

# DIGITAL CULTURE AND THE TRAINING OF PHYSICAL EDUCATION TEACHERS: A CASE STUDY AT UNIPAMPA

*CULTURA DIGITAL E FORMAÇÃO DE PROFESSORES DE EDUCAÇÃO FÍSICA:  
ESTUDO DE CASO NA UNIPAMPA*

*CULTURA DIGITAL Y FORMACIÓN DE PROFESORES DE EDUCACIÓN FÍSICA:  
ESTUDIO DE CASO EN LA UNIPAMPA*

**Paula Bianchi\*, Giovani De Lorenzi Pires\*\***

**Keywords:**

Professional  
competence.  
Faculty.  
Information  
technology.  
Curriculum.

**Abstract:** This article is part of PhD thesis that uses case studies to investigate the curricular inclusion of ICTs in teacher training at three recently created universities in southern Brazil. It describes and analyzes media-education experiences observed in Unipampa's Physical Education. The analysis of the proposals related to ICTs was based on the three dimensions of media-education: instrumental, critical, and expressive-productive. The qualitative methodology used involves document analysis, interviews and direct observation to produce data. The study found limited use of the ICTs in the curriculum studied, with an emphasis on the disciplinary approach.

**Palavras chave:**

Competência  
profissional.  
Docentes.  
Tecnologia da  
informação.  
Currículo.

**Resumo:** O texto é um recorte de uma tese de doutorado que investiga, através de estudos de caso, a inserção curricular das TICs na formação de professores de três universidades recém-criadas na Região Sul do Brasil. Aqui, são descritas e analisadas as experiências mídia-educativas observadas no curso de Educação Física/Unipampa. A análise das propostas relacionadas às TICs foi baseada nas três dimensões da mídia-educação: instrumental, crítica e expressivo-produtiva. A metodologia qualitativa empregada envolveu análise documental, entrevistas e observações diretas para a produção de dados. A pesquisa mostrou um uso limitado das TICs no currículo estudado, com ênfase na abordagem disciplinar.

**Palabras clave:**

Competencia  
profesional.  
Docentes.  
Tecnología de  
la información.  
Currículo.

**Resumen:** Este texto es un recorte de una tesis de doctorado que investiga, a través de estudios de caso, la inserción curricular de las TICs en la formación de profesores de tres universidades recién creadas en la región Sur de Brasil. Son descritas y analizadas las experiencias de educación mediática observadas en el curso de Educación Física de la Unipampa. El análisis de las propuestas relacionadas con las TICs se basó en las tres dimensiones de educación mediática: instrumental, crítica y expresivo productiva. La metodología cualitativa utilizada incluyó análisis documental, entrevistas y observaciones directas para la producción de datos. La investigación reveló un uso limitado de las TICs en el currículo analizado, con énfasis en el abordaje disciplinario.

\* Federal Universidade of Pampa  
(UNIPAMPA).  
Uruguaiana, RS, Brazil.  
E-mail: paulinhbianchi@gmail.com

\*\* Federal Universidade of Santa  
Catarina (UFSC).  
Florianópolis, SC, Brazil.  
E-mail: giovani.pires@ufsc.br

Received on: 02.25.2015  
Approved on: 07.02.2015



## 1 INTRODUCTION AND PROBLEMS<sup>1</sup>

The presence of information and communication technologies (ICTs)<sup>2</sup> has increased in recent decades and created a digital culture, while its implications have caused changes at all levels of society, including the educational field. New interactions with ICTs pose challenges to educational institutions – particularly teachers' schools, which have to rethink the training of future teachers for pedagogical integration of ICTs, since their use produce new content and new languages that must be understood and discussed in curricula.

That shows that we are facing a sociocultural reality that imposes new educational problems to teacher training: nowadays, training for citizenship (RIVOLTELLA, 2007) requires the development of both technical skills for the use of technological tools and critical skills to select and interpret the messages of ICTs, as well as skills to produce and convey content using those technologies and their languages. Future teachers must therefore be able to integrate ICT into teaching, planning and development of educational activities. They must be prepared to offer learning opportunities to students in the context of ICTs.

On the other hand, there are still few records of critical and successful curricular experiences of the presence of ICTs in Brazil. This scenario causes many uncertainties on the part of teachers when they propose pedagogical activities including ICTs. As highlighted by Fantin and Girardelo (2008, p. 8), that is because "[...] there are no maps or signs to establish directions, since the existing maps refer to a very different time [...]". The situation of ICTs in curricula of teacher training courses is not very encouraging either as shown in studies by Gatti and Barreto (2009), Fantin (2012) and Porto (2012). Some weaknesses are yet to be overcome, including low incentive for continuing education of teacher educators (college professors) in the context of information and communication technologies; infrastructure conditions relating to ICTs; and the curriculum design and organization of teacher training courses, which is still centered on a traditional educational perspective under the primacy of technical rationality, the disciplinary approach, and knowledge transmission.

Recently, it became possible to observe manifestations about the digital culture and ICTs in public policies that guide education in Brazil. They see those technologies as socio-cultural phenomena and technological innovation essential for understanding contemporary society while acting on it. With this, some government attempts have been taking place to modernize the country's educational institutions, based mainly on the introduction of technological equipment in the educational environment.

Therefore, it is necessary to reflect on the ways ICTs are being included in educational practices. According to Rivoltella (2007), to date, the integration of interdisciplinary topics has not received the necessary attention in curricula, and that is the reality involving the theme of ICTs. By and large, the presence of technology is seen from its instrumental point of view, from technical training to use technological resources and computer technology, thus overlooking the social dimension of technologies and limiting the emergence of critical-reflective and collaborative educational proposals. Thus, the inclusion of technological tools

<sup>1</sup> This text originated from the author's thesis presented at PPGEF/UFSC in December 2014. The field of study included Pedagogy courses (Federal University of the Southern Border at Chapecó, SC), Sciences of Nature (Federal University of Latin American Integration at Foz do Iguaçu, PR) and Physical Education School (Federal University of Pampa at Uruguai, RS).

<sup>2</sup> In this study, we use the term "ICT" as synonym with all media and technological resources used in contemporary society to store, transmit, reproduce, produce information/content as well as to communicate.

is approached through what Rivoltella (2007) calls “pedagogy of the media”: by reducing education, under the perspective of ICTs, to an instrumental and technical matter, such technologies are taken only to convey curricula, hampering the implementation of a broadened approach to media-education.

A chance to overcome traditional curriculum organization is to understand the curriculum as open to new learnings and different ways to educate based on questioning students’ and professors’ experiences within the digital culture. In this sense, Fantin (2012) suggests that the curriculum should be understood as a cultural practice that is able to put curricular knowledges in context and link them to knowledges acquired outside educational institutions. This would help in the challenge to read and write in digital culture, which can be supported in media-education proposals.

This curriculum model in which ICT-related issues are treated under the perspective of media-education involves understanding, as shown by Gonnet (2004), that all curriculum components are occasions to debate ICTs from the perspective of an education targeted to questioning, understanding and making sense of technological tool uses.

According to Buckingham (2007, 2010), Rivoltella (2009, 2012), Belloni (2010, 2012) and Fantin (2012), media-education can be understood as a theoretical-methodological interdisciplinary field aimed at establishing pedagogical mediations with ICTs and culture within the education realm, contributing to develop critical and autonomous skills for communication, expression and interaction toward technological media. It has three educational dimensions, which are defined as follows:

- Technical and instrumental: it refers to educating with ICTs by using different technologies as didactic-pedagogical tools, focusing on their methodological use. In this dimension, the role of ICTs as supportive/educational tools stands out, thus facilitating teachers’ work and improving the quality of education;
- Object of study or criticism: it proposes education for ICTs and/or media, leading to critical and independent reading and thinking in education about the social uses of technological tools and their languages. That is, ICTs are understood as curriculum content;
- Productive-expressive: it includes education through ICTs, which aims at promoting expression and communication through production/creation of new technological and media content in the educational context, seeking to emphasize ICTs’ collaborative and creative character in pedagogical practices.

In a scenario pervaded by ICTs, with new teaching and learning practices that result from the use of those technological tools and the current educational scenario in Brazil, marked by reforms and the expansion of college education,<sup>3</sup> teacher training within the curricular discussion of media-education emerges as an exciting field of research. Thus, our study sought to understand how undergraduate courses in newly established federal universities in southern Brazil include dimensions of media-education in their curricula. This delimitation takes this as a case study on the undergraduate course of Physical Education, Federal University of Pampa at Uruguiana, RS.

<sup>3</sup> The expansion of the Federal Higher Education Network in Brazil began in 2003, involving new campuses of federal universities in smaller towns and the creation of new federal universities. That process occurred due to the implementation of government policies for university expansion – through the Program to Support Restructuring and Expansion Plans of Federal Universities known as REUNI.

## 2 STUDY CHARACTERIZATION AND METHODOLOGICAL ASPECTS

The fieldwork<sup>4</sup> comprised two stages: in the first stage – approximation to the object of study – we sought to gather information relevant to the reality of the university as well as about its creation and implementation process. That stage also included the search for information on the Physical Education course offered by the institution, which consisted in an attempt to understand how ICTs were integrated into the university's pedagogical proposal and what were the spaces for discussing technologies in the curriculum of the course we analyzed. Information was obtained through the following methodological procedures: a) data collection through visits to the websites of the institution and the course of Physical Education; b) on-site visit in order to gather more information and establish an approach towards research participants.

In the second stage – of immersion in the field of study – we monitored academic and pedagogical activities related to ICTs, studied official documents of the institution and the course under study, such as the pedagogical project of the course and teaching programs and/or plans of curriculum components, and conducted interviews with professors related to the subject of study. That stage of the research was carried out during the first school semester of 2013.<sup>5</sup>

Report and interpretation of results included the following stages: description of institutional documents and observations; and transcription and analysis of interview content. Such analysis is based on the most recurrent themes in respondents' statements, which included three categories: 1) About curriculum: (non) presence of ICTs; 2) Training of teacher trainers (professors): educational experiences in the context of ICTs; and 3) Questions about infrastructure.

Unipampa, in the state of Rio Grande do Sul, was officially established in January 2008 by Law 11640 as a multi-campus institution located on the border of Brazil with Argentina and Uruguay. Its ten campuses include Uruguaiana, which is home to the Course for Physical Education Teachers studied in this research.

As for the approximation to ICTs established by the university's policies, the mention to those technologies is related to two trends: 1) recognizing that ICTs and digital culture are important elements in contemporary society; 2) being a multi-campus university where the use of technological resources such as ICTs contributes to develop academic and administrative actions at the university. However, such policies are virtually meaningless regarding effective proposals for curricular integration of ICTs and media-education.

## 3 PRESENTATION OF RESULTS AND DISCUSSION: EXPERIENCES OF MEDIA-EDUCATION OBSERVED IN UNIPAMPA'S PHYSICAL EDUCATION COURSE

Regarding curricular integration of ICTs into Unipampa's course of Physical Education, the analysis of its Pedagogical Project shows that the reference/guidance towards ICTs is quite shy, and the topic is implemented mainly by including mandatory curriculum components, which must debate ICTs directly or indirectly. According to the course's curricular organization, there are three curriculum components somehow related to ICTs, which are described in the table below. We sought to identify them under the three dimensions of media-education: technical-instrumental, critical, and expressive-productive.

<sup>4</sup> The research project was approved by the Ethics Committee of the UFSC: 15364713.8.0000.0121.

<sup>5</sup> Between April and August, staying about a month in each university/course included in the study.

**Table 1** – Curriculum components related to ICT in the Pedagogical Program of Unipampa's Physical Education Course

Curriculum component	Center	Information	Emphasis
Physical Education and Childhood	Specific	<u>Programmatic Contents:</u> Culture and cultural production for/of children: the presence of the media in the construction of children's imagination. <u>References:</u> Pereira, R. S.; Silva, M. R.; Pires, G. de L. Representações do corpo e do movimento no ciberespaço: notas de um estudo etnográfico no jogo Second Life. <i>Licere</i> , Belo Horizonte, v. 12, n. 2, p. 1-23, Jun. 2009. Available at: <a href="https://seer.lcc.ufmg.br/index.php/licere/article/view/604/491">https://seer.lcc.ufmg.br/index.php/licere/article/view/604/491</a>	Critical dimension
Sociology of Sport	Specific	<u>Objectives:</u> To verify how the elements of spectacle-sport influence daily school life; to analyze the sporting phenomenon through media broadcasts and in person. <u>Pedagogical practices or methodology:</u> the educational environment will consist of various forms of presentation of topics under study: reading academic texts, articles in newspapers and magazines; interpretation of films; participation in sporting events and or watching media broadcasts, interviews with clubs officials and athletes, seminar for presentations of studies in the area.	Critical dimension
Physical Education and Media	Specific	<u>Syllabus:</u> Study of different media-related cultural events in contemporary times. Education with, for and through media in Physical Education. Production and use of ICTs in teaching and learning in Physical Education based on theoretical and methodological assumptions of media-education. <u>Objectives:</u> To study cultural manifestations related to media/ICTs in society, especially in schools; to study concepts and views of communication and media-education; to production and use ICTs for teaching and learning Physical Education content. <u>Syllabus:</u> Conceptions of Communication and Education; Culture, school and ICTs; Educational possibilities between Physical Education and ICTs. <u>References:</u> O que é mídia-educação. Campinas: Autores Associados, 2001; Betti, M. A janela de vidro. Campinas: Papirus, 1998; Buckingham, D. Crescer na era das mídias eletrônicas. São Paulo: Loyola, 2009; Buckingham, D. O novo divisor digital. In: <i>Revista Pátio</i> . Ano XI, no. 44, p. 9-11. Nov. 2007-Jan. 2008; Fantin, M. Mídia-educação: conceitos, experiências, diálogos Brasil-Itália. Florianópolis: Cidade Futura, 2006; Fantin, M; Girardello, G. (Eds.) Liga, roda, clica: estudos em mídia, cultura e infância. São Paulo: Papirus, 2008; Orofino, M. I. Mídias e mediação escolar. Pedagogia dos meios, participação e visibilidade. São Paulo: Cortez: Instituto Paulo Freire, 2005; Pires, G. de L. Educação Física e o discurso midiático: abordagem crítico-emancipatória. Ijuí: UNIJUÍ, 2002; Pretto, N. de L.; Silveira, S. A. (Ed.). Além das redes de colaboração: internet, diversidade cultural e tecnologias do poder. Salvador: Editora da Universidade Federal da Bahia, 2008. Acesso digital. Sancho, J. M. (Ed.). Para uma tecnologia educacional. Translation by Beatriz Affonso Neves. Porto Alegre: Artmed, 1998.	Instrumental, productive and critical dimension

Source: Prepared by the authors.

As noted in Table 1, ICTs are included in the curriculum and therefore in the initial training of Physical Education teachers under a disciplinary perspective, that is, the topic is addressed

autonomously in the Physical Education and Media curriculum component and as content in the Sociology of Sport and Physical Education and Childhood curriculum components.

In Physical Education and Childhood, the debate on ICTs is included through the thematic unit named “Culture and cultural production for and of children: media presence in the construction of children’s imagination”. The teaching plan and lesson plans of that curricular component present some examples of educational activities proposed within ICTs to discuss the unit, such as reading texts related to the topic, viewing and discussing films, and research in Physical Education online journals about scientific literature related to Physical Education, childhood, and ICTs. According to the material analyzed, the aim is including ICTs among the contents studied by the curricular component, understanding that these technologies are now part of children’s culture. Thus, the debate on ICTs and their socio-cultural and educational impacts are brought to the context of training of future Physical Education teachers from the perspective of the critical dimension of media-education. Through critical reading and analysis, the proposal presented in curricular component is to elucidate and establish a reflective stance towards discourses as well as audiovisual and media messages with and for children.

The Sociology of Sport curricular component was also identified in the context of reading and critical analysis of messages produced and conveyed by ICTs. In this case, curricular integration of ICTs develops distinct roles: sometimes as a methodological tool and aid to teaching and learning activities, sometimes as content to be discussed and reflected upon.

When considering the existence of a close and reciprocal relationship between ICTs and the sporting phenomenon, the objectives show concern to understand the implications of ICTs within Physical Education and Sports in the development of that curriculum component. That is even more evident in modes of cultural appropriation of ICTs and the role they play in building society’s sporting culture in order to raise critical awareness about the media’s discourse on sports.

It is in this context – increasingly mediatized and pervaded by technological tools that enable production, reproduction and technical appropriation of sports – that the component aims at understanding the impact of Betti’s (1998) concept of “telespectacle sport” on the sphere of school Physical Education/educational sport. This is proposed in order to explore the changes in sports practice and the very concept of sport in an attempt to show the link between sport and ICTs.

The pedagogical activities proposed by the curricular component involve the use of different features of ICTs – such as newspapers, magazines, television and film – used as didactic support and learning reinforcement tools. An example would be the situation of watching sports broadcasts through ICTs and live. However, the central idea is that it allows exploring the differences and similarities between these two types of experience with sport and also the ways in which the discourse about sport is built and conveyed by ICTs.

The Physical Education and Media curricular component is the only specific component of the curriculum of Physical Education focused on ICTs. Even though it is called “Physical Education and Media”, its syllabus is related to “ICTs” and to the field of media-education. It is a specific and mandatory curriculum component that seeks to address the three dimensions of media-education during the course: instrumental, critical, and productive. Its aim is to prepare future Physical Education teachers so that they are able to use ICTs as methodological resources for teaching and learning and, above all, critically reading and interpreting information provided by ICTs and producing new content through them, in a critical, ethical and creative way, with a view to their work in the educational context.



Thus, the component has theoretical and practical nature: it proposes the study of different theories and concepts around the area involving education, media-education and Physical Education. It also seeks to explore the possibilities for use and production through ICTs as sources of learning and teaching Physical Education content.

Finally, the analysis of the Pedagogical Project of the Physical Education Course showed that the inclusion of ICTs in curriculum components reveals a focus of their productive and critical dimensions on the training of future teachers. In turn, the curricular integration of the topic of ICTs under the disciplinary perspective hinders the design of dialogic and interdisciplinary educational proposals between curriculum components and their different approaches to these technologies.

In order to understand how they the different curricular practices around the theme of ICTs proposed in the training course for Physical Education teachers are developed, the study also involved the observation of lessons of the Physical Education and Media curriculum component and two university outreach experiences developed by teachers linked to the course.

As for the classes, the emphasis is on critical reading of the content transmitted by ICTs – especially films and television shows. The teacher responsible for the curricular component Physical Education and Media reported that, because of his personal interest in ICTs, they always appeared in one way or another in the curricular components he taught.

The perspective of media-education or education in the context of ICTs present in the classes observed consists of taking on the critical stance of reading and understanding the discourse produced by the media. Thus, ICTs are understood and perceived as objects of study and can be questioned, discussed and re-signified. Such process of reading and critically interpreting ICTs may also lead to an experience of critical and creative production of new content using them.

Regarding community outreach experiences observed in the context of ICTs, the first proposal is related to the project entitled “Web Cycle in exercise and rehabilitation”. Under Unipampa’s Applied Neuromechanics Study Group (GNAP), it aims at contributing to neuromechanics studies on human movement and promoting scientific dissemination of that area of study. The project consists of a monthly conference taught by a guest teacher-researcher and computer-mediated through web conferencing.<sup>6</sup>

About this experience, it has a close connection with the methodological approach of ICTs, from the technical possibilities they offer for knowledge transmission – in this case, on neuromechanics of human movement. In this context, ICTs are the means used to convey content and, as occurs in traditional classrooms, the class with ICTs remains based on lectures and centered on the teacher and on declarative knowledge, saving students’ participation for the final moment of class – or presentation in the case of observed web conference.<sup>7</sup>

The second experience related to ICTs refers to the project “Radio Education: dialogue with the community”, created in 2009 by two teachers – one linked to the Physical Education course and another connected to Nursing school. The proposal includes production and presentation of radio program Unipampa Debates, broadcast through a spot granted by Radio 880 AM São Miguel, in the city of Uruguaiana. The program brings together the project

6 Web conferencing is the virtual meeting between people who attend conferences through computers from different geographical locations, enabling them to share text, image and voice files. To use UNIPAMPA’s web conferencing system, teachers should ask the Information and Communication Technology Center, which will provide space, technical support and system maintenance.

7 In the system used by the project, only the speaker and the coordinator (moderator) of the activity can share text or image and audio, while other participants are restricted to attending the lecture and sending questions through a chat room.

team<sup>8</sup> (including coordinating teachers and internship and volunteer students) and external guest of each program. They discuss several topics (education, health, culture, etc.) to convey information contents to the audience.

In this context, teachers and students from different courses at the Uruguiana<sup>9</sup> campus experience different roles when they case being information receivers and become producers/senders. This is because participation in the project requires the team to get involved in all stages of production of the programs, from the choice of themes, through the literature review of the contents, preparing theme questions that are released by the production team in each program to the guests, until its transmission. Finally, after each program, the group evaluates the results, reflecting on technical (such as production, operation of equipment, etc.) and pedagogical aspects (content and debate).

Thus, the project covers the three dimensions of media-education: technique, mastering equipment operation, radio language, technical production of a media program; critical and reflective analysis of the content broadcast by the different ICTs, raising critical awareness on what is conveyed on the media; and production of new content through ICTs, since the work of information producers/senders considers responsible production and ethics of media content.

#### **4 THE CURRICULUM INCLUSION OF ICTS IN TRAINING OF PHYSICAL EDUCATION TEACHERS: THE PROFESSORS' PERSPECTIVE**

Overall, professors' reports<sup>10</sup> show that the curricular inclusion of ICTs presupposes recognition of the omnipresence of ICTs in society as an important element of contemporary culture. In this context, technologies and their contents influence the ways in which information is provided about the world and the ways it is perceived and understood, which has been considered one of the issues that warrant discussion of ICTs in teacher training courses. This situation is shown in the report of one of the professors interviewed at the school of Physical Education, which underscores that widespread spectacularization of Physical Education contents in different media has challenged professors to build methodological and educational strategies to discuss ICTs and the contents they circulate and produce in the training of future teachers.

Professor A.: In short, in the case of the Physical Education course, the way the body is sold to people by the media, there comes a time when we have to analyze those images because they are building a series of values into our subjectivity, which we'll necessarily reproduce later. So if there is no critical reading of reality, in this case, a critical reading of the media, the media by teachers, they will be hostages to ideology that is passed or that some try to pass, something that the mainstream media tries to build.

Given this reality, and thinking of training that is closer to media-education and digital culture issues, attempts have been made to include ICTs in the curriculum of Physical Education by creating curricular components addressing autonomously and/or complementarily the theme of ICTs. Moreover, it is acknowledged that the linearity that pervades all current course organization hinders the appearance of interdisciplinary proposals such as media-education – especially regarding their inclusion as an axis throughout the entire curriculum and pedagogically addressed by all disciplines

<sup>8</sup> Since 2011, the project has been coordinated by two other professors – from the Pharmacy and the Sciences of Nature schools – who, for their interest and affinity with the subject, decided to keep the project running.

<sup>9</sup> Importantly, the project has had Physical Education interns from UNIPAMPA, however, at the time of our field research, there was no student from the area involved in the project.

<sup>10</sup> They interviewed three professors responsible for curriculum components and outreach projects related to ICTs.



that make up the course, as proposed by Gonnet (2004), Rivoltella (2007), Fantin and Rivoltella (2012).

As we have seen, there are (few) other chances for including ICTs through community outreach programs. Although they are designed to escape the traditional curriculum, these situations of work with ICTs influence the education of future teachers and add new teaching methods to the curriculum, expanding the classroom into new and different contexts – which can be school, radio, computer lab etc.

The difficulties in integrating ICTs into the education of future teachers include the lack of appropriate training of professors and ICT infrastructure. Their formative experiences in the context of ICTs vary widely and are motivated by different reasons – which can range from the search for learning by self-interest to the demands of the professional environment and public policies, as exemplified by the following account:

Professor A.: during all my training, in school, television was with me a lot, I always watched a lot of television [...] then I already used to do a critical analysis of television, the media, how they served, what they served, what their function was within the apparatus of society. And then when television came to my professional space I said: "I'll study it then!"

Despite the need for adequate teacher training in technical and critical skills linked to ICTs and new languages present in digital culture, as shown by Belloni (2005) and Sancho and Alonso (2012), the results of our investigation show that the training experiences of teacher educators with ICTs have largely focused on the acquisition of technical skills that are distant from the pedagogical approach of ICTs, whether it is in the social and personal domain or in teacher training, which favors the emergence of proposals merely as a result of the methodological inclination of ICTs.

The reports have also shown that few educational experiences of professors within the ICT realm are offered by the university, and the pursuit of education in the area seems to depend above all on personal interest and initiative, on teachers' autonomy and experiences in classroom or in research and outreach programs. On the other hand, when such training is offered, moments are created for individual and collective critical reflection about practices developed with ICTs, seen as necessary to the formation of reflective teachers.

Professor F.: In these meetings, we come into contact with people from other campuses and that's a good thing. We have talked and we have ideas to do things together because of the project, I am also being called to evaluate other efforts involving radio projects and that makes me have more contact with bibliographies and other actions being carried out in other campuses [...].

As for basic ICT infrastructure, respondents' statements pointed out that environments that do not have reasonable infrastructure do not favor or encourage educational practices involving ICTs. However, they also showed lack of confidence regarding the topic, indicating little discussion about the subject in the context investigated. This may be related to the fact that many activities involving ICT require no more than that basic infrastructure known to professors in the education realm (such as computers, computer labs, and internet connections).

## 5 FINAL REMARKS

Based on this study, It is possible to say that few educational proposals are developed in the context of ICTs in the course of Physical Education, and those carried out under critical and/or production perspective of media-education are even scarcer.

Except for inclusion of a specific curricular component that turns the introduction of issues involving ICT and digital culture mandatory, this research showed that the inclusion of the topic in other curriculum components and pedagogical practices developed in other curriculum spheres seems to be more related to personal interest and social appropriation of technologies by teachers, rather than a result of an established educational program focusing on ICTs. In this regard, it is believed that high absence of educational policies and their own institutional guidelines governing the courses on the issues of ICT can be a cause of too few media-education experiences in the curriculum – as it relieves professors from planning new ways of interaction and contextualization of ICTs in curriculum practices.

Furthermore, the almost non-existence of continuing education on ICTs provided by the university is reflected in the pedagogical practices of future teachers, who have many difficulties appropriating these technologies and including them in their teaching, considering the three media-educational dimensions. On the other hand, community outreach programs, although they are the result of personal initiatives of few professors, appear to be important for pedagogical experiences with ICTs in teacher training in the course analyzed.

Finally, the results showed that the curriculum of the course – although it is part of the educational project of a newly established university, which originates from a context that is strongly implicated and transformed by ICTs and digital culture – is giving little contribution for the training of future Physical Education teachers to be closer to media-education issues. Therefore, the future generation of PE teachers tends to continue with profound difficulties to intervene pedagogically within School Physical Education from the perspective of media-education.

## REFERENCES

BELLONI, Maria Luiza. **O que é mídia-educação: polêmicas do nosso tempo**. 2. ed. Campinas: Autores Associados, 2005.

BELLONI, Maria Luiza. **Crianças e mídias no Brasil: cenários de mudanças**. Campinas: Papirus, 2010.

BELLONI, Maria Luiza. Mídia-educação: contextos, histórias e interrogações. *In*: FANTIN, Monica; RIVOLTELLA, Pier Cesare. (Ed.). **Cultura digital e escolas: pesquisa e formação de professores**. Campinas: Papirus, 2012. p. 31-56.

BETTI, Mauro. **A janela de vidro: esporte, televisão e educação física**. Campinas: Papirus, 1998.

BUCKINGHAM, David. **Crescer na era das mídias eletrônicas**. São Paulo: Loyola. 2007.

BUCKINGHAM, David. Cultura digital, educação midiática e o lugar da escolarização. **Revista Educação e Realidade**, Porto Alegre, v. 35, no. 3, p. 37-58, Sep./Dec. 2010. Available at: <[http://www.ufrgs.br/edu\\_realidade](http://www.ufrgs.br/edu_realidade)>. Accessed on: July 5, 2012.

FANTIN, Monica. Mídia-educação no currículo e na formação inicial de professores. *In*: FANTIN, Monica; RIVOLTELLA, Pier Cesare. (Ed.). **Cultura digital e escolas: pesquisa e formação de**

professores. Campinas: Papirus, 2012. p. 57-92.

FANTIN, Monica; GIRARDELLO, Gilka. Apresentação. *In*: FANTIN, Monica; GIRARDELLO, Gilka. (Ed.). *Liga, roda, clica: estudos em mídia, cultura e infância*. Campinas: Papirus, 2008. p. 7-11.

FANTIN, Monica; RIVOLTELLA, Pier Cesare. Cultura digital e formação de professores: usos da mídia, práticas culturais e desafios educativos. *In*: FANTIN, Monica; RIVOLTELLA, Pier Cesare. (Ed.). **Cultura digital e escolas: pesquisa e formação de professores**. Campinas: Papirus, 2012. p. 95-146.

GATTI, Bernadete Angelina; BARRETO, Elba Siqueira de Sá. **Professores do Brasil: impasses e desafios**. Brasília: UNESCO, 2009. Available at: <<http://unesdoc.unesco.org/images/0018/001846/184682por.pdf>>. Accessed on: Jul. 5, 2012.

GONNET, Jacques. **Educação e mídias**. São Paulo: Loyola, 2004.

PORTO, Tania Maria Esperon. As tecnologias estão nas escolas. E agora, o que fazer com elas? *In*: FANTIN, Monica; RIVOLTELLA, Pier Cesare. (Ed.). **Cultura digital e escolas: pesquisa e formação de professores**. Campinas: Papirus, 2012. p. 167-194.

RIVOLTELLA, Pier Cesare. Realidad y desafíos de la educación en medios en Italia. **Comunicar**, Huelva, v. 15, no. 28, p. 17-24, 2007. Available at: <<http://www.revistacomunicar.com/verpdf.php?numero=28&articulo=28-2007-03>>. Accessed on: March 20, 2013.

RIVOLTELLA, Pier Cesare. Mídia-educação e pesquisa educativa. **Perspectiva**. Florianópolis, v. 27, no. 1, p. 119-140, Jan./Jun. 2009. Dossiê Educação, Comunicação e Tecnologia. Available at: <<https://periodicos.ufsc.br/index.php/perspectiva/article/view/2175-795X.2009v27n1p119>>. Accessed on: June 20, 2012.

RIVOLTELLA, Pier Cesare. Retrospectivas e tendências da pesquisa em mídia-educação no contexto internacional. *In*: FANTIN, Monica; RIVOLTELLA, Pier Cesare. (Ed.). **Cultura digital e escolas: pesquisa e formação de professores**. Campinas: Papirus, 2012. p. 17-29.

SANCHO, Juana Maria; ALONSO, Cristina Cano. (Ed.). **La fugacidad de las políticas, la inércia de las prácticas**. Barcelona: Octaedro, 2012.

