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Article

Distance Education as a strategy for permanent education in the Health field: training impact on the family health strategy team in the services organization

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ABSTRACT

Distance learning is a modality that allows eliminating the geographic separation between educator and learner in order to attend an unlimited number of students who are seeking to graduate or professional training and updating. The objective of this research was to explore and to expand the experience of the students in the city of Amparo from the in Family Health specialization course/Unasus/Unifesp, in the teaching-learning process through distance learning mediated by technology, and also to measure the impact of the continuing education in the organization of the services. Based in a qualitative research model, we sought to establish a student perception in relation to the methodology, technique, learning strategies and changes in the services in which the qualified professionals are inserted. The answers were classified according to established guidelines, aiming to contextualize the report collected of each researched actor. After analyzing and evaluating these speeches, relations and summaries inherent to the process of distance learning were established and an evaluation of the impact in the organization and implementation of the service was

also presented. It was noticed that all the narratives concern to the importance of the continuing education in Health field as a starting point of changes in the service. It was also noticed that the specialization was outstanding in quality and excellence. But it was highlighted that transformation does not always happen in the same velocity as the one proposed by the course. The conclusion of this article highlighted the importance of recognizing that continuing education in Health field must be always encouraged and offered to professional groups, where the practical scenarios can be reorganized and strengthened, seeking to development socially and technically qualified practices with applicability used by the managers and representatives of public power.

Keywords: Distance learning. Education mediated by technology. Moodle platform. On-the-job training. Continuing education. Service evaluation.

RESUMEN

La educación a distancia es un tipo de educación para eliminar la separación

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geográfica entre el profesor y el estudiante para cumplir con un número ilimitado de estudiantes que buscan la educación, la formación o el desarrollo profesional. Esta investigación tuvo como objetivo conocer y explicar la experiencia de los estudiantes de la especialización, en el municipio Amparo, en Salud/Unasus/Unifesp en el proceso de enseñanza-aprendizaje a través de la educación a distancia mediada por la tecnología, y evaluar el impacto de la formación continua en la organización de servicios. A través de un modelo de investigación cualitativa, hemos tratado de establecer la percepción de los estudiantes encuanto a la metodología, la técnica, las estrategias de aprendizaje y cambios en los servicios que son los profesionales capacitados insertados. Las respuestas fueron clasificadas de acuerdo a los ejes establecidos en busca de contextualizar la historia de los encuestados actores. Tras el análisis y la evaluación de estos discursos, las relaciones y la síntesis inherente a la educación a distancia. El proceso de la educación y la evaluación del impacto en la organización y ejecución de los servicios fueron establecidos. Se observó que todos los relatos se refieren a la importancia de la formación continua en la Salud como un eje de transmisión y cambios en los servicios. Esa experiencia se sobresale en calidad y excelencia. Pero oportunamente hicieron hincapié en que no todos los cambios deseados ocurren a la misma velocidad de la propuesta y asimilan el curso. La conclusión pone de relieve la importancia de reconocer que la educación sanitaria en curso siempre se debe estimular y ofreció a los grupos profesionales, que sus escenarios de práctica pueden ser reorganizados y fortalecidos. Buscando desarrollar prácticas social y técnicamente cualificados y con aplicabilidad alimentado por los gerentes locales, estatales y federales.

Palabras clave: Educación a distancia. Educación mediada por la tecnología.

Plataforma Moodle. Capacitación en servicio. La educación continua. Evaluación de servicios.

RESUMO

A educação a distância é uma modalidade de ensino que permite eliminar a separação geográfica entre educador e educando para atender a um número ilimitado de alunos que estejam em busca de formação, capacitação ou atualização profissional. Esta pesquisa teve por objetivo conhecer e explicar a vivência dos alunos da Especialização em Saúde da Família/Unasus/Unifesp, do município de Amparo, no processo de ensino-aprendizagem através do ensino a distância mediado por tecnologia, bem como avaliar o impacto da educação permanente na organização dos serviços. Através de um modelo de pesquisa qualitativa, buscou-se estabelecer a percepção dos alunos com relação a metodologia, técnica, estratégias de aprendizagem e mudanças ocorridas nos serviços em que estão inseridos os profissionais capacitados. As respostas foram classificadas segundo os eixos estabelecidos, buscando contextualizar o relato dos atores pesquisados. Após análise e avaliação desses discursos, foram estabelecidas relações e sínteses inerentes ao processo de ensino a distância e avaliação do impacto do curso de capacitação na organização e implementação dos serviços. Observou-se que todas as narrativas referem a importância da educação permanente em Saúde como eixo propulsor de mudanças nos serviços e que a especialização foi exímia em qualidade e excelência. Mas, oportunamente, tais relatos destacaram que nem sempre as transformações desejadas aconteciam na mesma velocidade do proposto e assimilado pelo curso. A conclusão deste artigo destaca a importância do reconhecimento da educação permanente em saúde, devendo ser sempre incentivada e oferecida para grupos de profissionais, para possibilitar que seus cenários de prática sejam reorganizados e fortalecidos. Essa proposta de incentivo deve ter como intuito

desenvolver práticas qualificadas socialmente e tecnicamente com aplicabilidade oportunizada por gestores e representantes municipais, estaduais e federais.

Palavras-chave: Educação a distância. Ensino mediado por tecnologia. Plataforma Moodle. Capacitação em serviço. Educação permanente. Avaliação dos serviços.

INTRODUCTION

Considering the diverse and quick changes taking place in society, globalization imposes new arrangements and educational strategies, especially with the incorporation of new technologies of communication and information. There is a consensus on the definition of such a social setting as a **society of knowledge** or **society of information**, because of the speed with knowledge or information began to circulate and multiply in various social areas of the country and the world. The impacts of these changes have been observed, especially in the labor market, scenario of practices and content for learning.

According Davini (2009), the technological revolution wrought in the last quarter of the twentieth century, focused in processes and continuous innovation of products, with the fundamental raw materials the information and knowledge, which operate on the production of articulations, networks and flows between activities and organizations. In this scenario, organizations require developing the capacity of adaptability of transformations, as well as the formation of alliances in specific areas of action.

The distance education (DE) has specific characteristics, disrupting the concept of the presence of the student and the teacher in the teaching-learning process in the same physical environment, the classroom. In distance education, the pedagogical act is not centered on the teacher's figure, but the student.

According to Riano (1997, p.21), one of the foundations of the teaching-learning process in distance education is the pursuit of "an autonomous, independent learning, in which the individual becomes a subject of their own learning and center of the whole system". The change this paradigm assumes the formation of critical and active people in the processes of social participation, as several technological mechanisms allowing greater engagement. Thus, students take on the role of actors and authors of the learning process, by having critical position in situations and problems presented in the virtual learning environment (VLE).

The constant changes of economic, social, technological and scientific nature lived today involve the development and professional qualification established in all sectors of human knowledge.

In 2007, the Ministry of Health / Secretary of Labor Management and Health Education (SGTES) in a partnership with the National Council of Health Secretaries (Conass) and the National Council of Municipal Health (Conasems), started the discussion about Decree no 198, (BRAZIL, 2004), in order to define new guidelines and strategies for the implementation of the National Policy of Permanent Health Education (BRAZIL, 2007).

Continuing education consists of promoting the learning in the work itself, incorporating the daily practices with a significant and transformative learning. The permanent education processes in Healthcare aim the transformation of professional practices and organization of work itself (BRASIL, 2009).

According to Abed (Brazilian Association of Distance Education), in 2012 there were more than 2,000 distance education courses in Brazil. In which all of them have been invited to join in the Abed-2012 Census. Only 252 questionnaires had returned and validated to the basis, of which it was observed the

following situation: the total number of courses offered in 2012 by the respondent institutions was 9,376, with 1,856 of them (19.8%) authorized / recognized courses and 7,520 (80.2%), free courses. In addition, 6,500 were given subjects in distance education mode, offered in authorized / recognized classroom courses. The total enrollment is 5,772,466, being 5.8% in distance learning subjects from authorized classroom courses (336,223), 19.8% from authorized courses (1,141,260) and 74.4% of free courses (4,294, 982). In 2012 compared to 2011, there was growth of 52.5% of enrollments in distance education mode (ABED, 2013).

An advantage of distance learning is the flexibility because it is a modality that is not limited to spatial and temporal conditions of the classroom, not forcing teachers and students to meet at the same time. This characteristic of distance education allows all citizens to experience the right to access knowledge, especially when they are distant from major centers.

The Unasus / Unifesp, through the course of specialization in Family Health, consolidated in a virtual learning environment, has contributed significantly to the training of human resources for the Brazilian public health system. Since 2010, approximately 4,000 health professionals have been trained, contextualized in programs such as Provabe and Mais Médicos.

By researching as the Specialization in Family Health Unasus / Unifesp added to these kinds of professionals, contents and transformational practices in teamwork and organization of services, must be credited competence and advances to permanent education in the SUS. Thus, impact measures and evaluation of services should be investigated, in order to observe the changes in the practices of professionals, which will allow improving the quality of care provided to the population. The analytical focus of this process should be the distance learning as a

permanent training strategy in service in the National Health System.

The aim of this study was to evaluate the perception of professionals from Amparo municipality inserted in the course of Specialization in Family Health Unasus / Unifesp (2nd offer - 2011/2012) regarding the process of teaching and learning, and to assess the impact of this training in teamwork and organization of services. Based on a qualitative research model, aimed to investigate aspects related to methodology, technique, learning strategies and impacts on the health service.

1. METHODOLOGY

In 2010, the Open University of SUS in partnership with Unifesp, has provided training opportunities for university-level professionals in the fields of Medicine, Dentistry and Nursing, which consisted of the performance of activities in the Family Health Strategy teams in the state of Sao Paulo. Based on this data, the focus of this research, qualitative and impact on these professionals who carry out their activities in the municipality of Amparo and have been trained as specialists in Health at the Specialization Course in Health Unasus/Unifesp.

To collect the study data presented here, a questionnaire was organized into three structural axes of analysis: axis 1: **The methodological strategies used and the perception of students toward learning in distance education**; axis 2: **The distance education mediated by technology used by the specialization course in Family Health Unasus / Unifesp added changes to professional practice**; axis 3: **Opportunities and challenges in the implementation/deployment of teamwork and processing practices and organization of services**.

Six professionals took part in the activities in three meetings: one in August 2013

(in person), to the agreement and signing the Consent and Informed held focus group; one in October 2013 (made via web conferencing and forums on the Moodle platform) for registration the impressions, and the other in October 2014 (in person) conducted with a focal group and ending the activities of the research. As a support for the analysis, a page was created in VLE, the Fousp Core Teledentistry on Moodle platform for the participation of those involved in the research. This enabled the interaction of study components to meet and discuss the issues of structural axes, using tools such as web conferencing, forums and activities that allowed communication between the participants and the researcher synchronously and asynchronously.

One of the advantages of the use of the web is, with the date and time agreed, the participants can access the activity of the focus group in multiple spaces and in real time; Another great advantage is that the shares are registered in the Moodle platform, eliminating the participation of rapporteur or recording reports. Thus, the researcher can deepen the analysis and content addressed at different times. The big caveat of this strategy is the issue of accessibility of the internet network. Many municipalities still have connectivity problems, which interferes with the possibility of effective participation in these focus groups.

The questions were directed to clarify and discuss relevant issues to the axes that guide important considerations in distance education mediated by technology. issues were discussed concerning: methodology, use of tool, process of socialization, interdisciplinarity, completeness in content approach, effectiveness of the teaching-learning process in the perspective of tutor and student, opportunities and challenges in the implementation of transformative strategies in services.

For the analysis and interpretation of the results, they used different tools: structural

axis 1 was analyzed by the instrument called the **inquiry community (IC)** the three variables: the cognitive, social and educational. According to Garrison, Anderson and Archer (2000), they propose an analysis model to evaluate the quality of courses developed in virtual learning environments. The axes 2 and 3 were contextualized methodologically through discourse analysis, and the axis 3 is segmented into three aspects: the organization of the group, the change of professional practice and the possibilities and challenges of deployment / implementation of changes in service practices.

Responses have been classified according to the established axes, seeking to contextualize the narrative of respondents actors. After analysis and evaluation of these narratives, relationships and syntheses were established inherent in the teaching process the distance and transformations in services, based on a qualitative methodology (focus group / discourse analysis).

According to Turato (2005), the qualitative method has its roots in phenomenology, it seeks to understand the dynamics of the human being, based on the meanings of the phenomena experienced by people. The qualitative methodology applied to health seeks not study the phenomenon itself, but understand the significance of this phenomenon in individual or collective level, as it has a structural function for the life of the people, as they organize their lives from these meanings for them assigned.

For Minayo (2010), qualitative methodologies are able to incorporate the question of meaning and intentionality as inherent to acts, relationships, social structures, which are understood as significant human constructions. They have the intention to interpret the meanings - whether psychological or sociocultural nature - brought by individuals with regard to the multiple phenomena inherent in the health-disease field.

The professionals were invited to participate and sign the informed consent form and by following national and international guidelines for ethics in research involving human subjects. The project was then forwarded to the Ethics Committee of the Faculty of Dentistry, University of São Paulo, and was approved by the Ethics Committee of Fouspsob paragraph 401,785 on September 20, 2013.

2. ANALYSIS AND INTERPRETATION

After initial contact with the Amparo Municipal Health, was performed a face to face meeting in the city between the researcher and the respondents who would participate, in August 2013, for signing the Instrument of Consent. At the time, the study participants answered a survey to characterize their target audience and the activities of the survey were presented, and have performed the first focus group, which was followed by two subsequently.

Attended these meetings six people who had attended and completed the Specialization in Family Health Unasus/Unifesp and the Municipal Secretary of Health. The average age of participants was 44.4 years old, six participants of both genders in the following professional categories nurse, doctor and dentist. The average service time in Amparo, professionals in the survey is 11.6 years old, and 83.3% work exclusively in the municipality.

3. REFLEXÕES SOBRE O EIXO ESTRUTURANTE 1

With the spread and use of courses making use of the virtual learning environment as an educational tool in health care, the authors Garrison, Anderson and Archer (2000) worked on a method that could evaluate the quality of learning in different structures and models in VLE. This instrument

was called inquiry community (IC), with the three-axis focus of analysis: the cognitive, social and educational attendance. Thus, will be analyzed in this article, the tools provided in the course Unasus / Unifesp, the three axis and evaluated as the course propitiated learning structures.

The spaces of interaction of groups of students, communication with the tutor, access to learning content, evaluation and interaction were classified according to variables: **social presence, cognitive presence and teaching presence.**

Table 1: Narratives of structural axis arrangement and presence of teaching Examination Communities, municipality of Amparo, 2014. structuring Axis 1: Which methodological strategies are used and what the perception of students toward learning in the distance teaching proposal?

QUESTION	NARRATIVES	PRESENCE
What is your evaluation of the course of specialization?	<p>a) "The preparation of texts for study, the permanent attention of the tutors, tools, etc. Discussion on both the forum and in groups. "</p> <p>b) "Interesting content and targeted lessons, efficient method."</p> <p>c) "Many interesting topics and new content."</p> <p>d) "A challenging study and deepen their knowledge in the virtual environment."</p> <p>e) "The ability to know other realities and learn from other experiences."</p> <p>f) "An excellent opportunity of democratic access to new content and ongoing in-service</p>	<p>cognitive</p> <p>educational</p> <p>educational cognitive</p> <p>cognitive/ social</p> <p>cognitive</p>
What was your perception of the methodological strategies used in distance learning provided by the specialization course in Family Health Unasus/Unifesp?	<p>a) "I really enjoyed the methodology, especially the part of mentoring and clinical cases and after discussion allowing the interaction of the participants facilitating the understanding."</p> <p>b) "At the beginning I had some difficulties, but when we started the study meetings, always on Wednesdays in the afternoon, when we were discussing together the text of that week, my understanding deepened."</p> <p>c) "I found it very interesting and could encourage students to discuss cases. When I enrolled in the course, I had no idea of the dynamism that could have a specialization course in the distance. I had done some online courses, but they did not have this wealth of discussion and active participation of students."</p> <p>d) "Quite adequate, in my case accessed virtually every day platform (except weekend), quite enjoyed the content."</p> <p>e) "These are strategies that result in a better use of time and the availability of tools and resources that optimize the HR training to the course objectives."</p> <p>f) "I had a great perception. It is a way of teaching that will surely change the paradigms of education in all media."</p>	<p>educational/ cognitive/ social</p> <p>cognitive/ social</p> <p>educational/ cognitive/ social</p> <p>cognitive</p> <p>educational</p> <p>educational</p>

<p>For you it was easy to adapt to the Moodle platform and use the tools available?</p>	<p>a) "When I started the course I had no idea of the process and interactivity, so I had a lot of difficulty, took the course and I was adapting, then it's easy." b) "I believe so. The platform was very peaceful. Maybe I have not explored all the possibilities ... " c) "Yes, the platform was easy to understand." d) "Yes I have familiarity with using the internet." e) "Very easy." f) "Yes, it is a very practical platform use."</p>	<p>educational</p>
<p>How the process of learning and socialization among professional participants of the municipality and its group during the course?</p>	<p>a) "It was very useful, exchange of knowledge, experience, we would meet every two weeks and discussed the problems, the work process, the case in question, the theoretical framework for solution." b) "We read the texts, made notes and we gathered in a room in the town hall, every one had its computer, discussing what had elaborávamos and the response and posted at about the same time" c) "In Amparo, we had multidisciplinary study group (multidisciplinary) which met to discuss the proposed activities. We discussed the issues and also discussed the postings of other students, as each protection professional was in different rooms (groups). It was a very positive change. " d) "Within my team at USF, knowledge sharing was partly hampered due to lack of interest on the part of the team, to acquire new tools to equip everyday. In the course of the group, rich exchange of experiences, with sharing of teaching materials (extra course) available. " e) "We did group meetings weekly with the permission of the manager and it was an enrichment in the content, with the democratization of knowledge among the participants." f) "We would meet periodically every 15 days for four hours, and there was also contact the Internet."</p>	<p>social/ cognitive</p>

The first analysis' variable, social presence, is the ability of students to project themselves socially and emotionally. Even in a virtual environment, students feel perceived as people, considering the asynchronous nature of the learning process.

According to Garrison (2007), it is fundamental in the process of learning, students feel socially and emotionally connected with each other. So the Virtual Café forum allowing open communication between all members of all groups (students, tutors and coordination), to exchange messages, texts and experiences of subjects off course or even your content. Another strengthening tool of the link between the team that teaching-learning process are the direct meetings between students and the tutor. The great advantage of the group of students in Amparo was the possibility of meetings to study and discuss the theoretical content and the referral of complex cases. More than meetings such as study group, those moments had strong social character of strengthening ties, creation of proposals and identification of a collective work in the ESF.

According to Garrison and Cleveland-Innes (2005) because of the possibility of open communication and the strengthening of group cohesion, social presence is necessary and essential for the development of cognitive presence. This, in turn, offers emotional security to enable deep communication that adds a common goal in the collective construction of knowledge.

The second variable analysis of inquiry community is cognitive presence, that is, the "students' ability to construct and confirm meaning through sustained reflection and discourse through reflection and communication among community participants" (GARRISON; ANDERSON; ARCHES, 2000). According to these authors, cognitive presence is expressed in practice in inquiry cycles, in which students are incited by triggering

elements moving through the exploration phase and understanding of the problem; the phase of integration with other content, knowledge, theories and thoughts of the group members, this being a reflection phase and relation- and, finally, the phase resolution and synthesis, which is the communicative action.

Cognitive presence has as triggering elements in the course Unasus / Unifesp, the problem situations presented in the complex case units, in which the tutor opens the course of the discussion forum with a guiding question. From the question, make an approach and exploration of the problem, referring to the theoretical contents developed in the following content units, the supplementary materials and contextualization. It begins thus a reflection and participation in the forum, in which the tutor explains their perceptions and works collectively and creatively, fulfilling the communicative action. This process also occurs in Scientific Methodology Unit and Course Conclusion Paper presentation, in which the contents are developed gradually, in stages and increasingly in complexity. Starting from a research problem, the student develops a literature review or an intervention project, including through scientific methodology, all the steps that lead to the Course Conclusion Paper (TCC). The course provides also continuous self-assessment process, because at the end of each content unit, the student answers to a questionnaire (in multiple choice format) and participates in evaluative forums, in complex cases, and guided activities in the face meetings.

The latest variable analysis at query community is the presence of education, which it is stratified into the following components: **institutional design**, **facilitating discourse**, and **direct instruction**. According to Anderson (et al., 2001, p. 5), the presence of educational "*Consists of the design, facilitation and direction of cognitive and social processes in order that students achieve learning outcomes*" and the institutional design is linked to planning,

- structural design processes - and the organization of the course. The second component, facilitating discourse, refers to mechanisms and methods that enable students to participate in the interaction and construction of learning. At this stage, it is fundamentally important interaction student-student and student-tutor, which automatically leads to the third component, direct instruction, which is the sharing of knowledge among students.

The Specialization Course in Family Health Unasus/Unifesp, in Amparo where professionals participated, has the variable analysis teaching presence being architected before the start of the course, because it is the way the course was planned, organized and structured learning strategies and interaction. Thus, we can identify some elements of this variable: participant's guide, course calendar, regulations and relevant legislation, monitoring participation in content units and complex case, face meetings, web conferences and student interaction with the tutor in the forums of units learning.

Correlating the questioning of assumptions community with the structural axis 1, proposed the goal of this study, it is emphasized, based on the narratives of the participants in this study, the clear and explicit nature of social presence, cognitive and educational.

When we observe the variable social presence, we can identify an affective and institutional connectivity among the Amparo municipality professionals, enabling open communication with strong academic exchange and group cohesion, strengthening the affective and security ties, as noted Garrison (et al., 2000). A strong point in this context was the availability of the local manager in enabling students to do meetings for study and discussion of the contents proposed in the course. This condition represented a positive qualitative differential highlighted in all narratives, collaborating with the findings of Oriogum (2003) eKanuka and Garrison

(2004), that a collaborative environment in a group learning is a strategy that can result in a level of learning greater than if the individual worked alone.

In the narratives of students, there were strongly associated elements with cognitive presence, as the identification and understanding of problems, integration with other theoretical content and a process of reflection: the possibility of synthesis of these discussions, with applicability in daily practice and work context.

With respect to the variable teaching presence, we can see how the **dynamics** according to which the course was planned and implemented enabled **richness discussions**.

Analyzing the narratives of students, we can identify a strong connection between social presence, cognitive and teaching, because, according to Garrison (et al., 2000), the three presences need to coexist and interact to optimize and facilitate learning. It may be noted a combination of narratives and feelings that support such appearances: to learn and teach, it is necessary to exchange and interact (social presence), from organized conceptual bases and objectives (teaching presence), making effective interdependent processes operations cognitive and cultural patterns (cognitive presence).

Lévy (2010) refers to virtual communities in the learning process as a stimulus to the formation of collective intelligences, that individuals can use to exchange information and knowledge. One can observe the course of Specialization in Family Health Unasus/Unifesp as a space for the exercise of learning; a space with an organized set of activities that act as smart filters, helping individuals to cope with too much information, but also as a mechanism that opens to alternative visions of a culture. A network of people interested in the same issues is a potential opportunity for the formation of ideologies, concepts and health practices.

4. REFLECTIONS ON THE STRUCTURAL AXIS 2

The structural axis 2 is called **Distance learning mediated by technology used by the specialization course in Family Health UNASUS / UNIFESP added changes to professional practice**. In this axis, the narratives of the participants will be analyzed according to qualitative methodology, discourse analysis, since according to Minayo (2010), personal stories are able to incorporate the question of meaning and intentionality as inherent to acts, relationships, social structures, which are understood as significant human constructions and evaluation.

"The course added knowledge and improved practice rescuing concepts; It was possible to socialize a lot of information at staff meetings."

For Argyris (1991), the learning environment has a significant role in the changes of professional practices, it implies not only the development of new skills, but a deep reflective process on the organization of the service itself. Has been identified in the narratives of the participants, the content, organization and structure of the course were strong inducers and catalysts in the professional practice change process, enabling us to reflect on the daily work, the relationships established team and relationships with other professionals working in the Health Care Network; providing better quality of care provided to the population.

"The course has created a framework, enabled a marking, more instrumentalized Community Agent and better patient care in team meetings giving greater support to the decisions and guiding actions."

Another point observed that meets the assumption of the continuing education (BRASIL, 2009 p.20), *"Where learning and teaching are incorporated into the daily life of organizations and work ... based on the*

meaningful learning and the possibility of transforming professional practices", it is that the course participants have become multipliers of the content and practices. This means that there was sharing of this knowledge with other team members, with community health workers and the local community in an important process for their professional practice. Is sought thus give meaning and life to the content learned in the course of specialization in Family Health, making them active and seized in work practice.

"Improved vision and teamwork, recognition of roles, improved dynamics of the service, although still unable to implement some projects that have emerged from the completion of the course (exchange of experience)."

"The course added knowledge and improved practice rescuing concepts, so it was possible to socialize a lot of information at staff meetings."

Continuing education is a powerful tool for institutional transformation, which facilitates the understanding, appreciation and appropriation of the health care model. This possibility of seeking professional qualification contextualize and deepen the reflection of the practice by integrating them with the real needs of população. Destro (1995, p. 26) defines continuous education as "any activity that aims to bring about a change of attitudes and / or behavior from the acquisition of new knowledge, concepts and attitudes."

"The course enables an extension of the look in the actions of the Family Health Strategy. The difficulty of bringing the team new concepts and proposals is the 'maturity of the team' which features different perspectives, because they are formed by different categories with different academic backgrounds and history of professional construction."

The virtual learning environment is a tool that enables deep reflection of the learning process and have influence on daily practice. According to Anderson and Krathwohl (2001), the use of communication technology to "distance mode" creates new educational opportunities, as it enables self-learning and learning control related to the autonomy of learning, which should be a process each more and more aware. One can observe this trend in the previous report, when the interviewee talks about "expanding the look" and "maturity of the team."

According Krathwohl (2002), the importance of the course meets the needs of participants and stimulate the extensive cognitive, lasting and deep development can be seen in this report, *"Balancing and underlain actions in the daily work, the course deepens the knowledge shared in forums"*. The course structure was used for educational strategies and technologies that made possible the acquisition of knowledge, and the development of skills and expertise, which has reflected in professional practice.

"The fact that some professionals in the city of Amparo doing the course, from different professions and occupying different positions from administration to unit management, and services to the community, enabled much progress has been made compared to what happens to other cities."

The support of the theory of andragogy, or of adult learning can be observed in the previous narrative, which makes a critical analysis of daily practice and context to professionals who participated in the course in their respective positions observing the influence of their performance in different scenarios.

The education processes of health professionals are guided from the questioning of the work process, and take into consideration the needs of training and development of

employees and transformation of professional practices and organization of work itself (BRASIL, 2009). The following narrative: *"A major problem observed is the relationship of the community agent with the community, it has to assume its leadership role and its actions"* basis for statements of Argyris (1991) that learning is a double circuit where besides, a review of the own conduct values, changes to the agenda of relations, because the status quo and changes it, creating interventions in organizations.

5. REFLECTIONS ON THE STRUCTURAL AXIS 3

The structural axis 3, **Opportunities and challenges in the implementation/ deployment of teamwork and the transformation of practices and organization of services**, is segmented into three aspects: the organization of the group, the change of professional practice, and the possibilities and challenges of the implementation of the transformation.

Understanding this affirmation from Ceccim (2004/2005) is to situate the various possibilities of transformation in the praxis of services.

The Continuing Education in Health field, while disputes for daily update of practices according to the latest theoretical contributions, methodological, scientific and available technology, is part of a necessary building relationships and processes ranging from the inside of the teams in joint work - involving its agents - the organizational practices - involving the institution and / or the health sector - and inter-institutional and / or inter-sectoral practices - implying the policies in which are part the health acts (CECCIM, 2004/2005, p.161).

With respect to the question: "How does the organization of study groups facilitated

the course activities and the impact on service?", we highlight the following narrative:

"The possibility to get together and study in groups was fundamental because the hours devoted to the course we met in working hours, it was fundamental to cohesion in the group and studies."

"So the management enabled the group of students to act as multipliers of knowledge and disseminators of the texts to the network."

"I was invited by management to join the team and hold a support group management, for as attending the course, the management proved open to new possibilities that the course was bringing with other viewpoints to central and local administration and training of teams . "

"The role of management was fundamental and indispensable."

One of the main features that differentiated the group from Amparo students was the support of management at the time, which allowed group meetings during working hours and in a physical space available in the city, every two weeks. Another relevant point is that the reflection in groups made it possible to deepen the content of the discussions and the feasibility of implementation of significant changes to improve services across the county reality in the various spaces of the Health Units of the Family Health Strategy. The warranty time for study was the local manager and criteria were suggested in the meeting of health secretaries. Today there is legislation that guarantee *Provave Mais Médicos* programs.

The distance education (DE) has specific characteristics, breaking with the design of the physical presence of the student and the teacher in the teaching-learning process, and the pedagogical act focused not on the figure of the teacher / tutor, but on the student.

Permanent health education is a fundamental strategy for the transformation of work among its employees and between managers of actions, services and health systems (CECCIM, 2005).

When asked the question: "The specialization course in Family Health Strategy has changed in some way their professional practice?", the respondents, through a metacognitive process, recognized the changes that occurred in their cognitive universe and work, allowing a qualification in their organizational practices in relations with staff and the community. But they highlighted the difficulties through collective Amparo workers - not all trained by the course - to implement the new proposals as well as the interdisciplinary inaccessibility team.

"Certainly, we can work more interdisciplinary, integrating more staff in the communities, educate users for their health and rights, working more with health indicators, a more skilled labor."

"I believe so! In discussions of complex cases, the meetings of my team (weekly meeting between the team area - ACS-doctor, nurse, dentist, oral health care assistant, nursing technicians, other NASF professionals). The evaluation scale of daily life and functional scale for priority users will be treated at home visit, as the bedridden patients and restricted ones. "

"I changed my theoretical knowledge, but in practice a lot is not carried out mainly interdisciplinary and inter-territorially. I see dentistry still a little far from the context of the Family Health Strategy, but is forwarding to improve it ".

There are significant changes in the narratives, and the students began to reflect on multidisciplinary practices with team integrated within the community, allowing the user awareness of the right to health

care. The course provided an enlarged view, enabling improvements in welcoming and multidisciplinary approach.

To Davini (2009), distance education takes on a strategic character in that it enhances the global dissemination of knowledge, providing the individual exchange with the collective, enhances the circulation of data and the development of debates, as well as allowing the accession of users more dynamically. It is a powerful tool for institutional transformation, facilitating the understanding, appreciation and appropriation of the health care model, seeking to contextualize and deepen the reflection of the practice integrated the population's needs.

For Ceccim (2005), the training of health professionals happens at work and for the work. It entails the transformation of the inserted care practice in humanized care networks geared to users of National Health System. "The educational investment is to be able to break what is given, expanding the range of notions of others and be creative spaces and sensitive in health production" (CECCIM, 2008, p.21).

The education assumes meaningful learning *"which promotes and produces senses"* and suggests that the transformation of professional practice is based on critical reflection on the actual practices of real professionals in action in the service network (HADDAD et al., 1994 p. 104). The purpose is thus the transformation of professional practices and organization of work itself (CECCIM; FEUERWERKER, 2004).

On the possibilities and challenges that have occurred in the deployment and implementation of changes in practices and in the organization of Amparo health service, it was highlighted:

"I believe that when the central management policy is clear, when the action

planning is done, thought, is more peaceful to work. The knowledge acquired during the course goes with us wherever we are! There are times when the motivation for change is greater and others that motivation go down. Sometimes the lack of openness to change the team mobilizes the team to take a step forward. Only a crisis to move down the line! "

"Health services are outdated in human resources for work, and there is no proper organization regarding the relocation of employees so that all may benefit toward the problem. There is no equity, or with users or with employees regarding infrastructure needs and materials such as autoclaving, which is essential today for the dental office."

The group described as implementation of the complicating factor the lack of human resources, and as a point facilitator of the change process, the presence of committed professionals. The clear guidelines on the management are a fundamental factor in the organization's strategy and teams. Even the difficulties become an important point to develop creativity and overcome the adverse variables.

According Zilbovicius (2007), higher education is faced with a major challenge when advancing the restructuring of human resources training for a job with the main health care framework is the National Health System (SUS). One must remember, after all, that education, to Libâneo (2005, p. 82), is *"the set of formative processes in the social environment, whether intentional or not, systematized or not, institutionalized or not."*

To Ceccime Feuerwerker (2004), health workers have the responsibility to verify the reality and produce meanings, aiming to collect, organize, analyze and interpret the reality with continuously information. They should also discuss the work and health

organizations and build meanings and practices with the active participation of managers, enabling integrated teaching - service - management - social control as proposed in the health quadrilateral.

To promote permanent education the Family Health Strategy (ESF), through its professionals becomes instrumentalized and able to exercise counter-hegemonic practices to care format to health, contributing to the construction of a health care model that ensures the principles and assumptions of the SUS.

The following transcribed below the perception of respondents in relation to advances in the organization of the services of professionals who performed Specialization in Family Health Unasus/Unifesp in the city of Amparo:

"I realize that some have expanded the vision in Public Health in the Family Health Strategy, and brought work tools as a team."

"But the vast majority of participants still limited to perform everyday tasks within their field and core operations."

"In 2014 there was a change of a representative of continuing education in the municipality, which I still see as fragile to reorganize the service in a short time. The management believes that continuous education was offered a few people, in a targeted way and almost always through courses outside the municipality without the participant's commitment to share the received information".

The use of the Moodle platform for developing training of Amparo municipality of professionals was an interesting strategy. The reports mention some issues that need to be addressed with all team ESF, in order to ensure its objectives: **What is the ESF's mission in the process of working in team, clinical**

management?; The role of each ESF team of professional in pursuit of comprehensive patient care; Health Surveillance; Singular Therapeutic Project; Fulfilling spontaneous demand in the ESF and matricial.

For Minayo and Sanches (1993), social awareness work should achieve three dimensions: the symbolic, historical and concrete. The symbolic dimension includes the meanings of the subjects; the historical privileges consolidated real-time and analytical space; and concrete refers to structures and social actors in relation, but also need to know that the experience and the living of a person occur in the context of collective history and are contextualized and involved the group culture in which it is inserted.

Thus, to express and evaluate the narratives of Amparo professionals involved in this research, it is observed that everyone believes in the pedagogical proposal of the course of Family Specialization Unasus/Unifesp realize how they have been aware, cognitively and emotionally. This perception considers that changes in collective labor are dependent of spaces for reflection process among all professionals of the ESF, and the willingness of management to consider the importance of this model for the development of primary health care.

CONCLUSION

It is concluded that there is no apolitical or unintentionally educational processes. In the process of continuing education, it is worth mentioning the nature and weight of the decisions and political will of the educational institution and the public policies adopted and practiced by the management of services.

The permanent education policies in Brazil, guaranteed by the Constitution, restore and strengthen the possibilities of integrating teaching and service-management-community. Make them feasible depend on a

number of factors involving social actors and the development of macro and micropolitics in the different territories.

Macropolicy (management) and the structural issues of municipalities, directly linked to the continuing education process, should be reviewed. From the perspective of services, refers to those who have the intention to develop dynamic and interactive processes, changing the practice of labor, ensuring infrastructure and ensuring that the concepts / objectives of training can be deployed efficiently, effectively and effective.

It can be observed that the city of Amparo, interested in revitalizing their collective work, invested in the registration and training of its professionals to the Health Strategy of the Family. In addition, changes in the political scenario may have interfered in the execution and consolidation of work processes learned in the course.

Affection in the teaching-learning process creates bonds and ties that move those that communicate the collective service, study and reflect on the work processes, and promote changes in micropolitical. In these spaces making, governance and empowerment of professionals can and should make sense that there may be changes.

In the narratives presented by Amparo professionals group, it stood out as relevant the possibility of participating in the Family Health Specialisation course of Unasus / Unifesp. The contents and the dynamics of learning have been individually made possible and reinforced by the study group, which met every 15 days to share thoughts, intentions and strengthen the construction of this organized group.

The meetings assisted the discussions in staff meetings where professionals were inserted. The doubts were shared by facilitating the theoretical understanding, the design of

strategies for coping with difficulties and referrals of viable proposals to the municipality. The Unasus / Unifesp has contributed significantly to the development of human resources for SUS.

The philosophy of distance education courses in the health field should be aligned with the purposes of the educational institution, management, services and community in order to ensure that the interests and practices are agreed and made effective to improve the quality of health care. The practice settings should be structured to enable the deployment of the contents seized in favorable environments, without which it the experience becomes a distant practice of theory.

The institutional reality is always in contradiction, it contains the affirmation and denial, acceptance and criticism in a dynamic process which is the midst of change. Who gives life to these transformations are the social actors involved in their groups of workers. In their daily lives, for to accomplish of what we understand as primary health care, they transform into reality the difficult task of reconciling and dealing with contradictions in professional practice: theory and practice, care and prevention, cost and benefit, health and disease.

Knowledge is given, imbricated and historically implied by society and the power relations that it represents: libertarian societies educate for creativity, freedom and growth and authoritarian societies help to cultivate fear, apathy and obedience.

Learn to live with these paradigms and recognize ways by which we choose and what we practice in our practices in education define our pedagogical choices, whether in classroom or distance, as educators.

Those who aim to build reflection and transform teaching and working practice have shared responsibility among various

institutional spaces, create learning opportunities and enabling practices committed politically at the federal, state and municipal levels.

REFERENCES

ASSOCIAÇÃO BRASILEIRA DE ENSINO A DISTÂNCIA. **Censo EAD.BR**: relatório analítico da aprendizagem a distância no Brasil 2012. Curitiba: Ibpex, 2013. Disponível em: <http://www.abed.org.br/censoead/censo-EAD.BR_2012_pt.pdf>. Acesso em: 25 jul. 2016.

ANDERSON, T.; ROURKE, L.; GARRISON, D. R.; ARCHER, W. Assessing teaching presence in a computer conferencing context. **Journal of Asynchronous Learning Networks**, Edmonton, v. 5, n. 2, p. 1-17, 2001.

ANDERSON, L. W.; KRATHWOHL, D. R. **A taxonomy for learning, teaching, and assessing**: A revision of Bloom's Taxonomy of Educational Objectives. New York: Addison Wesley Longman, 2001.

ARGYRIS, C. **Indivíduos dentro da organização**. Barcelona: Herder, 1991.

BRASIL. Ministério da Saúde. Portaria n. 198, de 13 de fevereiro de 2004: Institui a política nacional de educação permanente em saúde como estratégia do Sistema Único de Saúde para a formação e o desenvolvimento de trabalhadores para o setor e dá outras providências. **Diário Oficial da União**, Poder Executivo, Brasília, DF, 16 fev. 2004. Seção 1, p. 37-41. Disponível em: <http://www.funasa.gov.br/site/wp-content/files_mf/Pm_198_2004.pdf>. Acesso em: 25 jul. 2016.

BRASIL. Ministério da Saúde. Portaria n. 1.996, de 20 de agosto de 2007: Dispõe sobre as diretrizes para a implementação da política nacional de educação permanente em saúde. **Diário Oficial da União**, Poder Executivo, Brasília, DF, 22 ago. 2007. Disponível em: <<http://bvsms.saude.gov.br/bvs/saudelegis/>

[gm/2007/prt1996_20_08_2007.html](http://bvsms.saude.gov.br/bvs/saudelegis/gm/2007/prt1996_20_08_2007.html)>. Acesso em: 25 jul. 2016.

BRASIL. Ministério da Saúde. **Política nacional de educação permanente em Saúde**. Brasília: Ministério da Saúde, 2009. (Série Pactos pela Saúde 2006, v. 9). Disponível em: <http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_educacao_permanente_saude.pdf>. Acesso em: 25 jul. 2016.

CECCIM, R. B.; FEUERWERKER, L. C. M. O quadrilátero da formação para a área da Saúde: ensino, gestão, atenção e controle social. **Physis: Revista de Saúde Coletiva**, Rio de Janeiro, v. 14, n. 1, p. 41- 65, jan./jun. 2004.

CECCIM, R. B. Educação permanente em Saúde: desafio ambicioso e necessário. **Interface: comunicação, saúde, educação**, Botucatu, v. 9, n. 16, p. 161-77, 2004/2005.

CECCIM, R. B. Educação permanente em Saúde: descentralização e disseminação de capacidade pedagógica na saúde. **Ciência e Saúde Coletiva**, Rio de Janeiro, v. 10, n. 4, p. 975-986, out./dez. 2005.

CECCIM, R. B. A emergência da educação e ensino da saúde: interseções e intersetorialidades. **Ciência e Saúde**, Porto Alegre, v. 1, n. 1, p. 9-23, jan./jun. 2008.

DAVINI, M. C. Enfoques, problemas e perspectivas na educação permanente dos recursos humanos na saúde. In: BRASIL. Ministério da Saúde. **Política nacional de educação permanente em Saúde**. Brasília: Ministério da Saúde, 2009. (Série Pactos pela Saúde 2006, v. 9). Disponível em: <http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_educacao_permanente_saude.pdf>. Acesso em 25 jul. 2016.

DESTRO, M.R.P. Educação continuada: visão histórica e tentativa de contextualização. **Caderno Cedes**, Campinas, n. 36, p. 21-7, 1995.

- GARRISON, D. R.; ANDERSON, T.; ARCHER, W. Critical inquiry in a text-base environment: Computer conferencing in higher education. **The Internet and Higher Education**, v. 2, n. 2-3, p. 87-105, Spring 1999.
- GARRISON, D. R.; CLEVELAND-INNES, M. Facilitating cognitive presence in online learning: interaction is not enough. **American Journal of Distance Education**, v. 19, n. 3, p. 133-148, 2005.
- GARRISON, D. R. Online Community of Inquiry review: Social cognitive and teaching presence issues. **Journal of A synchronous Learning Networks**, v. 11, n. 1, p. 61-72, 2007.
- HADDAD, J. Q.; ROSCHKE, M. A., DAVINI, M. C. **Educación permanente de personal de salud**. Washington: OPS/OMS, 1994.
- KANUKA, H.; GARRISON, D. R. Cognitive presence in online learning. **Journal of Computing in Higher Education**, v. 15, n. 2, p. 30-49, 2004.
- KRATHWOHL, D. R. A revision of Bloom's taxonomy: an overview. **Theory into Practice**, v. 41, n. 4, p. 212-218, autumn 2002.
- LÉVY, P. **Cibercultura**. São Paulo: Editora 34, 2010.
- LIBÂNIO, J. C. **Pedagogia e pedagogos, para quê?** São Paulo: Cortez, 2005.
- MINAYO, M. C. S.; SANCHES, O. Quantitativo-qualitativo: oposição ou complementaridade? **Cadernos de Saúde Pública**, Rio de Janeiro, v. 9, n. 3, p. 239-262, jul./set. 1993.
- MINAYO, M. C. S. **O desafio do conhecimento: pesquisa qualitativa em saúde**. São Paulo: Hucitec, 2010.
- ORIOGUN, P. K. Towards understanding online learning levels of engagement using the SQUAD approach to CMC discourse. **Australian Journal of Education Technology**, v. 19, n. 3, p. 371-387, 2003.
- RIANO, M. B.R. La evaluación em educación a distancia. **Revista Brasileira de Educação a Distância**, Rio de Janeiro, v. IV, n. 20, p. 19-35, 1997.
- TURATO, E. R. Métodos qualitativos e quantitativos na área da saúde: definições, diferenças e seus objetos de pesquisa. *Revista de Saúde Pública*, São Paulo, v. 39, n. 3, p. 507-514, jun. 2005.
- ZILBOVICIUS, C. **Implantação das diretrizes curriculares para cursos de graduação em Odontologia no Brasil: contradições e perspectivas**. 2007. 211 p. Tese (Doutorado em Odontologia) – Faculdade de Odontologia, Universidade de São Paulo, São Paulo, 2007.