



## Subjective Perception of Teachers on the Use of Blogs in the Classroom

Luis M. Casas-García, Santiago M. Vicente-González, Ricardo Luengo González, Mercedes Mendoza García

[luisma@unex.es](mailto:luisma@unex.es), [alasombradeltomate@gmail.com](mailto:alasombradeltomate@gmail.com), [rluengo@unex.es](mailto:rluengo@unex.es), [mendoza@unex.es](mailto:mendoza@unex.es)  
Universidad de Extremadura (Spain)

### Abstract

*This communication seeks to highlight a research carried out within the CIBERDIDACT group, whose aim was to determine the perceptions of a group of 25 professors, bloggers in the classroom, on the use of this tool in teaching and change in performance and behavior of their students. The process of collecting data was the "information gathering snowball" through the blogs of the informants themselves.. We used the qualitative technique called "Life Stories" from a non-invasive survey, based on stories. The analysis of the results was based on texts collected through the establishment of categories, the Contingency Analysis and Pathfinder Associative Networks techniques. The analysis assumed that, as far as the contingency of two categories occur in several of them, you can quantify the importance of such categories in the group. For its part, Pathfinder Associative Networks establish relationships between the different categories and allows the graphical representation of the data organization and the possibility of comparing different networks. These tests were carried out through two programs, designed and implemented by the group CIBERDIDACT: GestMagister (which generates the contingency matrices from texts) and GOLUCA (generating networks and performs the appropriate analysis.) The investigation obtained interesting conclusions about the most important factors that influence teachers to use blogs in the classroom, and about what teachers themselves think about the benefits and potential that the use of blogs can have on the process learning to learn*

### 1.- Introduction

A blog is a website that collects chronological articles or posts of one or more authors that can contain text, images, videos, presentations, and can be made without having prior knowledge of programming language. In addition, the website itself automatically records the date and writing files, and thus facilitates later access, being able to query, add, edit, update and / or review the content.

Blogs also allow them access to people outside the blog author, enabling those visitors to leave comments on what written there. So many blogs are able to have a group of regular readers, with comments, can enrich the subject matter in a given post. And in the classroom those readers and commentators have secured in a natural way, if the blog is a learning resource one more that those used in class [4] [8].

The three more general uses of blogs in the classroom depending on the task are: course blog, teacher blog or students' blog. In any of these modes, the interaction between the author and visitors creates an opportunity for collaborative learning and to comply with the premises to create a community, supporting individual work, group work and exchange of information [7] [9]. In this way enhances the learning community as a shared path, and both the teacher and other peers have the ability to read and add comments to other blog.

These and others are the possibilities that we have tried to study with our research.

### 2.- Method.

#### 2.1 .- Participants.



The sample consisted of 25 teachers of different levels of education: Primary, Secondary, University and Special Education. All of them were bloggers and used them in their classes.

The sample can be regarded as high quality as many of the participating teachers have been highlighted in the Blog of Good Practices 2.0 of the Institute of Educational Technology of the Ministry of Education and Science of Spain, while others have been speakers at various seminars and congresses on ICT and Education, or have provided to teachers training on Blogs and ICT.

The informants were selected using a data collection procedure in "snowball", which was requested by the collaboration of certain persons who, in turn undertook to apply to others, to obtain the final sample. Thus, we obtained data from those respondents who were interested in answering. Furthermore, to increase the sample, was used the very means of the blogs: the spreading of information and reach a large number of teachers concerned about this research and to participate.

### **2.3.- Data collection.**

To obtain data from our study, teachers were asked to draft a written statement to indicate what their experiences with blogging in the classroom about the benefits that its use brings to the students face to other more traditional tools, if it stimulates and sustains interest, motivation, teamwork, discussion, addressing cross-cutting themes, active learning, responsible and constructive ... or any other important contribution in both positive and negative aspects.

It was carried out a content analysis of the texts collected so that, once established categories of analysis of documents (sentences for a specific concept), it was studied which of these categories appeared concurrently in documents of different people and how many times happened that contingency, building after that a matrix of contingencies between different categories. It is assumed that if two categories appear together in a document, corresponding to two events that are close in an individual's cognitive structure. If we extend this principle to the documents produced by a collective, we assume that to the extent that the contingency of two categories occur in several of them, we can quantify the importance and relationship of such categories in the group. This type of treatment is known as Contingency Analysis [5].

In our study we decided to represent the data obtained through networks that establish relations between the various categories. This form of representation has advantages such as the ability to display the organization of the data or the comparison of networks of different origins.

Specifically we decided to use the technique of Pathfinder Associative Networks [6]. In these networks, the representation is obtained from a matrix of proximity data, which shows the numerical score awarded to the similarity or difference between concepts perceived by a subject, so the closest semantic concepts will be represented in space closer and similarly further away the less similar [1].

Using the program GestMagister [3] we obtained a contingency matrix between categories to use as a matrix of proximity data to build the Pathfinder Associative Networks.

From this matrix, and using the program GOLUCA [2] we generate graphs for the Pathfinder Associative Networks and get data about the coherence and complexity of such networks, and their similarity with others.

## **3. Results and Discussion.**

After the reading, analysis and study of each of the 25 texts obtained from participating teachers we got the categories shown in Figure 1, and the frequency of occurrence of each:

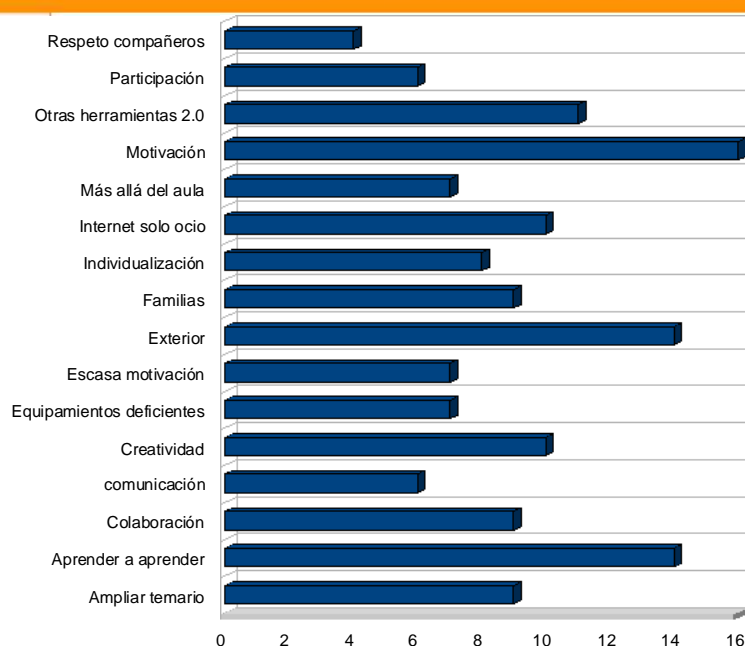


Figure 1. Frequency of the categories studied

As we can see, the most important reasons for using blogs in the classroom are: Motivation, Learning to Learn, possibility of that student work is viewed abroad, and the use of other Web 2.0 tools.

But the frequency calculation was not the only objective of this research, but to know what the most important relationships in the structure of the texts analyzed are, the answer to the question why teachers who use blogs in classroom do

In Figure 2, shown below, we can see what are the main categories found in the study, and the relationship between them.

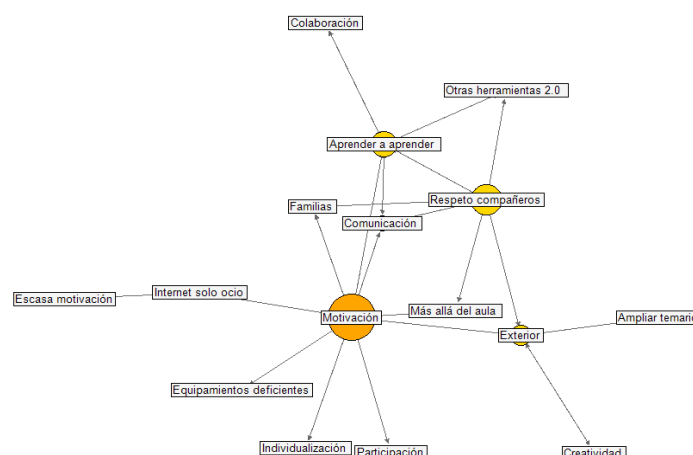


Figure 2 .- Pathfinder Associative Network: importance and relationship between categories.

According to this network, we can say that we find several key nodes or "Nuclear Concepts" [1], which are the most important concepts in the cognitive structure of the subjects studied and that the program GOLUCA has highlighted according their grade of importance.

Thus, after the investigation we can say that professors use blogs primarily because their use increases student motivation, motivation that connects with other variables.

The second reason is that blogs promote respect among students, a concept that just appeared in four texts, but weighs heavily on the rest. When the works generated by students are exposed to the



outside, they learn to respect the work of their peers and themselves because the effort that this entails. Furthermore, the use of collaborative tools in the creation of the blog encourages this estimation.

The third reason is that blogs help them learn to learn and students become more independent in their learning, both inside and outside the classroom.

The fourth concept is that allows exposure to the outside of their work, as it not only increases motivation and respect for their peers, as we mentioned above, but also the students try to be more creative and look beyond resources offered by the teacher, information available through the blog itself: the Internet.

The use of blogs, finally, encourages communication between teachers, families and students, promoting the exchange of roles within the classroom to be ones and others generators of knowledge.

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## Acknowledgements:

The research has provided the basis for this article, "Estado de la Informática en los centros de Primaria y Secundaria en Extremadura/State of Informatics at the Centers for elementary and primary education in Extremadura" has been funded by the Consejería de Economía, Comercio e Innovación of the Junta de Extremadura (Spain) through resolution of August 21 , 2009, which resolves the award of grants for research projects, development and innovation in Extremadura (Reference PRI09A005) and has been conducted by the research group "Ciberdidact".