attractive manner, but which also leads the pupil to cognitive and practical-active effort; ▪ the elaboration of learning self training strategy that involves establishing the type of learning experience in which students will be engaged (active, interactive, creative, heuristic, problematical, experimental), the system of teaching methods and procedures used, the system of the means of learning (with emphasis on the use of ICT and virtual libraries) and forms of organization of student activities; ▪ the determination of the structure of phases / moments of educational activities which alternate forms of traditional teaching with electronic, virtual teaching (the vision has radically changed, teaching is designed not only as an activity of communication, of conveying knowledge, but as a matter of organization and management of voluntary and autonomous learning processes, and the role of ICT is essential in this context); ▪ the establishment of evaluation and self-evaluation strategies for educational activities.*

*At the same time, we consider necessary to identify new roles for teachers in the online teaching / learning process, by building an online learning community, and not just posting lectures on a website. For example, Paloff and Pratt list the following roles for teachers: posting objectives and expected results; the development of guidelines for participation in the online learning community; creation of learning tasks to be undertaken by collaborating online; trying to create a friendly, pleasant atmosphere by organizing teambuilding activities, ice breaking activities, etc.; initiation, monitoring, providing feedback on the direction of discussions online; mediation, solving difficulties or conflicts occurred; assisting, monitoring the effectiveness of the online learning community; forming collaboration skills; engaging students in formulating evaluation criteria; encouraging students to discuss their reactions to online learning.*

**Keywords:** *roles, skills, teacher, e-learning process, learning environment, virtual teaching*

**I.** The strong impact produced by the flood of information on the formal education system forced its adaptation to this context by giving up the “teacher-centred learning” paradigm and by “providing opportunities for learning, training or educational programs through specific electronic means” (Brut, M., 2006:31)

### 1.1. The premises which we have started from when approaching this subject are:

- measures and actions to implement the National Pact for Education, as the strategy for the development of education and research in the period 2009-2015, also stated in the National Education Law, no.1/2011: *centring the curriculum on skills, considerably increasing curricular flexibility, introducing ICT as school subject and digitising the curriculum and creating a virtual school library, etc.* - e-learning presents numerous *advantages* to the traditional education system:

- *geographic independence, mobility* – the possibility to access the content of the educational material at any time and in any place, with the help of the PC and network;
- *online accessibility* – an important characteristic specific to this type of education, by which we understand access to education via the Internet in real time, without time dependence;
- *concise and selective presentation of educational content*;
- *individualization of the learning process* – each learner has his own rhythm and assimilation style and relies on a certain type of memory in learning (auditory or visual), covering courses can be done gradually and repeatedly, rapidly controlling progress, benefiting from a rapid and permanent feedback; some subjects have better efficiency during the weekend, others in the early morning;
- *diverse pedagogical methods* – e-learning programmes must be based on different teaching methods, which guide subjects through the process of learning: from the covering of educational materials, carrying out projects, online assessment to the certification of the programme if necessary; a series of experiments studying the effect of using various media in learning knowledge led to the conclusion that, in general, a diversified educational material is recalled 80% through listening, viewing and interactivity;
- *online administration* – using e-learning systems requires ensuring the security of the users, their registration, the monitoring of students and network provided services;
- *synchronous and asynchronous interactions* – the two types of interaction between trainers and trainees can be completed;
- *various dynamic technologies* – these allow a well-marked *feedback*, in real time, and formative and summative evaluation, qualitative and quantitative, carried out in an easy way, and by the most competent evaluators. (Ioniță, A.,2005.2006)

### 1.2. Characteristics of online educational/learning activities organisation

Organizing educational activities traditionally refers to the specific methods of design and implementation of teacher-student interactions and of promoting certain types of collaboration between them in accordance with: ▪ the educational objectives pursued; ▪ the scientific content selected and processed in an accessible, attractive manner, but which also leads the pupil to cognitive and practical-active effort; ▪ the elaboration of learning self training strategy that involves establishing the type of learning experience in which students will be engaged (active, interactive, creative, heuristic, problematical, experimental), the system of teaching methods and procedures used, the system of the means of learning (with emphasis on the use of ICT and virtual libraries) and forms of organization of student activities; ▪ the determination of the structure of phases / moments of educational activities which alternate forms of traditional teaching with electronic, virtual teaching (the vision has radically changed, teaching is designed not only as an activity of communication, of conveying knowledge, but as a matter of organization and management of voluntary and autonomous learning processes, and the role of ICT is essential in this context); ▪ the establishment of evaluation and self-evaluation strategies.

At the same time, an example of forms of organization of educational activities such as **e-learning** may include: activities at predetermined dates; tutorial activities – processes of information, counselling and guidance of students throughout school, in order to facilitate integration into university education; choosing the best educational options as well as encouraging training in a virtual group; compulsory attendance assisted activities (laboratory) control work which permits ongoing assessment of the student, developing his capacity for self-evaluation; hearing lectures; assisted activities – practical activities, applied activities, conducted mandatory face to face; independent study; elaborating year projects; elaborating diploma/dissertation projects; activities at the request of a user group, etc.

### 1.3. Roles/Skills of the teacher in the e-learning process

Trif, L., 2011, analysing both European and national educational policies and best practices, promoted and implemented, emphasizes current guidelines on the teaching skills of teachers in the e-learning community.

In this context, we consider necessary to identify **new roles for teachers in the online teaching / learning process**, by building an online learning community, and not just posting lectures on a website. For example, Paloff and Pratt, 1999, list the following roles for teachers: *posting* objectives and expected results; developing of guidelines for participation in the online learning community; creation of learning tasks to be undertaken by collaborating online; trying to create a friendly, pleasant atmosphere by organizing teambuilding activities, ice breaking activities, etc.; initiation, monitoring, providing feedback on the direction of discussions online; mediation, solving difficulties or conflicts occurred; assisting, monitoring the effectiveness of the online learning community; forming collaboration skills; engaging students in formulating evaluation criteria; encouraging students to discuss their reactions to online learning.

A synthetic perspective on the roles / skills of teachers in the e-learning process is presented by Corciu, C., 2008, organized in four dimensions: the role of the teacher as curriculum designer – the teacher describes and designs the curriculum of the specialty subject in relation to a model; the role of the teacher as learning adviser; the role of the teacher as evaluator of the learning outcomes and of the curriculum; the role of the teacher as manager of the group of students.

### 1.4. Ascertaining/exploratory research

In this paper, we propose as fundamental objective to identify the specific skills required for the successful implementation of the teacher's roles in the e-learning process; analysing the indicators *characteristic for the organization of the online learning environment*.

**Research methods:** questionnaire-based survey, focus group, scaling techniques, analysis of school documents.

**The sample of subjects** consists of a total of 52 students who are enrolled in the Department of Vocational Teacher Training, in the "1 Decembrie 1918" University, Alba-Iulia. They are students in the third year of study, so they covered the fundamental specialized disciplines, and they have also carried out their training in the application units; as a result they are able to identify roles, skills needed by the teacher in the e-learning process.

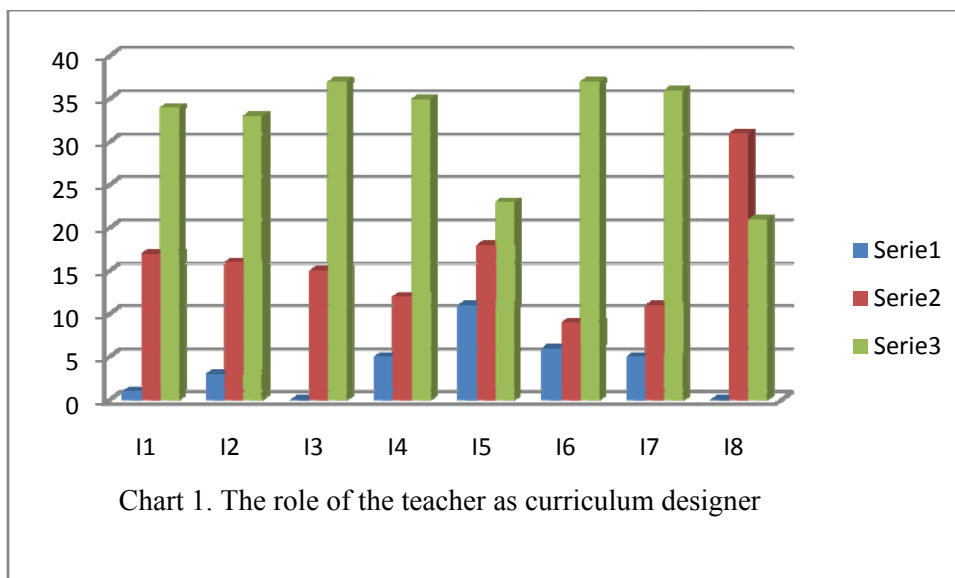
## II. ANALYSIS, PROCESSING AND INTERPRETATION OF RESEARCH RESULTS

**2.1.** The results referring to the roles/skills of the teacher in the e-learning process were organised in four categories, and the skills listed in the questionnaire were grouped into three scales: false, partially true, true. Students have selected these skills as follows:

### 2.1.1. The role of the teacher as curriculum designer

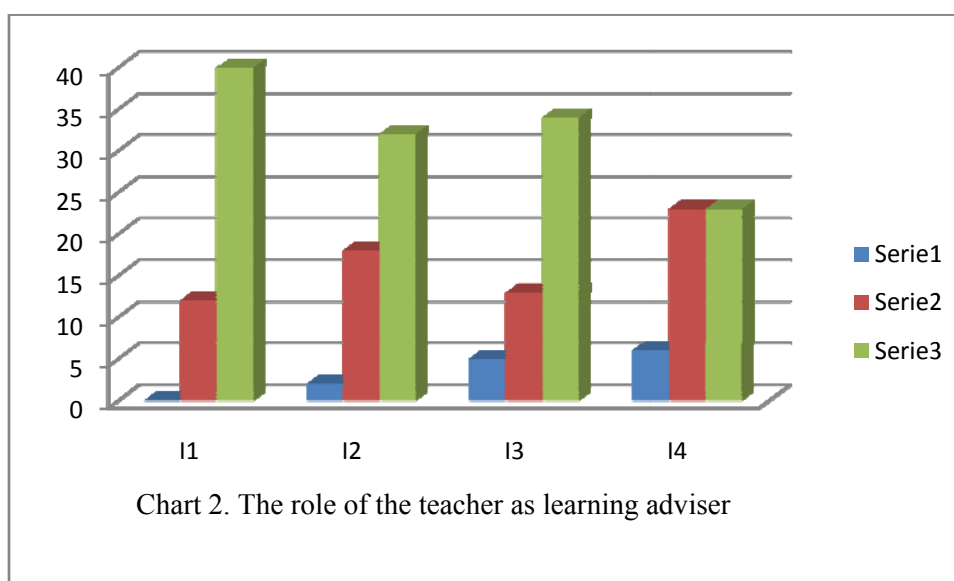
The teacher describes and designs the curriculum of the specialty subject in relation to a model. The specific skills to be considered here are: defining educational objectives in terms of professional skills, organizing and structuring content according to the informatics programme; providing relevant learning situations; developing assessment methods and tools; achieving an optimal balance between the online learning environments (only electronically), the mixed environment (combining on-line training and direct training, conducted in classrooms) and the additional environment (on-line applications represent an additional tool to the traditional one); ensuring methods of regulating learning and development of the designed curriculum.

Processing results showed over 72% the importance of these skills; we also identify the highest scores for skills such as defining pedagogical objectives in terms of professional skills; providing relevant learning situations; developing assessment methods and tools; the mixed environment (combining on-line training and direct training, conducted in classrooms) and the additional environment (on-line applications represent an additional tool to the traditional one);



### 2.1.2. The role of the teacher as learning adviser

The teacher is a specialist in the field and a good connoisseur of the psychology of learning, and must have the following specific skills: the student is supported in the uptake of an autonomous and responsible approach to learning: awareness for learning purpose, content delineation, adoption of appropriate learning and assessment strategies; insurance of the success in learning for all involved in the educational program through differentiated tasks; optimal organisation of the learning environment, presentation of the educational offer in a complete and attractive way – visual, audio, video and problem situations; development of skills for the self-management of learning.

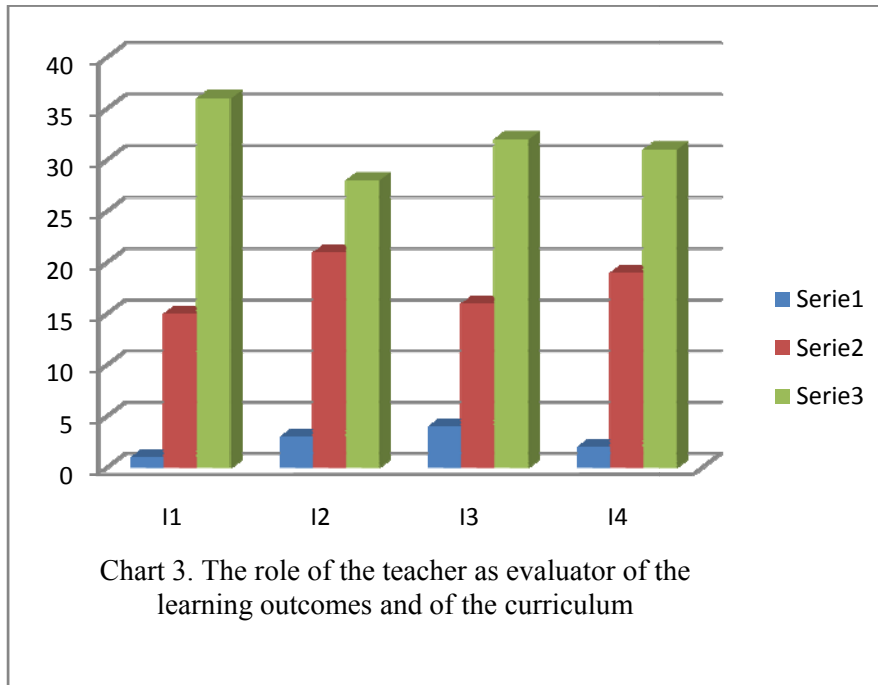


In processing the results proposed by the student, we notice the need for skills for the support of student assimilation of an autonomous and responsible approach to learning, with a share of over 90%, and optimal learning environment organisation, with 82%.

### 2.1.3. The role of the teacher as evaluator of the learning outcomes and of the curriculum

Specific skills include: formulating criteria for evaluating the results of the students in relation to educational objectives; designing assessment tasks in the electronic environment - assessment tests / grids / scales / criteria for evaluating the results, etc.; combining the assessment methods for the results of students - traditional (written, oral, practical), modern and computer oriented (grid test, observation,

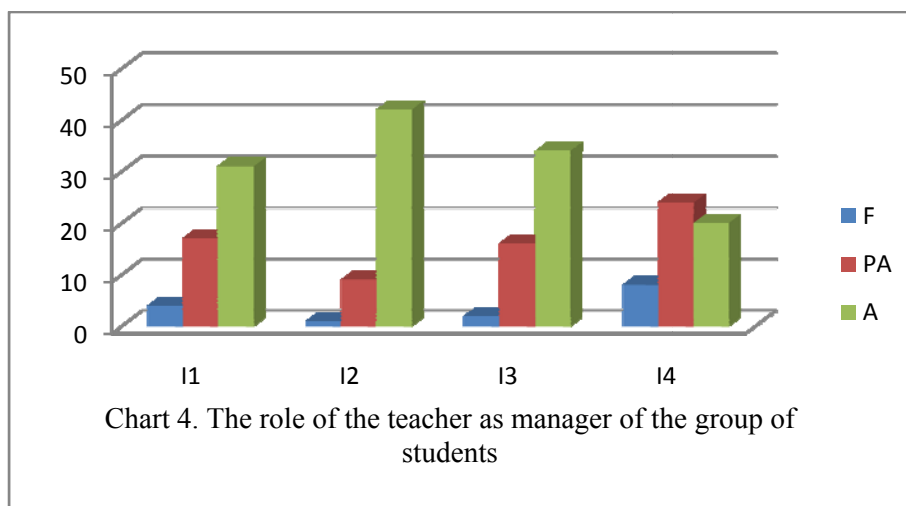
investigation, project, portfolio, report, essay, etc.); developing self-assessment skills in students by providing grid correction, time available, the mistakes made; forming the habit of applying an assessment test after completing a unit; curriculum assessment: assessment of objectives, content, effectiveness of methods and strategies used, of the results achieved by students followed by the identification and adoption of solutions for e-learning programme development.



Two key skills are emphasized, in light of this role, respectively the design of assessment tasks in the electronic environment – assessment tests / grids / scales / criteria for evaluating the results, etc.; developing self-assessment skills in students by providing grid correction, time available, the mistakes made.

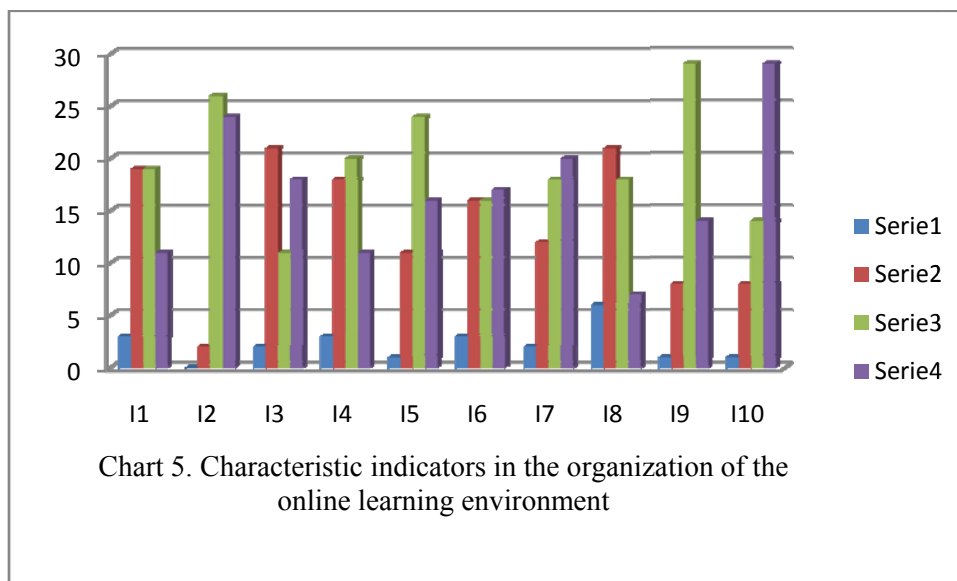
#### 2.1.4. The role of the teacher as manager of the group of students

Specific skills: classroom organization: establishing norms and group rules, assigning roles, delimitation of the work tasks; coordination and monitoring of students' activity – individual and inside the group; developing a communication network – collecting ideas from participants, negotiation of ideas and proposed solutions, applying the optimal version; ensuring group cohesion through competition and collaboration activities and stimulating group creativity.



The management component of the group of students, suggests as a choice of major importance the skill for coordination and monitoring of students' activity – individual and inside the group.

**2.2.** Characteristics of the on-line learning environment organisation: scale – the number of participants involved in a learning activity for a specified period; perception – the technical quality of materials received by participants; symmetry – the extent to which attention can be focused on each participant; interactivity – the minimum time in which a response can be elicited within an interaction; means – the range of means / tools for participants, available for learning and communication; control from the subject – the extent to which the subject may be active, may cooperate with other subjects or teachers in order to achieve learning objectives; integration ability – the opportunity to present information in different ways and from various sources; time – the opportunity to go through the content at their own pace, etc.



These indicators show the importance of online learning environment characteristics, in descending order. The first three options considered most important are: the technical quality of materials received by participants, the range of means / tools for participants, available for learning and communication, the extent to which the subject may be active, may cooperate with other subjects or with teachers in order to achieve learning objectives.

### III. CONCLUSIONS

This study aims to identify the most important roles and skills that the teacher needs to gain in the e-learning process, and the **recommendations** that we propose are to combine the traditional meanings and e-learning, otherwise there are many threats that concern: forms of abandonment, because this type of education requires consistent and sustained efforts by all participants in the educational process; the need for the teacher to be present in the virtual community, with the students, and *to moderate or to intervene* in a particular topic of discussion, sometimes, with the role of dividing the work tasks into smaller work groups; an important factor is *the teaching style and the degree of assimilation of knowledge* through the use of *online* courses formats, specific to this type of education and which adapt to the subjects' knowledge.

Despite these recommendations, experience of the already operating e-learning platforms showed that participants in education through the new e-learning technologies soon become familiar with the virtual environment and fall relatively quickly in the natural rhythm of transmitting and, respectively, acquiring knowledge through this modern and efficient type of education.

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