



Requested: 11-07-2011
Received: 25-07-2011
Accepted: 12-09-2011
DOI: 10.3916/C38-2011-02-08
Preprint: 10-01-2012
Published: 01-03-2012

Joan Ferrés & Alejandro Piscitelli
Barcelona (Spain) & Buenos Aires (Argentina)

Media Competence: An Articulated Proposal of Dimensions and Indicators

La competencia mediática: propuesta articulada de dimensiones e indicadores

The changes occurring in the media environment over the last decade force us to revise the parameters based on which type of media education is to be implemented today in a new age of communications. This article seeks to provide criteria that media education, or media literacy, should follow, in particular a coordinated proposal of dimensions and indicators to define new media competence. The proposal is written by the authors of this article from the contributions of 50 renowned Spanish and international experts in Media Literacy. The proposal focuses on six major dimensions: languages; technology; interaction processes; production and dissemination processes; ideology and values, and aesthetics. It is structured around two areas of work for each dimension: the production of the subject's own messages and the interaction with messages from others. We propose that this vision of media education be developed within the context of a participatory culture, combining critical and aesthetic thinking with expressive ability; the development of personal autonomy with social and cultural commitment. Finally, we propose combining the technological revolution with the neurobiological revolution, which assumes changes in the workings of the human mind, especially as regards the importance of emotions and unconscious processes over reasoned and conscious ones.

Los cambios que se han producido en el entorno comunicativo durante la última década obligan a revisar los parámetros desde los que se ha de impartir la educación mediática. En este artículo se ofrecen algunos criterios que deberían presidir esta educación, y sobre todo una propuesta articulada de dimensiones y de indicadores para definir la nueva competencia mediática. La propuesta ha sido realizada por los autores y ajustada a partir de las aportaciones hechas por 50 reconocidos expertos, españoles y extranjeros. La propuesta gira en torno a seis grandes dimensiones: la de los lenguajes, la de la tecnología, la de los procesos de interacción, la de los procesos de producción y difusión, la de la ideología y los valores y la dimensión estética. Y está estructurada en torno a dos ámbitos de trabajo: el de la producción de mensajes propios y el de la interacción con mensajes ajenos. Se propone desarrollar esta educación en el marco de la cultura participativa, compaginando el espíritu crítico y estético con la capacidad expresiva, el desarrollo de la autonomía personal con el compromiso social y cultural. Se propone, en fin, compaginar la revolución tecnológica con la neurobiológica, asumiendo los cambios producidos en la concepción de la mente humana, sobre todo en lo referente al peso de las emociones y del inconsciente sobre los procesos razonados y conscientes.

*Media literacy, media competence, participation, critical thinking, emotion, aesthetics, languages, interaction.
Educación mediática, competencia mediática, participación, actitud crítica, emoción, estética, lenguajes, interacción.*

Dr. Joan Ferrés Prats is Professor in the Department of Communication in the Faculty of Communication at the University Pompeu Fabra in Barcelona (Spain) (joan.ferres@upf.edu).
Ms. Alejandro Piscitelli is Professor in the Department of Communication in the Faculty of Social Sciences at the University of Buenos Aires (Argentina) (apiscite@well.com).

1. Introduction

Between 2005 and 2010, a research project was carried out in Spain financed by the Catalan Audiovisual Council (CAC) and the Ministry of Education to assess the level of media competence in the country's citizens (Ferrés & al., 2011). The findings of the investigation were based on 6,626 questionnaires, 31 in-depth interviews and 28 group discussions that took place across Spain during that five-year period. The sample was stratified according to age (16 to 24, 25 to 64, 65 and over), gender and educational level.

Seventeen universities, one from each of Spain's regional autonomous communities, took part in the project which was coordinated by Barcelona's Universidad Pompeu Fabra. A document was drawn up by a group of experts at the start of the investigation to identify the dimensions and indicators by which the extent of media competence was to be defined (Ferrés, 2006; 2007).

Along similar lines, three other research, investigation and development projects are currently in progress, financed by the Ministry of Science and Innovation and directed by Joan Ferrés, of the Universidad Pompeu Fabra, Ignacio Aguaded, at the University of Huelva and Agustín García Matilla, from the University of Valladolid in the city of Segovia.

These three projects aim to diagnose the needs of three important institutions or collectives involved in media competence for citizens: university education (in the disciplines of communication and education), compulsory education and the professionals who work in communication.

Much has changed in the world of media communication since 2005. There has been a significant transformation in the communicative landscape due to the appearance of new technological devices and communicative practices. These changes have altered the definition of media competence by adjusting the formulation of dimensions and incorporating new indicators.

The authors of this article drew up a draft document for a proposal of dimensions and indicators that updated the one published in 2006 and 2007, taking into account new work on the subject that has been produced in recent years (The High Council for Media Education, 2008; European Commission, 2010). This document was sent to several international experts in media literacy requesting their collaboration in the assessment of this field and in proposing changes. The document's definitive proposal, as presented in section 3, includes the majority opinions of those experts who responded to our request.

2. Defining concepts and discarding erroneous notions

2.1. The concept of competence

The concept of competence comes from the world of business and labor, and has been adopted by academia to the point where it is now the key concept in educational reform in the majority of European Union member states, including Spain. Competence is understood as a combination of the knowledge, skills and attitudes deemed essential for performing a task within a specific context.

It is precisely this concept's origin in work and the professions that provokes misgivings in some experts. If this concept is still valid despite these misgivings, it is because the concept is not subject to an instrumental interpretation of measurable impact. A broader definition of competence does not necessarily assume that media education guarantees professional workforce development efficacy but instead sees it as a pathway for a wide range of personal development opportunities. Media competence has to contribute to the development of citizens' personal autonomy and social and cultural commitment.

2.2. Dimensional functionality

The dictionary of Spain's Royal Academy defines «dimension» as «each magnitude of a set that serves to define a phenomenon». The phenomenon of communication, like all human phenomena, should be viewed holistically. None of its components can be explained in any other way than by the total sum of their symbiotic interactions. Nonetheless an overall understanding of the phenomenon requires the specification and differentiation of each of the relevant magnitudes so that none are overlooked in the analysis and expressive practice.

In the phenomenon of media education, language, for example, cannot be understood without technology. Likewise, neither can ideology or aesthetics be understood without language. So nothing prevents approaches to the phenomenon of media education in school or university praxis from being polarized by prioritizing the technological dimension over the linguistic dimension; just as there are approaches to the dimensions of technology and languages that simply enable students to reproduce the formulaic production of the conventional mass media in an uncritical way. That is, these approaches focus on the media languages but marginalize their ideologies and values. Or they concentrate on languages but neglect the aesthetic dimension. These six clearly defined dimensions seek to avoid these types of reductionist approaches.

2.3. The integrative nature of the proposal

This proposal owes much to the work of Jenkins (2008; 2009), one of the foremost analysts of the social and educational implications of the new media and communication environment. For Jenkins, the new media literacies should include the traditional literacies (Jenkins, 2009: 29). The old and the new coexist in the new environment. While the potential to transmit personal or collective messages to the rest of society is greater than ever for all citizens, media power is more concentrated than ever in the hands of a few (Jenkins, 2009: 110-111). These power brokers also benefit from the transparency that characterizes the new representative systems, which blurs representation and reality. Media competence has to deal with this complexity by supporting participatory culture at the same time as developing critical capacity.

2.4. The flexibility of the indicators

Media literacy must be the birthright of all citizens, not just children and young people; with that in mind, this proposal is aimed at all ages, proffering dimensions and general, flexible indicators with the idea that they can be adapted to each specific educational situation according to the age and cultural scope of the intended media literacy learner.

This flexibility applies to the document in general and to each of the indicators in particular. Since the world of media and communication is in a process of constant transformation, it follows that the approaches to media education will also have to change, and constantly.

So, this document can never be considered definitive or closed. The research and daily practice of media teachers will mean that a constant revision and updating of the document will be necessary.

2.5. The work areas

One of the main changes in the new media environment is the emergence of the age of the «prosumer», in which citizens have as many opportunities for producing and disseminating their own messages as for consuming the messages of others. The dimensions and indicators of this proposal are structured around two major work areas: analysis and expression. In other words, a person must develop media literacy by interacting in a critical way with the messages produced by others, and must also be capable of producing and disseminating his or her own messages.

2.6. A playful proposal for media literacy

This proposal for dimensions and indicators might give the impression that media literacy could become a motley compendium of more or less abstract content with some highly charged semiotic components. To dispel this notion, the authors contend that media literacy should be taught in an active, participative and playful way. It should focus more on personal reflection on the experience of interaction with media screens and devices than on abstract semiotic discourse and intensive study. An example of a supposedly abstract principle is one which corresponds to the technology dimension: «The capacity to manipulate sounds and images based on the awareness of how representations of reality are constructed».

Does fulfilment of this principle demand that we resort to semiotic discourse? An example of a more playful approach to media education can be seen in the didactic material produced by the Catalan Audiovisual Council (Obach & Ferrés, 2007: 69-71). In one exercise, participants are shown images that the Reuters news agency sent to television stations across the world on one particular day on the subject of the harsh conditions in Liberia during its civil war. There are 25 images. The participants are asked to imagine that they are TV news editors, and they are to run this story, but the deadline is tight. Each participant is to quickly choose five images and arrange them in their order of presentation. Then, each person attempts to justify the shots chosen. It is a highly effective game. Each news story presented differs from the rest, but which is the best? Which choice is valid or the most objective? In this example, the participants learn how to construct representations of reality by playing a game, and there is no need for abstract theories, intensive study or semiotic discourse. Just play.

2.7. The neurobiological revolution

Educators tend to be much more predisposed towards incorporating changes arising from the technological revolution into the teaching-learning processes than they are to accepting contributions from the neurobiological revolution. Neuroscience has radically altered many of the convictions held for centuries in Western culture on the workings of the human mind. Neuroscience urges us to «change the way we think about ourselves forever» (Ratey, 2003: 11). In educational practice, we seem more willing to change our way of thinking about the media but far less inclined to alter our view of ourselves as active extensions of these media.

The changes referred to by neuroscience are related to the influence of the emotive and unconscious processes on the conscious mind. These processes are largely ignored in the praxis of media literacy.

Media literacy based exclusively on the conscious processes is insufficient because we now know that, in the words of the neurobiologist LeDoux (1999: 32), «the conscience can only be understood if the unconscious processes that make them possible are studied».

Similarly lacking would be media education that ignores the emotional dimension of the people interacting with screens because we are now aware that reason (and consequently the critical spirit) is highly vulnerable to attacks of the emotions that are entirely unreasonable.

So, media literacy requires the development of critical thinking alongside a critical spirit because, as a consequence of the dominance of the emotional over the rational part of the brain, it is more realistic to refer to the human being as a rationalizing rather than a rational animal.

Finally, media literacy will never be effective unless it clearly signals that media and communication technologies can only encourage participative culture and personal independence if they support the individual's management of emotional capital. According to Jonah Lehrer (2009: 26), «Reason without emotion is impotent».

2.8. A participatory approach

The technological and neurobiological revolutions work together to strengthen the participatory dimension of the communicative processes. Participation cannot be relegated to the area of expression. The media analysis process also needs to be tackled from an active, dialogical approach taking into account the participation of the media consumer or user via processes of selection, interpretation, acceptance and rejection, criticism, dissemination, etc.

The spirit of participatory culture should be integrated across all methods, proposals and approaches to media literacy education. The intense scrutiny of a product is incomplete if it does not come with, or is not preceded by, the x-ray of the reactions of the person interacting with the product. The analysis of the meaning of the message is of no use if it does not come with the analysis of the media effects on the person who receives that message. And the deep analysis of what the person thinks about the media product has no validity unless it comes with an equally profound analysis of what he or she feels about it.

3. Media competence: dimensions and indicators

Media literacy shares the domain of knowledge, skills and related attitudes with six basic dimensions derived from the principle indicators. According to the case in question, these indicators relate to the area of participation, such as when people receive messages and interact with them (areas of analysis) and when people produce messages (areas of expression).

3.1. Languages

a) Areas of analysis include the ability to:

- Interpret and evaluate the various codes of representation and the function they perform within a message.
- Analyze and evaluate the messages from the perspective of sense and meaning, from narrative structures and the conventions of genre and formatting.
- Understand the flow of stories and information from multimedia, networks, platforms and modes of expression.
- Establish links between texts –intertextuality–, codes and media, producing knowledge that is open, systematized and interrelated.

b) Areas of expression include the ability to:

- Express oneself via a wide range of systems of representation and meaning.
- Choose between different systems of representation and different styles according to the communication situation, the type of content to be transmitted and the type of user.
- Modify existing products, conferring new meaning and value to them.

3.2. Technology

a) Areas of analysis include the ability to:

- Understand the role played by the information and communication technologies in society, and their possible effects.
- Interact in a significant way with media that enables the user to broaden his or her thinking skills.

- Handle technological innovations that make multimodal and multimedia communication possible.
- Manage hypermedia, transmedia and multimodal environments effectively.

b) Areas of expression include the ability to:

- Use media and communication tools effectively in a multimedia and multimodal environment.
- Apply technological tools to achieve communicative objectives.
- Produce and manage sounds and images with an awareness of how representations of reality are constructed.

3.3. Interaction processes

a) Areas of analysis include the ability to:

- Choose and review media content and make a self-assessment on the basis of conscious and reasonable criteria.
- Ability to discern why certain media, products or content are popular and why they are successful individually or collectively: the wants and needs that satisfy the senses, emotions, and stimulate the cognitive, aesthetic and cultural interest, etc., of audiences.
- Evaluate the cognitive effects of the emotions: to be aware of the ideas and values associated to people, actions and situations which generate positive and negative emotions according to the case in question.
- Understand and manage the disassociations that sometimes occur between sensation and opinion, and emotionality and rationality.
- Express an awareness of the importance of context in the interactive process.
- Understand basic concepts of audience, of audience studies, their usefulness and limitations.
- Appreciate messages from other cultures, for intercultural dialogue in an age of media without borders.
- Manage leisure media and use them as learning opportunities.

b) Areas of expression include the ability to:

- Demonstrate active participation in the interaction with screens, understood as an opportunity to construct a more complete citizenry, an integral development, to be transformed, and to transform the environment.
- Carry out collaborative work via connectivity and the creation of platforms for social networks.
- Interact with people and diverse collectives in environments that are increasingly plural and multicultural.
- Recognize and report infringements of the laws relating to audiovisual material, and know how to act responsibly in these situations.

3.4. Production and dissemination processes

a) Areas of analysis include the ability to:

- Know the basic differences between individual and collective productions, and between popular and corporate productions; in the case of the latter two, between productions by citizens and those of authorities of private or public ownership.
- Recognize factors that transform corporate productions into messages subject to the socio-economic cultures of these industries.
- Recognize basic conventions for production systems, programming techniques and broadcasting mechanisms.
- Know the rules and self-regulatory codes that protect and regulate the various social actors, of the groups and associations that oversee compliance

b) Areas of expression include the ability to:

- Know the phases of the processes of production and the infrastructure necessary for individual, group or corporate productions.
- Collaborate in the production of multimedia or multimodal products.
- Select meaningful messages, and use and transform them to make new meanings.
- Share and disseminate information through traditional media and social networks, making the messages more visible, and promoting interaction with expanding communities.

- Manage one's own online/offline identity, and to maintain a responsible attitude towards the control of the individual's private data and those of others.
- Assimilate the concept of individual or collective authorship, to have a responsible attitude towards the rights of intellectual property, and to possess the skill to make the best use of resources such as «Creative Commons».
- Generate and maintain a commitment to networks of collaboration and interactive dialogues with extensive feedback loops.

3.5. Ideology and values

a) Areas of analysis include the ability to:

- Discover how media representations structure our perception of reality, often through unnoticed communications.
- Evaluate the reliability of sources of information, drawing critical conclusions about what is said and what is not said.
- Search for, organize, contrast, prioritize and synthesize information from different systems and environments.
- Detect the intentions and interests that underlie corporate and popular productions, their ideology and values, latent or patent, and take a critical stance towards them.
- Maintain an ethical attitude towards downloading products that can be used for consultation, documentation or entertainment.
- Analyze individual and collective virtual identities, and detect stereotypes, especially in terms of gender, race, ethnicity, social class, religion, culture, disabilities, etc, analyzing causes and consequences.
- Critique the effects of opinion forming, and the cultural homogenization promoted by the media.
- Recognize that empathy with people and stories in media can be used both as a mechanism for manipulation and as an opportunity for self-knowledge and new experiences.
- Manage our own emotional responses when interacting with screens, according to the ideology and values that these screens evoke.

b) Areas of expression to include the ability to:

- Use new media and communication tools to transmit values and contribute to improving the environment based on social and cultural commitments.
- Make products and modify existing ones in order to question the values and stereotypes in certain media productions.
- Use the new media tools for active and civic participation.

3.6. Aesthetics

a) Areas of analysis to include the ability to:

- Enjoy formal aspects of media, that is, not only of what is communicated but also how it is communicated.
- Recognize a media production that does not satisfy minimum aesthetic requirements.
- Relate media productions to other artistic output and detect mutual influences.
- Identify basic aesthetic categories like formal and thematic innovation, originality, style, schools and trends.

b) Areas of expression to include the ability to:

- Produce elementary messages that can be understood and which help to raise the level of personal or collective creativity, originality and sensibility.
- Appropriately and transform artistic productions, boosting creativity, innovation, experimentation and aesthetic sensibility.

Notes

1) Spanish experts: Ignacio Aguaded, José María Aguilera, María Cinta Aguaded, Roberto Aparici, Sue Aran, Antonio Bartolomé, Magda Blanes, Julio Cabero, Daniel Cassany, María del Rocío Cruz, Pilar de las Heras, Patricia Digón, Manuel Fandos, José Antonio Gabelas, Agustín García Matilla, Alfonso Gutiérrez Martín, Laura López, María Lozano, Carmen Marta, Enrique Martínez Salanova, Estrella Martínez Rodrigo, Rafael Miralles,

José Manuel Pérez Tornero, Antonia Ramírez, Paula Renes, Jacqueline Sánchez, Josefina Santibáñez, Ana Sedeño, Fernando Tucho, Alejandra Walzer.

2) International experts: Claudio Avendaño (Chile), Frank Baker (USA), Marlene Blois (Brazil), Catharina Bucht (Sweden), Abel Carlier (Belgium), Susanne Ding (European Commission), Nicoleta Fotiade (Rumania), Divina Frau-Meigs (France), Tania María Esperón Porto (Brazil), Valerio Fuenzalida (Chile), Nathalie Labourdette (European Commission), Roxana Morduchowicz (Argentina), Sara Pereira (Portugal), Salvador P. Ottobre (Argentina), Ida Pöttinger (Germany), Daniel Prieto (Argentina), Vânia L. Quintão (Brazil), Vitor Reia-Baptista (Portugal), Tapio Varis (Finland), Klas Viklund (Sweden).

References

- European Commission (2010). Study on the Current Trends and Approaches to Media Literacy in Europe (<http://ec.europa.eu/culture/media/literacy/docs/studies/study.pdf>) (12-06-2011).
- Ferrés J. & al. (2011). Competencia mediática. Investigación sobre el grado de competencia de la ciudadanía en España. Madrid: Ministerio de Educación.
- Ferrés J. (2006). La competència en comunicació audiovisual: proposta articulada de dimensions i indicadors. Quaderns del CAC, 25; 9-18.
- Ferrés J. (2007). La competencia en comunicación audiovisual: dimensiones e indicadores. Comunicar, 29; 100-107.
- Jenkins H. (2008). Convergence Culture. Una cultura de la convergencia. Barcelona: Paidós.
- Jenkins, H. & al. (2009). Confronting the Challenges of Participatory Culture. Media Education for the 21st Century. Massachusetts: The MIT Press.
- Lehrer, J. (2009). How We Decide. New York: First Mariner Books.
- LeDoux, J. (1999). El cerebro emocional. Barcelona: Ariel / Planeta.
- Obach, X. & Ferrés, J. (2005) ¿Cómo ver la televisión? Material didáctico para niños y jóvenes. Madrid: Ministerio de Educación y Consell de l'Audiovisual de Catalunya.
- The High Council for Media Education (Ed.) (2008). Declaration of Brussels (http://www.declaration-debruxelles.be/en/declaration_accueil.php) (12-06-2011).