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# eLC RESEARCH PROGRAMME ABOUT TIME FACTOR

IN THIS SECTION A SUMMARY OF THE ORIGINAL eLC RESEARCH PROGRAMME IS PRESENTED.

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## Time factor in e-learning: eLC Research Programme 2009-2012

### CONTEXT

The research work of the eLearn Center is structured into four-year research programmes that thematically focus the activities carried out by researchers working from or with the eLC during specific periods of time. The decision to organise the research into programmes was based on the need to advance in a joint and thematically convergent way, providing a greater visibility of results about the subject being studied. The research programmes set out the thematic pertinence and relevance

in a way which places the programmes firmly within the current trends of concerns, gaps and possible improvements in e-learning. The multi-dimensional response to the problems posed will be one of the most important characteristics of the programmes. The aim of these programmes will be to present the most coherent construct possible, the fruit of different contributions made by the studies involved in the programme.

### LINES OF RESEARCH

In order to obtain this explanatory construct, which will advance knowledge about the programme's theme, three stable lines of research are proposed. These lines of research respond to an agreed classification

from the area of e-learning which assures a very diverse and complete scientific contribution as well as to a phenomenon as complex as e-learning.



The lines of research into e-learning are:

1. Research related to teaching and learning processes.
2. Research related to educational organisation and management.
3. Research related to technological learning resources.

## OBJECTIVE AND THEME

The theme of the research programme for the first four-year period (2009-2012) is “The time factor in e-learning”. The time factor in this case refers to all those elements that are related to a perspective of influence and benefit from the time factor in online learning. All research objects related to what could be called “tempo in e-learning” are included, which in this programme are understood as being the questions related to time which bring about improvements in learning. In a generic way, this “temporal dimension in e-learning” is considered as a real tool which is always present and which spreads out into the planning and implementation of online education. Perhaps the time factor does not appear as a keyword for research and conferences but its good management and conscious adaptation is decisive for the good functioning of online learning. This research theme integrates, by way of an example, elements as diverse as: learning rhythms, curricular timings, contingent support for learning, student continuation rates, automatic feedback technologies, self-management study calendars, speed and duration of courses, chronology of competence achievement, ubiquity and distribution of

teaching, institutional flexibility, latency of online discourse, learning support structures, short, medium and long-term resources, validated qualifications and previous knowledge, synchrony, use of time on campus, continuous assessment technologies, etc.

The programme is presented under double verification in the area of study into e-learning: on the one hand, the time factor is very often ignored in research into e-learning, taking for granted its presence and influence, which means that the specific requirements are not dealt with carefully and research is carried out into the learning process, applying or analyzing a set of factors that do not take into account the progression marked by learning achievements and, on the other hand, the programme also shows the belief that by varying some elements related to tempo in e-learning, improved results can be achieved that are different to those being achieved until now.

To summarise, the programme is designed to gather empirically argued actions and decisions related to the time factor in online education, with the aim of improving learning.

## RESEARCH ELEMENTS

From the experience accumulated it seems logical that the theme of the research be contextualised in higher education in these first stages and that it should remain predominant throughout the different

research programmes that may be developed. However, a sufficiently complex representation of the research view is required to be able to understand the main focuses and future research actions.

To this effect we are equipped with a representation in which the different possible thematic focuses are reflected and in whose inter-relation the different nodes of current research could be situated, as well as indicating some others for the future.

The representation has four core elements:

#### A) SUBJECT/S

Who is/are the recipient/s of the research results: teachers, students, designers, business people, technicians, institutions, etc.

#### C) TECHNOLOGICAL

Technological tools involved in educational solutions: virtual campus, 2.0 tools, mobile technology, 3D, etc.

#### B) CONTEXTUAL

Which educational level is being addressed, principally, the research solutions: compulsory education, post-compulsory, higher, non-formal, informal, etc.

#### D) STRUCTURAL

If the selected research plan is of an institutional nature or of a programme, course, resource or material nature, etc.

A greater determination of the research theme and of its priority focus for this first period of time will help to shape the lines of research. Therefore, in accordance with the proposal that the theme of the programme should be “The time factor in e-learning” and maintaining the three lines of research (time factor in/of teaching and learning processes, time factor in/of educational organization and management and the time

factor in/of technological learning resources) a greater level of precision is required, reflected in guiding research questions for each of the lines. Despite the fact that these questions are still generic and do not exhaust all the research possibilities, they aim to focus the results of the research along all lines and they respond to the specific and contrasted problems in coherence with the practical focus of the programme.

## RESEARCH QUESTIONS

Dealing with the time factor means, according to the proposed lines of research, responding to some of the following guiding questions:

### 1. TEACHING AND LEARNING PROCESSES:

- Is it possible to identify and strengthen an increase in the *cognitive level* achieved by online students if they use learning support tools in real time?
- Is the *faint process* in online learning a gradual process of the same nature as the structured support process? Which specific mechanisms in relation to the time factor are involved in the withdrawal process?

- Can the quality of the content and the real achievement of feedback online be related to the moment at which the teaching and learning sequence is provided?

### 2. EDUCATIONAL ORGANISATION, MANAGEMENT AND POLICIES:

- Which factors must be taken into account when planning and implementing an educational institution that is truly *open and flexible* through the use of technological learning tools?



- What is the nature of the conceptions about the educational organisation of an institution and its teachers in the *continuance and level of completion of studies* online?
  - What are the *problems of an organisational character* related to the time factor which institutions have to face in order to develop quality online educational proposals?
- .....
- ### 3. TECHNOLOGICAL LEARNING RESOURCES:
- .....
- How can one set out a more efficient *technological mediation* in the implementation of continuous assessment coherent with the achievement of competences?
  - How can technology help to *manage time* in a rational way for online students?
  - Which resources of a *synchronous* nature provide a significant change that could lead to the consideration that technology is an *amplifying tool* in teaching and a strengthener in learning?

## APPROACH

The approach of the research programme prioritises two fundamental aspects for knowledge advancement:

1. The research must be clearly directed toward the *resolution of problems* that are current, objectively relevant and with the widest possible reach. This research has to seek solutions in an empirical way to a problem which is well delimited, which although it may arise from normal practise, it must always be possible to place it within the framework of a research thread and global debate at the point at which it is started (reflected in specialised magazines, committees, fundamental reports, etc.)
2. The research must be focused on providing *innovative and specific results for improvement* in the chosen field of research, in a clear way, providing instruments that provide evidence to support the contributions made. Likewise, the results of the research have to constitute a clear base of innovation in their field of application.

## ANTICIPATED RESULTS

Without differentiating between products of short or half term, we expect to see contrasting results coming directly from the research, referring to:

1. Contrasting instructional guidance for improving online teaching and learning through aspects related to the time factor.
2. Specific validated instruments which are mediators of this improvement in the online learning process (protocols, patterns, others).
3. Technological processes and validated technologies which respond to some subsidiary need of the time factor.
4. A final explanatory construct on the influence of time on the improvement of segmented online learning from the contributions of all the research involved in the programme.