

FROM A REDUCTIONIST TO A HOLISTIC MODEL OF DIGITAL COMPETENCE AND MEDIA EDUCATION

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ABSTRACT:

The fact that digital competence is a key competence in the 21st century, which increases the educational level of an individual (in the lifelong learning process) and the chances for their professional growth and personal satisfaction within the context of diverse life realities of the 'networked' society, is currently undebated among experts. However, the qualities to be included as a result of reflecting the current trends of ubiquitous and all-embracing digitalisation and its associated changes in (not only) the educational needs of an individual are more widely discussed in a professional context and within a number of relevant European guidelines. The objective of this study is to contribute to the discussion in the context of the questionable reductionist concept of digital competence, preferring its technological and instrumental dimension, while ignoring enhancement of other key qualities, such as critical thinking, socio-affective qualities and persistent positive value habits of personality interacting with digital media. Especially with this intention, it tests the key tool to improve citizens' digital competence – *DIGCOMP 2.0 – The Digital Competence Framework for Citizens*. At the same time, it penetrates the process of media education, especially the five fundamental values, which include the new values of the media literacy movement (proposed by J. M. Pérez Tornero a T. Varis) as an integral part of the reflection and description of changes in its paradigm. The study outlines conditions for understanding the digital competence model, which, in the context of the generally perceived educational process should be holistic. Its support in implementation is particularly within formal education.

KEY WORDS:

DIGCOMP 2.0 – The Digital Competence Framework for Citizens, digital competence, holistic model, media education, media literacy movement, reductionist model

On the Way to Searching for Relevant Digital Competence Concepts in the Digitised Era – Selected Examples

In the second decade of the 21st century, educational concepts and individuals' related needs have already been formulated in response to the demands of the digitalised information society. These include those resulting from the symbiosis or integration of several literacies, especially media literacy, digital literacy and information



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literacy, i.e. MIL (media and information literacy) as a result of changing the paradigm of media education under the influence of digitalisation, as well as digital competence concepts. These at the level of European approaches find a predecessor in the definition frameworks The DigEuLit project *European Framework for Digital Literacy* (EFDL) which was created and implemented as a response to a call for actions on digital literacy within the Learning Programme of the European Commission¹ in 2005/2006, or efforts to create a definition framework and tools applicable to the needs of educational practice and its examining at a European level. It presents digital literacy, or competence² which is broader than ICT literacy and integrating elements of information literacy, media literacy and visual literacy.³ The concept provides a reference framework of qualities that should be basic for the education of a digitally competent individual. It includes awareness, attitude and ability of individuals to appropriately use digital tools to identify, access, manage, integrate, evaluate, analyse and synthesise digital resources, construct new knowledge, create media expressions, and communicate with others. This is to be done in the context of specific life situations, in order to enable constructive social action. It also includes reflection upon this process.⁴ The concept envisages a more complex development of individuals' capacities to enable them to work effectively with digital media in diverse life situations, including their effective deployment in the communication process involving socially active and conscious actions. At the same time, it includes the development of individuals' meta-ability to reflect their own level of digital competence. It is a flexible and multidimensional concept whose content is variable and adaptable to each individual's situation. Its importance has been adapted in the educational context, more specifically in *Media and Information Literacy Curriculum for Teacher proposed* by UNESCO in 2011.⁵

The breakthrough concepts of digital competence include the EU initiative and its *Recommendation of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning (2006/962/EC)*, perceived as a prolongation of the efforts of transnational European institutions to introduce the concept of competence into the educational legislation and practice in a European context. It has highlighted the status of digital competence as a quality indispensable for increasing individuals' educational level (one of the key competences of lifelong learning); and *"necessary for personal fulfilment, active citizenship, social cohesion and employability in a knowledge society"*.⁶ The definition perception of digital competences is also beneficial. It *"involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. It is underpinned by basic skills in ICT: the use of computers to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in collaborative networks via the Internet"*.⁷ Besides the development of operational (or instrumental) skills, it counts on the development of the core capacity, which is also key in the process of media literacy – critical autonomous thinking in relation to digital media in the context of a knowledge society and the diverse needs of an individual. According to A. Ferrari, the recommendation is also important in terms of developing citizens' attitudes – that they are critical and reflective towards information, responsible users and interested in engaging in online communities

1 MARTIN, A.: DigEuLit – A European Framework for Digital Literacy: A Progress Report. In *Journal of eLiteracy*; 2005, Vol. 2, No. 2, p. 130. [online]. [2019-01-13]. Available at: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.1923&rep=rep1&type=pdf>>.

2 The study did not avoid the terminological problem of an adequate definition of the relationship between "digital literacy" and "digital competence", which may be noticed in the referred and other professional approaches, as well as in European legislation. The solution goes beyond the scope of this text. Possible starting points in the application of the relationship between these terms are outlined in: KAČINOVÁ, V.: *Teória a prax mediálnej výchovy: Mediálna výchova ako súčasť všeobecného školského vzdelávania*. Trnava : FMK UCM, 2015, p. 25-26.

3 MARTIN, A.: DigEuLit – A European Framework for Digital Literacy: A Progress Report. In *Journal of eLiteracy*; 2005, Vol. 2, No. 2, p. 135. [online]. [2019-01-13]. Available at: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.1923&rep=rep1&type=pdf>>.

4 MARTIN, A.: DigEuLit – A European Framework for Digital Literacy: A Progress Report. In *Journal of eLiteracy*; 2005, Vol. 2, No. 2, p. 135-136. [online]. [2019-01-13]. Available at: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.1923&rep=rep1&type=pdf>>.

5 PÉREZ ESCODA, A.: *Alfabetización mediática, TIC y competencias digitales*. Barcelona : Editorial UOC, 2017, p. 7.

6 Recommendation of the European Parliament and of the Council of 18 December 2006. On Key Competences for Lifelong Learning. In *Official Journal of the European Union*, 2006, No. 2006/962/EC, p. 13. [online]. [2019-01-11]. Available at: <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN>>.

7 Recommendation of the European Parliament and of the Council of 18 December 2006. On Key Competences for Lifelong Learning. In *Official Journal of the European Union*, 2006, No. 2006/962/EC, p. 15. [online]. [2019-01-11]. Available at: <<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN>>.

and networks.⁸ This perception is crucial, especially in terms of the danger of reductionist concepts of digital competence preferring technological approaches and neglecting other personality qualities in the context of education, or curricular (school) context. A. Gutiérrez and K. Tyner highlight the danger of reducing digital competence to its technological and instrumental dimension: focusing on technical knowledge, user practices and control of devices and programmes and forgetting about attitudes and values.⁹ A more comprehensive approach is sought by the definition of digital competence in the second report of the DigComp by the Joint Research Centre of the European Commission, or The Institute for Prospective Technological Studies (IPTS) under an Administrative Agreement for DG Education and Culture. It is understood as a *"set of knowledge, skills, attitudes, abilities, strategies, and awareness that are required when using ICT and digital media to perform tasks; solve problems; communicate; manage information; collaborate; create and share content; and build knowledge effectively, efficiently, appropriately, critically, creatively, autonomously, flexibly, ethically, reflectively for work, leisure, participation, learning, and socialising"*.¹⁰ It is a complex of Learning Domains, Tools, Competence Areas, Modes and Purpose.

Digital Competence Penetrating Values of Contemporary Media Education

Under the influence of digitalisation and convergence, the nature of media, the ways of accessing and handling the communicated information content, the quality of user interactions in the media (or digital space) have changed, inspiring a revision in the approaches to contemporary media education. The awareness of the changes brought about by new information and communication technologies, which have prompted the emergence of a new communication environment, changing communication practices and their social relationships, as well as learning systems, lead to a revision of the dominant paradigm of media education.¹¹ This stimulates the need for competent preparation of individuals for life in a digital information society in accordance with its typical aspects, naturally determining the digital media and their reality as the main object of study for media education. The development of digital competence is, particularly in school practice, an integral part of media education.¹² At the same time, it is not possible to reduce media education to the development of digital competence.¹³ We identify ourselves with this, taking into account the full breadth of the communication media and their contents related to this process (concept). However, it is also clear that the prevalence of digital media, on which the process of education is currently focused, greatly reduces the subject of the education as well as the development of qualities directly linked to those media.

The shifts in media education approaches follow the changes in new communication environments – the establishment of the 'prosumer era' where individuals have innumerable possibilities to produce and disseminate their own contents as well as to consume contents of others. A person should therefore develop a media competence that allows them to interact critically with contents produced by others and be equally capable of producing and communicating their own contents.¹⁴ The emphasis on the development of evaluating and productive qualities

8 FERRARI, A.: *Digital Competence in Practice: An Analysis of Frameworks*. Luxembourg : Publications Office of the European Union, 2012, p. 30. [online]. [2019-01-11]. Available at: <<https://publications.europa.eu/en/publication-detail/-/publication/2547ebf4-bd21-46e8-88e9-f53c1b3b927f/language-en>>.

9 GUTIÉRREZ, A., TYNER, K.: Educación para los medios, alfabetización mediática y competencia digital. In *Comunicar*, 2012, Vol. 19, No. 38, p. 38. [online]. [2019-01-16]. Available at: <<https://recyt.fecyt.es/index.php/comunicar/article/view/26608>>.

10 FERRARI, A.: *Digital Competence in Practice: An Analysis of Frameworks*. Luxembourg : Publications Office of the European Union, 2012, p. 30. [online]. [2019-01-11]. Available at: <<https://publications.europa.eu/en/publication-detail/-/publication/2547ebf4-bd21-46e8-88e9-f53c1b3b927f/language-en>>.

11 FERRÉS PRATS, J.: Cambio de paradigma en la educación mediática. Cuatro razones y una conclusión. In ARANDA, D., CREUS, A., SÁNCHEZ NAVARRO, J. (eds.): *Educación, medios digitales y cultura de la participación*. Barcelona : UOCpress, 2013, p. 37.

12 HARTAI, L. et al.: *Report on Formal Media Education in Europe. (WP3)*. Brussels : European Union, 2014. [online]. [2019-01-25]. Available at: <<https://eavi.eu/wp-content/uploads/2017/02/Media-Education-in-European-Schools-2.pdf>>.

13 GUTIÉRREZ, A., TYNER, K.: Educación para los medios, alfabetización mediática y competencia digital. In *Comunicar*, 2012, Vol. 19, No. 38, p. 38. [online]. [2019-01-16]. Available at: <<https://recyt.fecyt.es/index.php/comunicar/article/view/26608>>.

14 FERRÉS PRATS, J., PISCITELLI, A.: La competencia mediática: Propuesta articulada de dimensiones e indicadores.

is traditional in the context of media education;¹⁵ however, the multiplication of possibilities and the intensity, with which digital media are nowadays used by individuals in a receptive way or an active way within diverse communicative participatory processes, increases their importance. At the same time, it should be noted that while the emphasis on the development of critical thinking is indisputable in the competition of approaches that favour the focus of the formative process of media education,¹⁶ the emphasis on productive work with the media may not be satisfactory based on the main goals of media education. In terms of the nature of media education, understood as learning about the media, media and their reality are to become the objects of practical learning. Own media production should primarily be a tool for learning about the media and their processes. This should be done particularly by a focused reflection of the media production process, or practical media work enriched by (critical) reflection.¹⁷ Reflective and Practical Work with Media¹⁸ is a basic didactic method of media learning in, for example, German action-oriented media education (*Handlungsorientierte Medienpädagogik*). At the same time, as in the case of the development of digital competence, especially in the context of school media education, it is necessary to avoid the reductionism resulting from its instrumental and technological perception. According to A. Gutierrez and K. Tyner, the introduction of digital technologies into school practice has meant that media studies are sometimes limited to studying how they work and how to deal with them. Because of purely technological approaches, media education is even confused with technical capabilities to use ICTs, computer networks, virtual platforms, social networks, and various video, text and image editing devices. Technical preparation of media users was perceived by some authors as digital literacy.¹⁹ As these specialists recall, the field of formal education is indispensable in not confusing technological capacities with the much needed digital and media literacy of the 21st century, which, in the context of preparing for life in a digital society, should be perceived as “critical, giving dignity and liberation” and not as a means of creating consumers and technology users.²⁰ Such a perception is also key to the need for the formation of critical digital citizens who will be able to understand how new technological tools interfere with their personal rights and freedoms as a result of their use. It concerns, in particular, mechanisms for controlling and regulating citizens’ behaviour through advertising strategies on social networks, free mediation of personal data, strategies of penetration into networks as a public opinion managing tool (creation of opinion leaders),²¹ and so on. A combined role for both media and digital education is the development of individuals’ resistance to these influences.

J. M. Pérez Tornero and T. Varis summarise the trends of contemporary media education around 5 core values – the new values of media literacy movement:

- a) the defence of individual autonomy based on critical thinking, free access and the right to information;
- b) the constructive value of open, participatory dialogue; it relates to the capacity of collectively generated quality information, its critical assessment, decision-making as well as generic sharing of human knowledge through ICT and new media;

In *Comunicar*, 2012, Vol. 19, No. 38, p. 77-78. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083010>>.

15 FEDOROV, A., LEVITSKAYA, A.: Synthetic Media Education Model Used in Commonwealth of Independent States (CIS). In *Media Education*, 2019, Vol. 59, No. 1, p. 31, 32. [online]. [2019-01-25]. Available at: <<https://cyberleninka.ru/article/n/synthetic-media-education-model-used-in-commonwealth-of-independent-states-cis>>

16 For more information, see: PETRANOVÁ, D.: Rozvíja mediálna výchova v školách kritické kompetencie žiakov? In *Communication Today*, 2011, Vol. 2, No. 1, p. 66-83; GÁLIK, S., GÁLIKOVÁ TOLNAIOVÁ, S.: Influence of the Internet on the Cognitive Abilities of Man. Phenomenological and Hermeneutical Approach. In *Communication Today*, 2015, Vol. 6, No. 1, p. 4-15.

17 KAČINOVÁ, V.: Produktívne zameraná mediálna výchova ako súčasť výchovného procesu na slovenských školách. In PETRANOVÁ, D., SOLÍK, M., RADOŠINSKÁ, J. (eds.): *Megatrendy a médiá 2016: Kriška v médiách, kriška médií I. Mediá a gramotnosť: Mediá a kreativita. Conference Proceedings*. Trnava: FMK UCM, 2016, p. 103.

18 SCHORB, B.: Stichwort: Medienpädagogik. In *PEDOCS: Zeitschrift für Erziehungswissenschaft*, 1998, Vol. 1, No. 1, p. 17. [online]. [2019-01-21]. Available at: <http://www.pedocs.de/volltexte/2011/4497/pdf/ZfE_1998_01_Schorb_Medienpaedagogik_D_A.pdf>.

19 GUTIÉRREZ, A., TYNER, K.: Educación para los medios, alfabetización mediática y competencia digital. In *Comunicar*, 2012, Vol. 19, No. 38, p. 33. [online]. [2019-01-16]. Available at: <<https://recyt.fecyt.es/index.php/comunicar/article/view/26608>>.

20 GUTIÉRREZ, A., TYNER, K.: Educación para los medios, alfabetización mediática y competencia digital. In *Comunicar*, 2012, Vol. 19, No. 38, p. 32. [online]. [2019-01-16]. Available at: <<https://recyt.fecyt.es/index.php/comunicar/article/view/26608>>.

21 FUEYO GUTIÉRREZ, A., RODRÍGUEZ HOYOS, C., HOECHSMANN, M.: Construyendo Ciudadanía Global en Tiempos de Neoliberalismo: Confluencias entre la Educación Mediática y la Alfabetización Digital. In *Educación mediática y formación del profesorado. Revista Interuniversitaria de Formación del Profesorado*, 2018, Vol. 32, No. 1, p. 60. [online]. [2019-01-19]. Available at: <<https://www.aufop.com/aufop/revistas/arta/impres/206/2183>>.

- c) personal and collective creativity and imagination as substantial elements of healthy communication;
- d) the ideal of an active communicative democracy as the potential of political democracy;
- e) the value of understanding and respect for cultural diversity and dialogue among cultures.²²

It is possible to partially find a collision between these values and the model of citizens’ digital competences, which is currently the key model of the development of digital competences in the European space and educational context. The key model or tool to improve citizens’ digital competence is *DIGCOMP 2.0 – The Digital Competence Framework for Citizens* (DigComp), which is an updated version of the model contained in *DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe*.²³ At the same time, it follows the abovementioned understanding of digital competences. It contains a model consisting of 21 competences which are necessary for a citizen of the 21st century, divided into the five areas:

1. Information and data literacy – 1.1 Browsing, searching and filtering data, information and digital content; 1.2 Evaluating data, information and digital content; 1.3 Managing data, information and digital content;
2. Communication and collaboration – 2.1 Interacting through digital technologies; 2.2 Sharing through digital technologies; 2.3 Engaging in citizenship through digital technologies; 2.4 Collaborating through digital technologies; 2.5 Netiquette; 2.6 Managing digital identity;
3. Digital content creation – 3.1 Developing digital content; 3.2 Integrating and re-elaborating digital content; 3.3 Copyright and licenses; Programming;
4. Safety – 4.1 Protecting devices; 4.2 Protecting personal data and privacy; 4.3 Protecting health and well-being; 4.4 Protecting the environment;
5. Problem solving – 5.1 Solving technical problems; 5.2 Identifying needs and technological responses; 5.3 Creatively using digital technologies; 5.4 Identifying digital competence gaps.²⁴

Within the defined dimensions, the model emphasises the development of knowledge, cognitive skills and instrumental skills in interaction with digital media, and to a lesser extent attitudes and values. Although some authors attribute reductionism to the original model with regard to the key category of media education in the context of current digital media issues,²⁵ we believe that in particular the revised version puts more explicit emphasis on the development of critical thinking – understood as analysis, comparison, interpretation and critical assessment of credibility and reliability of mediated digital sources, data, information and digital contents (category 1.2).²⁶ Furthermore, this implies the current problem of searching out tools to provide individuals with resilience mechanisms against “post-truth” and “fake news”. The ability of critical thinking, which is such a quality, will also enable an understanding of how media construct their own reality in accordance with possible ideological or economic interests.²⁷ It also leads the individual to defend their personal autonomy, manifested,

22 PÉREZ TORNERO, J. M., VARIS, T.: *Media Literacy and New Humanism*. Moscow : UNESCO Institute for Information Technologies in Education, 2010, p. 44-46. [online]. [2019-01-28]. Available at: <<https://unesdoc.unesco.org/ark:/48223/pf0000192134>>.

23 FERRARI, A.: *DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe*. Luxembourg : Publications Office of the European Union, 2013. [online]. [2019-01-11]. Available at: <<http://publications.jrc.ec.europa.eu/repository/bitstream/JRC83167/lb-na-26035-enn.pdf>>.

24 VUORIKARI, R. et al.: *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase I: The Conceptual Reference Model*. Luxembourg : Publication Office of the European Union, 2016, p. 8-9. [online]. [2019-01-12]. Available at: <<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>>.

25 GUTIÉRREZ MARTÍN, A., TORREGO GONZÁLEZ, A.: Educación Mediática y su Didáctica. Una Propuesta para la Formación del Profesorado en TIC y Medios. In *Educación mediática y formación del profesorado. Revista Interuniversitaria de Formación del Profesorado*, 2018, Vol. 32, No. 1, p. 20. [online]. [2019-01-12]. Available at: <<https://www.aufop.com/aufop/revistas/arta/impres/206/2180>>.

26 VUORIKARI, R. et al.: *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase I: The Conceptual Reference Model*. Luxembourg : Publication Office of the European Union, 2016, p. 14. [online]. [2019-01-12]. Available at: <<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>>.

27 GUTIÉRREZ MARTÍN, A., TORREGO GONZÁLEZ, A.: Educación Mediática y su Didáctica. Una Propuesta para la Formación del Profesorado en TIC y Medios. In *Educación mediática y formación del profesorado. Revista Interuniversitaria de Formación del Profesorado*, 2018, Vol. 32, No. 1, p. 20. [online]. [2019-01-12]. Available at: <<https://www.aufop.com/aufop/revistas/arta/impres/206/2180>>.

inter alia, in independent ways of using digital media and handling the information obtained – as stated in Pérez Tornero and Varis's dimensions a) and partly b). The use of digital media and technologies should be both creative and innovative in terms of creating knowledge and transforming processes and products (category 5.3) and communicating them (dimension c) mentioned by Pérez Tornero and Varis). The individual should also be able to express engaged citizenship through digital tools (category 2.3) within the framework of guaranteed democratisation of free expression (dimension d) discussed by Pérez Tornero and Varis).

However, we are of the opinion that the model encompasses a certain reductionism. This is due to the fact that the model to a lesser degree emphasises enhancement of socio-affective, or value dimensions. Among other things, it results from a preferred descriptive, non-prescriptive approach to defining the required qualities within key competences.²⁸ However, without any doubt, these ICT dimensions are, viewed in unity as of communication and social media, as vital as cognitive dimensions, and deserve a more explicit mention in this model. Particularly at the level of development of the key communication capacity,²⁹ perceived as social communication, i.e. beyond the level of the direct sharing of information, but understood as communication, understanding of others, or understanding with others.³⁰ Such a perception includes the dimension of establishing and developing positive relationships with others, even in the context of cultural diversity and intercultural dialogue – similarly to Pérez Tornero and Varis's dimension e). At the same time, in the context of the need to re-humanise the digital space, it is necessary to develop social competences (such as respect, empathy, esteem and social reconciliation) and other positive attitudes and habits of individuals manifested not only by conscious, but in particular willing, consensual and preferred value behaviour³¹ and rejection of ethically undesirable behaviours in the given environment. The socio-affective, and especially axiological dimensions should be implicitly included in several categories according to the concept of the model; explicitly we would expect it within the category 2 dimensions, especially Netiquette (2.5). However, it is formulated only at the level of cognitive ability to understand the normative and cultural and generational framework of digital media, to which an individual may adapt in their own ways in communication behaviour. It is based on the definition: *“To be aware of behavioural norms and know-how while using digital technologies and interacting in digital environments. To adapt communication strategies to the specific audience and to be aware of cultural and generational diversity in digital environments”* (underlined words marked by the authors).³² The value of collaboration (dimension 2.4) is also characterised marginally and non-specifically. Collaborating through digital technologies means to *“to use digital tools and technologies for collaborative processes...”*³³ The 3.3 dimensions and the whole of dimension 4, which should include socio-affective qualities, again have a predominant cognitive dimension in the formulation of educational goals. We also say that the model lacks the elements of effective learning in digital media, as shown in the follow-up study of evolving approaches.

28 VUORIKARI, R. et al.: *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model*. Luxembourg : Publication Office of the European Union, 2016, p. 13. [online]. [2019-01-12]. Available at: <<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>>.

29 See: TYURINA, S.: Development of Communicative Potential of Personality by Means of Foreign Media Discourse in Digital Environment. In *Media Education*, 2019, Vol. 59, No. 2, p. 328-336. [online]. [2019-01-25]. Available at: <<https://cyberleninka.ru/article/n/development-of-communicative-potential-of-personality-by-means-of-foreign-media-discourse-in-digital-environment>>.

30 There is an intersection with the general objective of education, which is described by Š. Švec as learning to talk to each other and understand others and oneself. It includes subobjectives such as the ability to use and share own and foreign experiences, thoughts and feelings; the ability to express oneself economically and easily, and the ability to apply forms of social communication. For more information, see: ŠVEC, Š.: Učit sa byt a uspieť. In *Pedagogická revue*, 2002, Vol. 54, No. 1, p. 20.

31 See: KRATHWOHL, D. R., BLOOM, B. S., MASIA, B. B.: *Taxonomy of Educational Objectives. The Classification of Educational Goals. Handbook II: Affective Domain*. New York : D. McKay Co., 1969.

32 VUORIKARI, R. et al.: *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model*. Luxembourg : Publication Office of the European Union, 2016, p. 14. [online]. [2019-01-12]. Available at: <<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>>.

33 VUORIKARI, R. et al.: *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model*. Luxembourg : Publication Office of the European Union, 2016, p. 14. [online]. [2019-01-12]. Available at: <<https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digcomp-20-digital-competence-framework-citizens-update-phase-1-conceptual-reference-model>>.

Neglected Dimensions or Need for Holistic Models of Digital Competence and Media Education (Competences)

Based on the above-described problems in educational approaches, the current problem is the reductionist rather than holistic concept of both digital competence and the process of media education and its output – media competence. According to A. Gutierrez and K. Tyner, brilliance and fascination of the new media can prevent us from seeing the goals that media education shares with education in general in terms of integral formation of a person.³⁴ It should be borne in mind that the process of media and digital education, perceived as an educational process, includes the following dimensions of personality development: cognitive, socio-affective, as well as psychomotor. In the holistic concept, it means to enable personality development in the so-called positive operating habits (Latin *habitus*), respectively virtues (Latin *virtus*), as a growth in positive qualities in interaction with digital media that are reflected in the level of positive changes in personality structure.

The reductionist approach can be largely the result of defining the intended educational goal in the context of individuals' needs of social self-realisation. Media and also digital competence are often perceived as an integrated set of knowledge, abilities, skills and attitudes that individuals need to adequately use ICTs and digital media to become *“effective citizens of the 21st century”*.³⁵ It is based on the concept of competence in the professional-life context of a performance-oriented society. However, more than this point of view, it is necessary to think about the competence that enhances personal excellence, stimulates the personal autonomy of citizens, but also their social and cultural commitment.³⁶ An example is the media competence model by J. Ferrés Prats and A. Piscitelli, which is the result of an authors' proposal that was commented by 50 experts. The model envisages implementation of the educational process within a digital participative culture,³⁷ combining the development of critical and aesthetic dimensions with the ability of an individual to express themselves through the media, the development of personal autonomy and social and cultural commitment. At the same time, it seeks to link current knowledge of the technological revolution to the neurobiological revolution, by accepting the changes arising in the human mind under the influence of new technologies, which specifically relates to the predominance of emotions and nonconsciousness over rational and conscious processes.³⁸

Thus, the relatively neglected area in media education – the development of individuals' ability to control their emotions in interaction with (digital) communication tools as an important area for the development of their judgment – comes to the foreground. Rational judgment or the process of critical thinking becomes vulnerable under the influence of emotionally charged digital contents or communication situations. This is particularly significant in the current 'culture' of spreading fake news, in the context of the need to distinguish between pseudo-facts and facts on social media. A media education that does not include the emotional dimension of people interacting with digital screens is deemed to be inadequate for the abovementioned reason,³⁹ as is a digital competence model not considering that dimension at a sufficient level. The ability to identify our own emotional states triggered by a certain digital impetus (message) is the crucial quality of

34 GUTIÉRREZ, A., TYNER, K.: Educación para los medios, alfabetización mediática y competencia digital. In *Comunicar*, 2012, Vol. 19, No. 38, p. 33. [online]. [2019-01-16]. Available at: <<https://recyt.fecyt.es/index.php/comunicar/article/view/26608>>.

35 PÉREZ ESCODA, A.: *Alfabetización mediática, TIC y competencias digitales*. Barcelona : Editorial UOC, 2017, p. 2.

36 FERRÉS PRATS, J., PISCITELLI, A.: La competencia mediática: Propuesta articulada de dimensiones e indicadores. In *Comunicar*, 2012, Vol. 19, No. 38, p. 76. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083010>>.

37 For more information about the implementation of the educational process within a digital participative culture, see: JENKINS, H. et al.: *Confronting the Challenges of Participatory Culture. Media Education for the 21st Century*. Massachusetts : The MIT Press, 2009.

38 FERRÉS PRATS, J., PISCITELLI, A.: La competencia mediática: Propuesta articulada de dimensiones e indicadores. In *Comunicar*, 2012, Vol. 19, No. 38, p. 75. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083010>>.

39 FERRÉS PRATS, J., PISCITELLI, A.: La competencia mediática: Propuesta articulada de dimensiones e indicadores. In *Comunicar*, 2012, Vol. 19, No. 38, p. 79. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083010>>.

a media-competent and digitally-competent person, similar to the ability of their successful integration or control (even at the level of dissociating themselves from the triggered emotion). This is the basis of a relevant rational response to an impetus (message), and also the ability to “manage our own emotional responses when interacting with screens, according to the ideology and values that these screens evoke”.⁴⁰

S. Osuna Acedo, D. Frau Meigs and C. Marta-Lazo⁴¹ in turn present a holistic model of media education in a broader context of the contemporary participative digital culture created by Information and Communication Technologies with a core factor of relationship (Tecnologías de la Relación, la Información y la Comunicación, i.e. TRIC). It is based on and encompasses the areas of cultural and digital practices of children and young people experimenting in technology environments (technology + relationship + information + communication) = TRIC (*tecnologías + relación + información + comunicación*).⁴² This concept, in educational perception of digital media, puts emphasis on the dimension of social, cognitive and emotional relationships,⁴³ going beyond technical skills and improving the cognitive and socio-affective dimension of personality in interaction with digital tools. Taking into account the nature of the given culture, along with the development of individuals’ ability to analyse and create media contents in the process of media education, “they will also develop a critical and responsible attitude for their daily actions in a participatory process, through the «relational factor», to leave their cultural and creative footprint”.⁴⁴

A holistic digital competence model, or a model of integral literacy for citizens’ formation in digital society, is also presented by M. Area and T. Pessoa, and it consists of the following competences:

- a) instrumental – relating to practical control of technical areas of technology and its logical usage practices;
- b) cognitive and intellectual – relating to the acquisition of knowledge and cognitive abilities, enabling the search, selection, analysis, interpretation and recreation of information through ICTs as well as the ability to communicate with others through digital tools;
- c) socio-communicative – relating to the development of a set of skills to create contents of a different nature and to share them with others as well as the ability to establish fluent communication with others through ICTs. At the same time, it includes the acquisition and development of standards of behaviour implying a positive social attitude towards others (collaboration, respect, empathy) on social networks;
- d) axiological – relating to the awareness that ICTs, in social, cultural and political terms, are not aseptic or neutral, and the acquisition of ethical and democratic values in relation to the use of information and ICTs as well as the prevention of negative social and communicative behaviour;
- e) emotional – relating to affections, emotions and emotional impulses experienced in digital environments, learning to control negative emotions as well as developing empathy and the construction of digital identity characterised by an emotional and personal balance in the use of ICTs.⁴⁵

40 FERRÉS PRATS, J., PISCITELLI, A.: La competencia mediática: Propuesta articulada de dimensiones e indicadores. In *Comunicar*, 2012, Vol. 19, No. 38, p. 81. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083010>>.

41 See the article: OSUNA ACEDO, S., FRAU MEIGS, D., MARTA-LAZO, C.: Educación Mediática y Formación del Profesorado. Educomunicación más allá de la Alfabetización Digital. In *Educación mediática y formación del profesorado. Revista Interuniversitaria de Formación del Profesorado*, 2018, Vol. 32, No. 1, p. 29-42. [online]. [2019-01-20]. Available at: <<https://www.aufop.com/aufop/revistas/arta/impres/206/2181>>.

42 ARANDA, D., MARTA-LAZO, C., GABELAS, J. A.: Por qué las TRIC i no las TIC. In *COMeIN*, 2012, Vol. 2, No. 9, p. N/A. [online]. [2019-01-10]. Available at: <<https://www.uoc.edu/divulgacio/comein/es/numero09/articles/Article-Dani-Aranda.html>>.

43 MARTA-LAZO, C., GABELAS, J. A.: *Comunicación Digital. Un modelo basado en el Factor R-elacional*. Barcelona: Editorial UOC, 2016, p. 26.

44 OSUNA ACEDO, S., FRAU MEIGS, D., MARTA-LAZO, C.: Educación Mediática y Formación del Profesorado. Educomunicación más allá de la Alfabetización Digital. In *Educación mediática y formación del profesorado. Revista Interuniversitaria de Formación del Profesorado*, 2018, Vol. 32, No. 1, p. 29-30. [online]. [2019-01-20]. Available at: <<https://www.aufop.com/aufop/revistas/arta/impres/206/2181>>.

45 AREA, M., PESSOA, T.: De lo sólido a lo líquido: Las nuevas – alfabetizaciones ante los cambios culturales de la Web 2. In *Comunicar*, 2012, Vol. 19, No. 38, p. 18-19. [online]. [2019-01-10]. Available at: <<https://www.redalyc.org/articulo.oa?id=15823083003>>.

Conclusion

The preferred educational concepts in the field of digital media are aimed at overcoming the reductionist and lead to the holistic, which makes them fully educational. Based on the nature of the media and in particular the need of individuals who are fully affected by the impact of the media (in all dimensions of personality), concepts of developing digital competences should be optimally perceived as a set of perspectives involving holistic personality enhancement of individuals interacting with digital media. This perception corresponds to the primary challenge to develop digital media curriculum models and media education, especially within the curriculum content, seeking to change the emphasis from “know” and “know how to do” to “know how to be” in their programming.⁴⁶ Without giving up the need for passing on relevant knowledge and improvement of technical and instrumental skills, the dimension of cognitive and intellectual aptitudes and socio-affective qualities must be taken into account to a larger extent. Without an attempt at further reductionism, the emphasis on the key category of autonomous critical thinking is considered to be determining, taking into account the current trends of digital environments outlined in this study. At the same time, it serves individuals as the starting point for adequate responses to the value norms to which they are exposed in digital environments and which they complete or transform by their way of presence. At the level of formation, education for autonomy and freedom of individuals in digital environments is desired, which, by applying the general educational requirements with a psychagogic dimension⁴⁷ to the educated, mediates cultural and social norms (with their particular application in digital environments), but at the same time makes individuals to a certain extent independent from them. Consequently, it stimulates responsibility for maintaining and developing a human way of being in the given environment and humanising the space.

Such a perception of educational process can result in introducing values and ways of interaction into digital environments that not only maintain values, but have a positive-transforming effect and humanise the environment to a greater extent. For this, however, individuals must have positive operational habits in contact with digital media (manifested, for example, in categories of wise, patient, respectful, empathetic, pro-social behaviour) and be emotionally mature (in terms of adequate expression and control of their affections, emotions). The acquisition of the given qualities goes beyond formal education, but it necessarily finds support and anchor in it.

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