

## The Moderator in Knowledge-Management Networks<sup>1</sup>

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The appearance and development of new working and learning environments is becoming increasingly common in the Knowledge Society. Here at the *Accelera* Project, we have defined and experimented with a model that enables knowledge to be created, shared and managed within a network amongst different groups: centre headmasters, programme consultants, professors engaged in initial university training and lifelong learning, and students-teachers. There are three intelligent networks on *Organisation and Management of Schools* (Atenea), *Social Sciences* (Galatea) and *Gender Violence* (Themis), which feed back into a fourth network (Momo) that serves as a knowledge base.

One of the essential elements in this model is the moderator, the subject of reflection in this article, in which we discuss his or her skills, the role he or she plays in a knowledge network, and the training needed to properly undertake the role of moderator.

**Keywords:** knowledge society, moderator, learning networks, creation and management of knowledge, virtual teaching-learning environments.

### 1. The Knowledge Society: Context of Action

One of the clear features of the so-called Knowledge Society is the exponential development of Information and Communication Technologies (ICT), which support the appearance and development of new virtual spaces for social relations, as well as for the processes of teaching-learning and for knowledge creation and management.

The Knowledge Society, as an advanced stage in the Information Society [1,2], demands new forms of organisation and new training policies that pave the way for an effective, ongoing development of the intellectual capital of organisations and thus enhance their competitiveness. It is precisely the development of these training policies where the creation and management of knowledge is being revealed as a fundamental strategy.

### 2. About Knowledge Management

Within the framework of the Knowledge Society, in the early 1990s, Knowledge Management (KM) stormed onto the scene, rapidly become one of the fundamental disciplines in the organisation and management of business institutions [3,4,5,6] and service companies.

In his work entitled 'Personal Knowledge. Towards a Post Critical Philosophy' [7], Michael Polanyi told us that we always know or can know more than what we are capable of saying or explaining. This claim, which Polanyi made in reference to individuals, is perfectly applicable to organisations, and it is thanks to a sound KM strategy, amongst other factors, that organisations are capable of saying and explaining everything they know or could know.

*After a careful analysis of the definitions and inherent characteristics of knowledge creation and management, we can regard that it consists of a series of systematic processes (identification and gathering of intellectual capital; processing, development and sharing of knowledge;*

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and the use of knowledge) aimed at organisational and/or personal development and, consequently, at generating a competitive advantage for the organisation and/or individual. [8]

### 3. The Accelera Project

The *Accelera* project (<http://cedu345.uab.cat>) on Networked Knowledge Management has **defined and experimented with a model of Knowledge-management network (KM-Network) in the realm of education**, which led to the creation of a virtual community whose purpose is to generate and exchange knowledge and experiences through a collaborative process between groups of people from the different strata involved in educational processes who are interested in sharing their knowledge.

#### 3.1 Knowledge Networks

The *Accelera* virtual space is organised into three intelligent networks centred on factors related to the Organisation and Management of Schools (ATENEA), Teaching the Social Sciences (GALATEA), and Gender Violence (THEMIS), which feed back into a fourth network (MOMO), which in turn serves as a knowledge base where reflection takes place on the processes and dynamics generated in the other three networks (Figure 1).

- The GALATEA network is made up of university faculty engaged in initial university training and lifelong learning, primary school teachers, university students in the first cycle and lifelong learning classes, and primary or secondary school students.

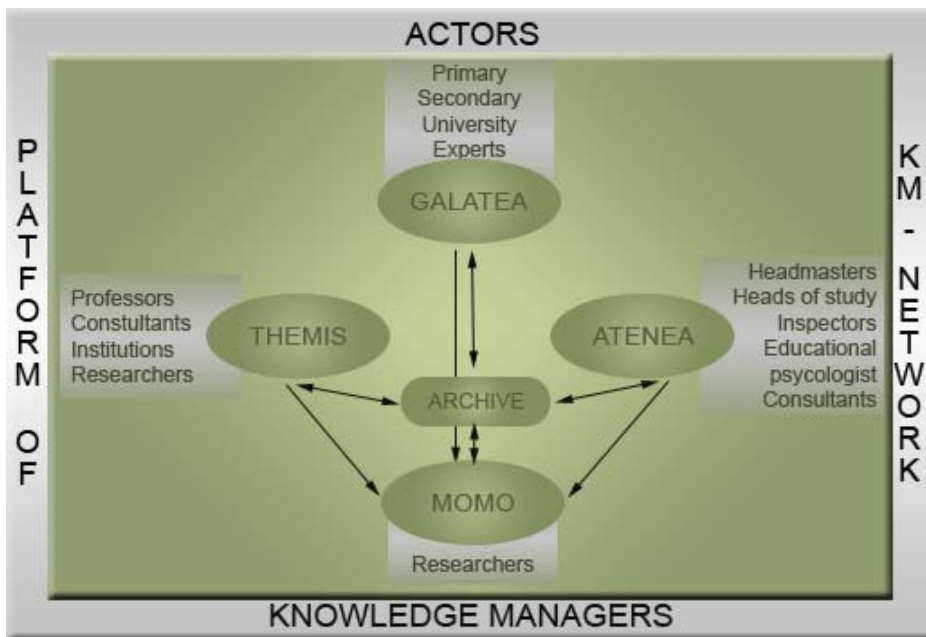


Fig. 1 The Knowledge Networks in Accelera

- The ATENEA network is mainly made up of headmasters of primary and secondary schools (headmasters and heads of study), although participants also include education inspectors, first-cycle university faculty and doctoral students interested in issues related to the organisation and management of organisations.
- The THEMIS network is mainly made up of primary, secondary and university teachers, doctoral students and experts in coeducation and gender violence. Currently, the issue of gender

- violence is being examined in schools with the involvement of people from all around the country and from a variety of organisations (Municipal Education Institute of the Barcelona Town Hall, SOS Racism, Platform against Gender Violence, etc.).
- The MOMO network is made up of moderators and knowledge managers from the different KM-Networks, the system administrator and the other members of the research group, all of them experts in the different areas to be taken into account in the processes and systems of knowledge management (such as organisational culture, organisational learning, group dynamics and learning communities).

### 3.1 The Accelera model of knowledge creation and management

From the technological standpoint, the model of knowledge-management network defined is based on the development and adaptation of an open source CMS (Course Management System), such as Moodle (<http://moodle.org>), a type of social software created by the course designer to develop online learning communities and based on pedagogical principles about the social construction of knowledge.

Adapting Moodle to the characteristics and needs of our model of Knowledge Creation and Management (KCM) has given rise to the *Accelera* platform, whose model of operation is reflected in the figure below (Figure 2):

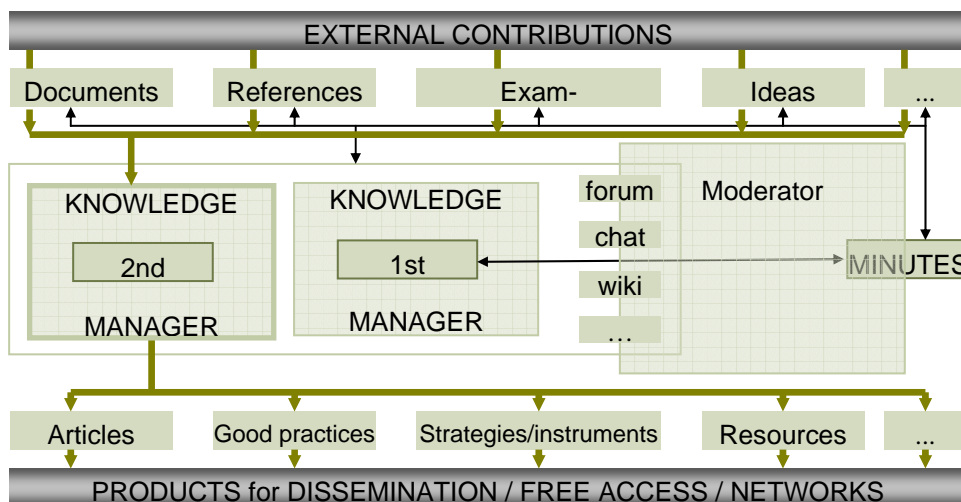


Fig. 2 Accelera KM-Networks model [9]

## 4. The Moderator of Knowledge Networks

The moderator is one of the key pieces in the *Accelera* model of success. Interpersonal relations enable interaction between peers or multi-interaction, in which the moderator is devoted to reinforcing these interactions and intervening in the event of conflict. The moderator is the host, facilitator and organiser of the learning community, which is formed based on a topic of interest and in accordance with a working procedure.

The role of the moderator mainly centres around: motivating and creating a pleasant climate that facilitates the construction of knowledge; structuring and proposing work; offering feedback; establishing the criteria of moderation and ensuring that they are met; approving the messages according to the criteria set; managing and reinforcing relations between people; and proposing conclusions. All of this will make it more likely that the tasks in general will remain centred on the three typologies (Paulsen and Malson cit. in Gros [10]): organisational, social and intellectual.

Some of the more specific tasks of the moderator are [11]:

- To support the activities in the network by nurturing its areas of contributions through relevant materials.
- To find out about and analyse the needs of the debate, and to discover the salient points of the discussions, the alternative approaches and/or the shortcomings in the reflection on the subjects proposed.
- To ensure the relevancy and quality of the contributions, in an effort to ensure that they fit within the goals of the network.
- To find relevant information and knowledge, either on the network or outside it. Also to secure documents, research, experiences, teachings by experts or interviews with personalities (famous or not) who have knowledge or experience about the issues being debated.
- To contact experts and consultants in order for them to contribute to the debate at some point, either directly or by submitting some document for discussion.
- To draft briefs and criticism of works (books, articles, software, websites, films, etc.).
- To keep the network in touch with other relevant networks.
- To get in touch with lurkers<sup>3</sup> in an individualised way in order to encourage them to abandon their stance and join the network's activities.
- To find out what problems are arising via some tool or area for reflection and comment, in order to help solve them.
- To organise and coordinate the interaction amongst participants in the knowledge network.
- To outline the debate through brief recapitulations or summaries, with the aim of guiding and re-launching the discussion.

#### 4.1 The training of e-moderators.

The proper training of the moderator of knowledge networks is crucial if we want some assurance of success in the processes of creating and managing knowledge.

The vast interrelation of functions and tasks to be undertaken by the moderator in virtual environments necessitates the acquisition and development of an entire series of knowledge and competencies, both basic and essential, both administrative and technical, as well as other more complex ones related to pedagogical and social factors.

The moderators need to be familiar with and understand how the technological platform for online training and the LMS (Learning Management System) that is being used works, and they need to feel comfortable with them. In-depth knowledge of the LMS and its tools enables moderators to easily manage the problems within their knowledge network as well as to help the other participants navigate the network.

Thus, we agree with Harasim and others [12] in believing that moderators must master a series of basic tools and procedures, including:

- Accessing messages, downloading them and sending them (bulletin boards, e-mail, etc.).
- Reading, writing, deleting and sending conference and e-mail messages.
- Opening, closing and deleting conferences.
- Organising the contents of the LMS so that they are easy to find, recover and then process.
- Surfing Internet and using certain basic tools (such as browsers).
- Attaching and deleting documents from the LMS.
- Creating new communication spaces (such as new chat rooms).
- Using and managing groupware tools such as Wikis.

Much more important and complex than mastering the administrative and technical aspects is developing pedagogical and social competencies, as well as mastery of the contents to be examined. We

should not forget that the moderator should be an expert in the field of knowledge to which the discussion subject and network task belongs.

*Even more, the training should be aimed at pedagogical knowledge and should be founded on personal and collective reflection on the practice realised as opposed to at the acquisition of technical and functional knowledge of the hardware and software. [13]*

Finally, the moderator must be capable of re-structuring the network so that it is effective and fulfils the set objectives; he or she must know how to communicate and intervene to foster participation; must be familiar with and apply group development dynamics; must be able to identify conflicts; must be capable of taking decisions, etc.

The coherent training model must use the most appropriate problem-solving, case studies and the project methodology, which should be implemented and managed through the network. Its implementation must combine and make possible spaces for information, debate and knowledge creation and management, as well as the creation of support and professional development networks.

In this respect, some of the competencies that this network training should develop include:

- Developing conceptual maps of a field of knowledge;
- Understanding and analysing professional realities related to the field of knowledge;
- Posing problematic situations and guiding their resolution;
- Finding out about online sources of documentation;
- Using tools related to detect training needs and develop training plans;
- Learning about procedures related to participants' motivation and satisfaction;
- Structuring methodological strategies that foster collaborative, inclusive work;
- Assessing training processes and using feedback mechanisms; and
- Stimulating virtual learning communities.

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