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**Curriculum in the Digital Culture and the Educational
Process: A Mediated Relationship**

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**Curriculum in the Digital Culture and the Educational Process:
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Abstract

The purpose of this article is to understand how the authors of didactic materials in a distance education course conceive the relationship mediated in the process of creation of a digital culture curriculum and the educational process. The concepts of curriculum in digital culture and education are essentially inter-related, and involve the relationship of education and the cultural process in which digital information and communication technologies are also present. This is a qualitative case study. To collect the information we used semistructured interviews with these authors, university professors and public school teachers. We found that there is a distancing between the conception of the digital culture and education in digital culture. Digital culture is understood as a concrete reality and education in digital culture as a possibility to be established. We understand that the challenge is to strengthen the roll of schools in the education of digital culture and in presenting digital culture in schools. It is a priority that schools express themselves collectively as an educational and social practice, with the desire to rethink their rolls, based on an integration of digital information and communication technologies in their pedagogical practices, recognizing education as being naturally linked to digital culture.

Keywords: Curriculum. Digital Culture. Education. Digital Information and Communication Technologies.

Initial Considerations

Considering the societal increase of digital culture in the past century, the Brazilian public education policy has sought to develop actions to provide programs for teacher education, as well as infrastructure and pedagogical materials for school communities to strengthen the insertion of digital culture in schools. Among the actions taken through public policies, we can highlight the National Educational Technology Program (PROINFO).

In the context of PROINFO, in 2014 a special distance education course was established for educators (teachers, instructors and administrators) with the goal of critically and creatively integrating digital information and communication technologies to school curriculums (Ramos et al., 2013a; 2013b).

One of the main elements of the Pedagogical Course Project was shared authorship. Thus, the didactic material was written by a university professor-researcher who is a specialist in the theme of the module of study, and a basic education teacher. The production of these materials also involved the following creative and development teams: a video crew, an educational design group, another specialized in hypermedia and another in graphic design (Ramos *et al.*, 2013a).

This article presents a portion of a larger study (Cerny, 2014) that sought to understand how the authors of didactic materials for a distance education course conceive the relationship mediated in the process of constitution of the curriculum in the digital culture and the teacher education process.

To prepare this article, we turned to some studies already conducted in the development of the research project mentioned “[Burigo, personal communication]”; “[Cerny, personal communication]”, based on the authors’ conceptions about curriculum and education in the digital culture, seeking to reveal the concepts involved and the relationships between them.

The article begins with the most concrete elements that we have, that is the authors’ conceptions about curriculum in the digital culture, teacher education and education in the digital culture. We then discuss the methodological process used and present our perspective on the relationship of mediation to the concepts presented by the authors. Finally, we return to the starting point, to reveal understandings through final considerations that this process has provided us.

Curriculum in the Digital Culture and Education

Studies indicate that (Sacristán, 1999; Cerny, 2009) curriculum is inseparable from the concept of culture, because it has historically been constructed as a social practice constituted by content, practices and experiences in a process of interaction with reality. Sacristán (1999, p. 61) affirms that:

Curriculum is the link between culture and society outside the school and education; between knowledge and the inherited culture and learning of the

students; between theory (ideas, suppositions and aspirations) and the possible practice, given certain conditions.

The literature investigated in this study “[Burigo, personal communication]”; “[Cerny, personal communication]” indicates the diversity of concepts about curriculum in our daily practices, as a historic and social process. Therefore, in the context of digital culture, the challenge of a conception of curriculum becomes complex, essentially because of the challenge to integrate the digital ICTs. That is, the challenge is to allow better forms of learning, or even to integrate digital technologies to make possible and contemplate the different forms of learning and to allow a reconstruction of knowledge and not only to conceive digital technologies as tools for modernizing or revolutionizing schools (Sibilia, 2012).

It is undeniable that our society’s institutions and practices are undergoing an increasingly broad inclusion of digital media, provoking the interlinking of social configurations with digital space, developing a culture of the use of the media, or of a digital culture (Almeida and Silva, 2011).

In this context, the decision by educators to integrate digital technologies to the curriculum is always a challenge, considering that this integration cannot be anchored in a simplistic and mistaken idea based on the supposition that access to digital ICTs in distinct spaces and times and the instrumental command of their resources would be sufficient to allow their significant use in education (Costa *et al.*, 2012). For this use to take place, the digital ICTs must be inserted in the educational and cultural context, and this may make it possible to create more dynamic spaces for the production of knowledge that allow overcoming the social division found in access to the technological media and their use.

We believe that by understanding curriculum as culture, we join with a perspective that proposes the appropriation of technologies based on a collective project that seeks the emancipation of the individuals involved, educating with the medias, for the medias and about the medias.

When conducting the study “[Burigo, personal communication]”; “[Cerny, personal communication]”, most of the authors of the Didactic Materials – university professors (AU) and elementary school teachers (AB), when questioned about their understanding of curriculum in the digital culture, expressed that the digital culture allows a way to resignify the school curriculum and that it is necessary to construct another concept of the school. To do so, we highlight the statements of two authors (AU3 and AB1):

I cannot tell you if it is curriculum within the digital culture or if it is digital culture within the curriculum, I think that it is an integration. It is not one inside the other ...it is a reciprocal assimilation...the digital culture is something broader, it is in society and I believe ...that digital culture can impact, in a good sense, practices that no longer function independently from digital culture. And that the digital culture can renovate this curriculum in some form ... which changes a little the times, space, the organization of schools as a function of ideas, or at least, of the new times of

digital culture, of new spaces, because we had and we have understood for a long time that the place of learning is in the schools...So I think that digital culture can help schools to...rethink their curriculums (AU3).

Curriculum is something like this, it goes beyond this limit of a chart with content and that we must even, in a course like this for specialization in education in digital culture, experience the curriculum also in these (digital ICTs), right? In these digital information and communication technologies, that is, recognize them as part of this curriculum, right? It is not a separate, independent curriculum that is there and that has technology, they are part of this curriculum that we experience (AB1).

The curriculum is in the digital culture, like the digital culture is in the curriculum. To deny this movement is to deny the conception of the reality in which the student and society are inserted. Nevertheless, in this relationship of constitution between the curriculum and the digital culture, there are concrete possibilities for thinking of pedagogical practice, based on the school collective. This is because culture, as a process, is expressed in the social collective as a practice that is establishing itself and revitalizing itself each day.

The essence of the Pedagogical Course Project (RAMOS *et al.*, 2013a), is the education of educators (teachers, instructors and administrators), understanding curriculum in the digital culture as a phenomenon that is being established. Nevertheless, the analyses of the studies “[Burigo, personal communication]”; “[Cerny, personal communication]” allow us to infer that there is a similarity between what the precepts of the Course Project and the statements of the Authors, in the educational sense of rethinking the pedagogical practice. Nevertheless, there are some isolated concepts that are revealed in the statements; that the integration of the digital ICTs can reshape schools, that it is necessary to invent a new institution, or at least, that schools are too closed for any change.

These concepts essentially involve the authors’ perspective of schools, of pedagogical practice, of curriculum and culture, that is, their educational process. We begin from the conception of education as a process of construction of individuals, in interaction with the environment and with others, which is conducted during the development of their life. Recalling Moita (2000, p.114), the concept of education is “considered not only as a learning activity situated in specific times and spaces, but also as a vital action for construction of oneself.”

The education that we conceive of in the process of interaction with reality is an educational and social practice: educational in the formative context, as a process, a path in movement, which is historically constructed, for the internal transformation of one who passes from a supposed knowledge (or from ignorance, of not knowing) to knowledge itself (or the understanding of oneself, of others, of reality, of knowledge, of culture). It is social, as a process of interaction with the other and with the reality where this individual, in this study, the authors, are inserted (Burigo, 2013; Chauí, 2003).

Chauí (2003, p.12) emphasizes that this educational and social interaction is diachronic, because it takes place over time in the analysis of the history of mankind:

In the first place, as the word itself indicates, a relationship with time: it is to introduce one to the past of their culture (in the anthropological sense of the term, that is, as a symbolic order or of a relationship with the absent), it is to awaken one to the issues that this past engenders for the present, and it is to stimulate the passage from the instituted to the instituting.

Education as a process, as an educational and social practice, takes place in a certain cultural context, whether in formal spaces or not, but interlinked to the cultural process. Culture is a historic and social construction, a collective process of humanity. It is a social identity permeated by countless factors, which is capable of expressing how individual actions can have a collective validity and how the multiple interactions between individuals, over history, can construct a given reality (Bauman, 2012).

According to Bauman (2012, p. 20):

Culture, as it tends to be seen today, is both an agent of disorder and an instrument of order; a factor both of aging and obsolescence as well as atemporality. The work of culture does not consist so much in its self perpetuation as in guaranteeing the conditions for future experimentations and changes.

In this context, culture is not static or permanent. Like education, culture involves a reality where change and movement consist in an essence of these social phenomenon.

As Kosik (1976, p.40) affirms, social phenomenon can be understood as moments of the whole, from the perspective of the concrete totality.

A social phenomenon is a historical fact to the degree to which it is examined as a moment of a determined whole; it thus performs a dual function, the only one that is capable of effectively make from it an historic fact: on one hand, to define itself, and on the other, to define the whole; to be simultaneously a producer and a product; to be a revealer and at the same time determinate; to be a revealer and at the same time to decipher itself; to conquer the specific authentic meaning and simultaneously confer a meaning to something more. This reciprocal connection and mediation of the part and of the whole signifies a single time: isolated facts are abstractions, they are moments that are artificially separated from the whole, which only when they are inserted in the corresponding whole acquire truth and concreteness. In the same manner, the whole from which moments were not differentiated and determined is an abstract and empty whole.

Beginning with the epistemological presumption of education as a social phenomenon, when the authors were questioned “[Burigo, personal communication]”; “[Cerny, personal communication]”, about their conception of education and the education in digital culture, most of those interviewed made clear in their statements that education is a continuous process that is in interaction with the other and with the environment:

That process, which we are always experiencing, a process that never ends and that has as its main objective to place us in the capacity to act in the world in which we live. (...) But I think that fundamentally this idea that it is a continuous process (AU6).

Education is a continuous process of learning, of socialization, I think that it is something permanent, right? This is what it is, more or less. (AB2).

By conceiving education as a social phenomenon, as a movement in interaction, they potentially demonstrate understanding that the reality in which they are inserted is also in movement, denying the conception of education as a product decontextualized from educational social practice.

We understand that reality in movement generates transformation and incites the formation of the individual that triggers changes in the environment, in a process that continues throughout human existence. Thus, by understanding education as a process, we open space to be apprentices and learners of the demands that society and reality present us. Schools are also inserted in this context, as social spaces for learning (Burigo, 2013; Chauí, 2003; Freire, 1983; Moita, 2000).

In terms of the context of education in digital culture, the Authors indicate that to educate in Digital Culture is a necessary process, because the Digital Culture is intensely present in society and must be resignified,

It is not only a question of acquiring competences for living in the technologized world, but mainly of incorporating these requirements to its experience, as an interactivity (AU7).

I think that education in digital culture will be a re-education, right?! (...) Thus it is to have it arrive and try to show the teachers who are teaching class that there are many things that can be done. We are in a time when each student comes with a laptop and the teachers have to use it and know how to do everything, because there is always the fear that: “Ah! I don’t know how to use everything!” So education in digital culture is to see how this can enter the classroom, so it is almost preparing the teachers for this, that is taking place without anyone having very much preparation, no one knows and one of the things that we hear most is: “Ah, I don’t know how to use this”, “I am not prepared” and then they must be trained for this, I think that’s it. To prepare, show things that can be done and to take it inside schools. (AB5).

Based on the conceptions of the authors interviewed, concerning the concept of education and education in digital culture, the relationship between education and culture is essentially intertwined. And it is in this context that society is found, where the digital ICTs are present, imbued by digital culture.

Nevertheless, a contradiction is expressed in this context: at the same time in which the authors conceive education as a process, they deny this process is linked to digital culture as education that is still to be established. There is a distancing in the concept of digital culture and of education in digital culture. Digital culture is seen as a concrete reality and education in digital culture as a possibility to be constructed.

On the other hand, overcoming this contradiction, perhaps through the educational processes of the Course (Ramos, 2013a), means understanding the school as a collective that is constantly questioned, which rethinks its practices, which thinks about its formative needs and that in this process promotes its education, in the realm of the collective, as a social and cultural institution.

Methodological Route Taken

This article is a portion of a larger study, which is being realized based on a registration of the planning and development of the production of materials for a Specialization Course in Digital Culture, in the distance modality, coordinated by a public university under the Brazilian state (RAMOS *et al.*, 2013a).

The broad objective of the study is to understand, based on the principal of collaborative management and shared authorship, the process of conception, development and management of the course (CERNY, 2014). A particular purpose of this article is to understand how the authors of didactic materials for a distance education course conceive of the relationship mediated in the process of constitution of the curriculum in digital culture and the educational process.

It is a qualitative study, which explores potentialities and conditioning factors that interact in the education process in and for digital culture, based on the Authors' perspectives. To collect this information, we conducted semistructured interviews that, according to Triviños (2003), include a group of basic questions and those that derive from them. The basic and derived questions are supported by the educational principles of the course and by the objective proposed in this investigation.

Based on these interviews, some theoretical reflections were conducted about the concept of curriculum in digital culture and education in digital culture “[Burigo, personal communication]”; “[Cerny, personal communication]”. To draft this article, these reflections were reconsidered to reveal the understanding of these relations of mediation that are established in the process of analysis of these concepts.

The basic questions that guide this study are based on the category curriculum in digital culture and education in digital culture, supported by the base content: Conception “[Burigo, personal communication]”; “[Cerny, personal communication]”.

What essentially distinguishes one category from the other is the content. The base concept, according to Cheptulin (1982), is that which composes the essential elements of the definition of the category, which allows distinguishing one category from another, knowing that this base content is unfinished and not petrified in a reality. That is, another researcher, with a different methodological presumption, can analyze the information collected and propose other categories with other contents, or even these same categories with other contents.

In particular, to undertake this study the statements of those interviewed were analyzed based on the following questions: What do you understand by curriculum? What do you understand as curriculum in the digital culture? What do you understand as education? And what do you understand as education in digital culture?

The individuals interviewed were authors of the didactic materials, university professors and public school teachers from the different study groups that compose the course (Cerny, 2014; Ramos, 2013a).

We understand that as a qualitative study, the results obtained constitute generalities that can be of interest to certain groups of specialists, as a starting point for an analysis that seeks to develop new ideas, new meanings and new understandings about the phenomenon studied.

Relation of Mediation: Curriculum and Education in the Digital Culture

Considering the epistemology of the word, mediation comes from the Greek root *mésos* and from the Latin *mediatio*, which mean that which is placed in the middle, mid, interceding or intermediary point. It refers to reciprocal actions that interact between two parts of a whole, signifies what is between the two parts and establishes a relationship between them (Maheu, 2005).

In the conception of the authors, there is an interlinking between curriculum and digital culture. The curriculum is in the digital culture, as the digital culture is in the curriculum, in an interactive relationship that offers concrete possibilities for thinking about the pedagogical practice. In terms of formation in digital culture, the authors locate it as a process that is being established and to be established.

In general, the relationship of mediation between curriculum and education in digital culture permeates the concept held about culture. If we understand that the media are in the daily life of society, as an expression of social development, this culture is given in the realm of its collective expression, as an action of legitimation. In the cultural development process, the actions are legitimated in the collective (Bauman, 2012).

Nevertheless, this scenario of conception between curriculum and education in the digital culture is not established as a cause and effect relationship, but through the contradictory relationships that mediate it: between the singular and the general; between the production and reproduction of the educational process; between education and the conditions of realization of the work of the teacher;

between theory and practice; between education and professionalism; and between educational practice and social practice.

Digital culture is a given in our society. The media integrates social life. As Almeida and Silva (2011, p.3) affirm, “Technologies come to be part of the culture, taking a place in social practices and resignifying educational relations, even if they are not always physically present in educational organizations.”

This resignification of the educational practices is perhaps the challenge to be overcome, in order to materialize the digital culture through the curriculum and the educational processes of the actors in the schools (administrators, teachers and other educators). And this action is legitimated only in the collective as a cultural process, which is already given in daily social life. To ignore this process is to deny the school as a social educational space for the appropriation of culture.

Final Considerations

Returning to the initially proposed objective, to understand how the authors of didactic material for a distance education course conceive of the relationship mediated in the process of establishment of the curriculum in the digital culture and the educational process, it is possible to identify that this mediation is established broadly through the conception of the process of culture and particularly through the materiality in the collective.

Therefore, a contradiction is revealed in this relationship that is mediated in the Authors' conception of the curriculum and education in the digital culture, that is, at the same time that culture is conceived as a historic and social process, this process is denied if it is not legitimated in the collective.

To dissociate the digital culture from a historic and social process is to see it as a product, an instrumental action, which is also conceived by the banalization of a vague educational process, which is distant from a concrete reality.

To undertake educational actions of digital culture as a historic and social cultural process is one of the challenges that sustain the educational principles of the Specialization Course in Education in Digital Culture, as well as in conceiving the education of teachers and educators as individuals who are capable of thinking of and promoting their own education, based on a methodological proposal that considers the school through itself.

In this context, given the challenge of strengthening schools in the educational process of digital culture and of digital culture in schools, we understand that it is a priority and pertinent that schools collectively express, as an educational and social educational practice, the desire to rethink the integration of digital information and communication technologies in their pedagogical practice.

Therefore, we believe that it is pertinent to add actions, by means of dialogical processes, denying the instrumental functionalist rationalism of actions of insertion of the digital ICTs in schools that is separated from a conception of digital culture legitimated in and by the collective.

Perhaps, based on the school reality, through the experience of the partners in the schools we can establish an educational process of and in the school culture.

References

- Almeida, M. E. B., Silva, M. G. M. da. *Currículo, Tecnologia e Cultura Digital: espaços e tempos de Web Currículo* [Curriculum, Technology and Digital Culture: spaces and times of Web Curriculum]. Revista e-currículum, São Paulo, v.7, n.1, p.1-19, abr. 2011.
- Bauman, Z. *Ensaio sobre o conceito de cultura* [Essays on the concept of culture]. Rio de Janeiro: Zahar, 2012.
- Burigo, C. C. D. Formador em processo de formação: um olhar de uma orientadora [Trainer in the process of formation: a look of a counselor]. In: Hardt, Lúcia Schneider; Arrias, Neide Martins; Smolinski, Gigiane Paula (org.). *A coordenação pedagógica e os dilemas do labirinto. Onde está o fio de Ariadne?* Nova petrópolis: Editora Harmonia, 2013, p. 63-76.
- Cerny, R. Z. *Gestão Pedagógica na educação a Distância: análise de uma experiência na perspectiva da gestora* [Pedagogical Management in Distance Education: analysis of an experience from the perspective of the manager]. Tese (Doutorado em Educação). Pontifícia Universidade Católica de São Paulo, 2009. p.120.
- Cerny, R. Z., *Educação na cultura digital: uma proposta de construção coletiva* [Education in digital culture: a proposal for collective construction]. Projeto de pesquisa. Universidade Federal de Santa Catarina – UFSC. Centro de Ciências da Educação – CED. Florianópolis: Laboratório de Novas Tecnologias - LANTEC, 2014.
- Chauí, M. *A universidade pública sob nova perspectiva* [The public university from a new perspective]. Rev. Bras. Educ., 2003, no. 24 p. 5-15.
- Cheptulin, A. *A dialética materialista: categorias e leis da dialética* [The materialist dialectic: categories and laws of the dialectic]. São Paulo: Alfa-Omega, 1982.
- Costa, F., Rodriguez, C., Cruz, E., Fradão, S. *Repensar as TIC na educação: o professor como agente transformador* [Rethinking ICT in education: the teacher as a transforming agent]. Lisboa: Santillana, 2012.
- Freire, P. *Extensão ou comunicação* [Extension or communication]. 7ª. Ed. Rio de Janeiro: paz e terra, 1983.
- Kosik, K. *Dialética do concreto* [Concrete dialectics]. Rio de Janeiro: paz e terra, 1976.
- Maheu, C. M D. T. *Decifra-me ou te devoro: o que pode o professor frente ao manual escolar?* [Decipher me or I will devour you: what can the teacher do with the school manual?]. In: Reunião Anual da Associação Nacional de Pós-Graduação e Pesquisa em Educação, 28., 2005, Caxambu. Anais... Caxambu, MG: Anped, 2005.
- Moita, M da C. *Percursos de formação e de trans-formação* [Training and transformation courses]. In: Nóvoa, A. *Vida de professores*. 2ª ed. Porto: porto editora, 2000. p. 111-140.
- Ramos, E. M F. et al. *Curso de especialização em educação na cultura digital: documento base* [Specialization course in education in digital culture: document base]. Brasília: Ministério da Educação, 2013a. Disponível em: <http://educacaona.culturadigital.mec.gov.br/downloads/documento-base.pdf>. Acesso em: 06 mar. 2016.
- Ramos, E. M. F. et al. *Curso de especialização em educação na cultura digital: guia de autoria* [Specialization course in education in digital culture: guide of authorship] .

- Brasília: Ministério da Educação, 2013b. Disponível em: <http://educacaonacultura.digital.mec.gov.br/downloads/guia-de-autoria.pdf>. Acesso em: 06 mar. 2016.
- Sacristán, J. Gimeno. *Poderes instáveis em educação*[*Unstable powers in education*]. Porto Alegre: Artmed, 1999.
- Sibilia, P. *Redes ou paredes: a escola em tempos de dispersão* [Networks or walls: the school in times of dispersion]. Rio de Janeiro: Contraponto, 2012.
- Triviños, A. N. *A formação do educador como pesquisador no Mercosul/Cone Sul* [The training of the educator as a researcher in Mercosur / Southern Cone]. Porto alegre: UFRGS, 2003.