

# ASSESSMENT OF THE USE OF ONLINE COMUNITIES TO INTEGRATE EDUCATIONAL PROCESSES DEVELOPMENT TEAMS: AN EXPERIENCE IN POPULAR HEALTH EDUCATION IN BRAZIL

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## ABSTRACT

This paper is intended to share the results of the assessment of the use of the Online Work Community (OWC), developed in the Moodle technology that was used as an instrument to facilitate the educational and operational processes, intended to share problems and proposals for solution among the 470 members of the development teams, made up of educators, experts, technicians, managers and supporters, connected to the Popular Health Education Qualification Program, aimed at the qualification of the Basic Healthcare (*Atenção Básica à Saúde* - EdPop-SUS), through the examination of the issues concerning educational practices related to health in the disadvantaged communities of the Federal District and 8 other Brazilian states. The Program, based on critical pedagogy (FREIRE, 1997), sets forth three stages of a familiarization course aimed at 17 thousand healthcare professionals, and another one for a deeper level of understanding, for 8 thousand alumni of the first course. The assessment methodology is based on the Dialogue Assessment (ROMÃO, 2005), in which the assessment took two paths for analysis, a quantitative one and a qualitative one. The first one occurred by means of a survey of the perceptions of the participants, recorded in two online self-applied questionnaires, with open and closed questions that focused on the access, guidance/navigation and functionalities. The other one through the observation of the posts and interventions in the different online spaces of the OWC. The quantitative analysis ratified attendance as a still important characteristic in the Popular Education field, due to the difficulties pointed out by the participants regarding access (31%) and navigation and guidance (42%). The qualitative analysis, having as Speech Analysis as basis, revealed the wealth of the construction process by means of the shared statements and productions, totaling 159 products connected to culture and art. In addition, it evidenced the problems faced, the “political” category being the most significant one for the participants. Thus, the assessment concluded that the OWC allowed social integration between educators and team members, contributing to the implementation of the National Popular Health Education Policy, a government action that brings care, absence of centeredness, dialogue and respect to the community cultural diversity as premises for its implementation.

## KEYWORDS

Popular Health Education, Online Communities, Community Healthcare Agents, Unified Healthcare System (*Sistema Único de Saúde* – SUS).

## 1. INTRODUCTION

Professional education currently works with elements connected to the civilization milestone of modernity that encompasses reflection, culture and subjectiveness. Within such context, the starting point for learning is the understanding of education as a social interaction experience by language and action (Vygotsky, 2003), intended for the creation of a learning, speech and practice community, in order to produce results, understanding for critical action, exercising learning through cooperation and autonomy, ensuring the centrality of the individual in the construction of knowledge and allowing cognitive and affective results, and those aimed at actions (COELHO, 1999).

Regardless of whether the modality of education is class-attendance or at a distance, the perpetuity of such integration is sought, by means of Technologies considered to be mediators of human wealth; environments able to promote the meeting of people by transcending time and space: the so-called Online Environments. Beyond communication, within an educational context, such environments are expected to contribute to the intuitive search and shared construction of knowledge that is no longer individual, to gain a collective dimension. Thus, even if they are in different physical spaces, the social relationships gain power insofar as, in such environments, active expression and participation are valued.

In relation to the concept of health, it currently transcends the purely biomedical understanding of absence of illness, to give preference to quality of life, incorporating the notion of promotion of health. This new paradigm presupposes social participation as a crucial element to reach equity, universality of assistance and integrality of healthcare, principles that are the goals of the Brazilian healthcare system – the Unified Healthcare System (*Sistema Único de Saúde - SUS*).

The structuring of public policies aimed at healthcare in communities goes through popular education strategies involving the Basic Healthcare professionals and the population itself, so that they see themselves as health promoters and, in case of the professionals, as healthcare agents in charge of the mediations in the health scope, within a concept of State. Logically, social actions related to health assume an educational axis, for it is only through it that new authority paradigms can be turned into new ways of seeing, understanding and working with health. Such new participative concept of healthcare may be appropriate in a country of continental dimensions.

Popular Health Education (EPS) allows the approximation and dialogue among the popular knowledge, the scientific medical knowledge, the healthcare professionals and institutions. The EPS constitutes a movement expressed by the healthcare practices, production of shared knowledge and constitution of subjects and political players in the health field (BONETTI, PEDROSA, SIQUEIRA, 2011).

The main professionals connected to the EPS are the Community Healthcare Agent (Agente Comunitário de Saúde -ACS) and the Health Surveillance Agent (Agente de Vigilância de Endemias - AVE), people who were born, live and work in the communities, understanding their realities and healthcare needs. Such work, however, has been faced with outdated and authoritarian guidelines that set forth a mere fight against disease instead of working on its causes, together with the populations, incorporating the local realities involving cultural and environment dimensions.

In October, 2011 the National Basic Healthcare Policy (PNAB/2011) stressed that Basic Healthcare occurs by means of care practices and democratic and participative management, also ratifying the educational activities as duties of such agents, so as to promote health and prevent disease. Two years later, Ordinance 2,761/2013 instituted the Popular Healthcare Education Policy (Política Nacional de Educação Popular em Saúde - PNEPS-SUS) that, among other elements, proposes a political and educational practice to guide the actions aimed at the [...] promotion, protection and recovery of health, based on the dialogue among the several kinds of knowledge, valuing popular knowledge, ancestrality and incentive to individual and collective production of knowledge...” (BRAZIL, 2013).

As the main strategy to contribute to the consolidation of PNEPS-SUS, in October, 2013 the Popular Healthcare Education Qualification Program (EdPop-SUS) was launched, a fruit of the partnership between the Strategic and Participative Management Department of the Brazilian Ministry of Health, the National Public Healthcare School (Ensp) and the Joaquim Venâncio Polytechnic Health School (EPSJV), the latter units being members of the Oswaldo Cruz Foundation (Fiocruz), a federal institution connected to the Ministry of Health, headquartered in the city of Rio de Janeiro and with 6 other regional centers in Brazil.

EdPop-SUS was developed to qualify the educational practices in the basic healthcare field by means of the formation of ACS and AVEs that, mentioned in the Brazilian Healthcare System principles, develop

educational practices of social mobilization, health promotion and equity, its political and educational reference being the Popular Health Education (invitation to bid, 2014). It is structured in an awareness course made up of three 53-hour stages for 17 thousand agents and another stage, for a more in-depth understanding, for 8 thousand agents, qualified of the first offer. The EdPop-SUS is a great challenge in the Brazilian public health field, seeing as in addition to the social inclusion of such players, it also sets forth the digital inclusion of 17 thousand agents that have been historically deprived of access to consumer goods, including digital access technologies.

Due to the fact that it involves the Federal District, in addition to 8 other Brazilian states, the Popular Health Education Qualification Program relies on the decentralized participation of a multi-professional staff of approximately 470 professionals, each of them dealing with the regional specificities typical of a continental country. Due to that, in addition to the educational dimension inherent to all collective construction process, such action has, as the crucial element of the shared management of processes, an Online Community containing spaces intended for the sharing of ideas and experiences, the Online Work Community – OWC. The interaction among the teams occurred by means of discussion forums in which the work teams exchanged experiences, impressions and doubts about the development and implementation of the course.

This paper is intended to show the results of the assessment made with the faculty and work teams about the experience with the OWC, connected to the Popular Health Education Program ([www6.ensp.fiocruz.br/edpopsus](http://www6.ensp.fiocruz.br/edpopsus)) in progress, pertaining to the first stage of the awareness course.

## 2. THE ONLINE WORK COMMUNITY (OWC) ASSESSMENT AND ITS ANALYSIS

The political and educational guideline of the Popular Health Education Awareness Course, based on socio-constructivist grounds, considers that learning is a complex process that occurs within a social context by means of the interaction among cultural agents that go through new experiences, which are compared with other experiences already lived, thus favoring the development of new mental schemes expressed in individual and collective knowledge (BARILLI and PESSÔA, 2013). Add to that the critical pedagogy guideline that understands education as being the practice of freedom that, by means of the critical understanding of reality, renders the subject politically able to free him or herself from forms of oppression (SANTIAGO, 2012), considering that knowledge belongs to a greater act, that of knowing, thus being the epistemological element of the action of learning (FREIRE, 1997).

Due to the innovative nature of the EdPop-SUS, the development and implementation activities were considered to be learning experiences for the 470 members of the teams. For such, in addition to the OLC, an Online Work Community (OWC) as made available, intended for the follow-up, from a management and interaction and support opportunity viewpoint, but The OLC is not the purpose of this paper, which is dedicated to the assessment of the Online Work Community (OWC).

The OWC is an online environment supported by the Moodle technology, developed so as to promote integration between the work teams connected to the EdPopSUS and to facilitate the decentralized and shared management of the teaching and operational processes.

We must stress the importance of being able to provide an environment for human communication/interaction, research and collective construction.

The OWC's structure expresses the work processes related to the development and implementation of the course, composed by: a) Online Mediators' Room – a space where the mediators receive educational support from professional education experts, in addition to popular educators and learning instructors; b) Coordinators and teams forum – intended for the sharing of solutions and strategies implemented in the state centers; c) Exchange forum – This forum is for general use, intended for the sharing of News and documents, needs, doubts regarding the work process and; d) Doubts regarding the Online Work Community - support to the doubts regarding the navigation and use of the OWC's tools. The support, in this space, is distributed by each participant state.

In addition to the process development teams, the Program also relies on the participation of the faculty (185 participants), which comprises three different profiles: 1) The *Mediator* – teachers responsible for the learning relationship with the student; 2) *Popular Educator* – professionals of any level of qualification, but who have solid experience in popular healthcare education practices with disadvantaged communities. Their duty is to provide support to the mediator in the teaching work, by means of their experience and popular educators; and 3) *Learning Instructor* – working as theoretical, methodological and educational reference for the faculty (mediators and popular educators).

In order to be coherent with the educational guidelines adopted, the assessment of the OWC followed the “Dialogue Assessment” approach, that affirm that the purpose of which is to allow the different players involved, whose fields of judgment are often different, to be apt to take a stance in order to build, individually or collectively, a judgment that could be translated into action. Thus, having previously established criteria and methods as basis, the assessment subsidizes the decision-making process that will support future actions (ROMÃO, 2005).

Within such logic, from a methodological point of view, the assessment followed a quantitative and qualitative guidance, the latter supported by the methods of content analysis and discourse analysis. Thus, the OWC assessment followed two paths, one with a quantitative emphasis and another with a qualitative one. The first one was through two online self-applied questionnaires, with closed questions, developed in the *Online Assessment System*, made available at the institutional web address ([pesquisa.ead.fiocruz.br](http://pesquisa.ead.fiocruz.br)), touching upon the easiness of access, guidance/navigation, tools and functionalities. Due to its not being required, the first one, intended for the faculty, was replied to by only 127 people. The second questionnaire, aimed at the other members of the work teams, was replied by 43 people.

The quantitative analysis was based on the results of the questionnaires, number of interactions and products shared in the different online spaces of the OWC.

The second methodological path, of a qualitative nature, occurred by means of the observation of the “speech” of the participants, expressed in the posts and interventions in the different online spaces of the OWC. The assessment was therefore focused on the content of the interventions, seeking to group them into the following significant categories: experiences lived, problems faced, cultural expressions,

The qualitative method of assessment adopted was the Speech Analysis, following the principle set forth by Rocha and Deusdará (2005), that *the text of the informants’ replies forms a surface to be explored, from which “psychological qualities” emerged in relation to the object* (p.331), herein considered to be the dialogues posted on the OWC.

### 3. RESULTS

The access to, as well as the guidance and navigation in the OWC, were considered difficult, perhaps due to the participants’ profiles, since in the Popular Education attendance is one of the main characteristics (Figures 1 and 2), followed by the difficulty in accessing Internet in some of the communities located in the countryside of Brazil, where the mediators live and work.

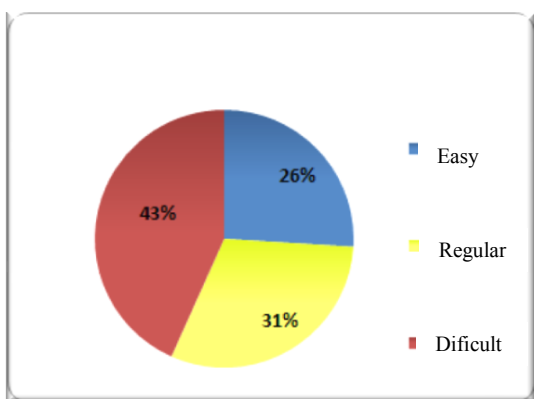


Figure 1. Access to the OWC

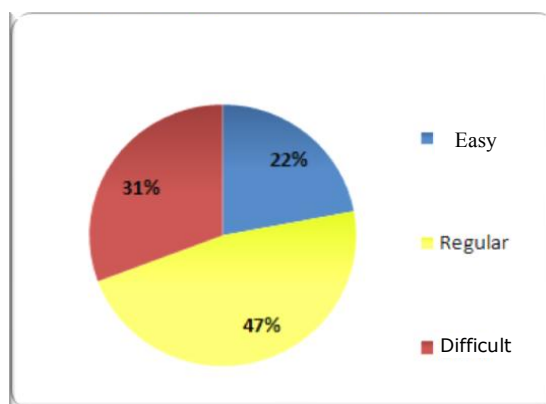


Figure 2. Guidance and navigation in the OWC

Even though considered to be simple activities, demands regarding difficulty in changing passwords, posting of images and sending of messages were recurrent.

In spite of the difficulties evidenced by the results show, we must highlight the fact that in this first stage of the Course it was not possible to hold the (practical) training on the OWC, due to the unavailability of places with computers upon the initial qualification of the faculty, which could explain the participants' difficulty in using the functionalities of their virtual spaces. Even so, table 1, shows the wealth of productions shared in the OWC.

Table 1. Survey of productions shares on the OWC, distributed by participant

Products	CE	PE	BA	DF	SE	RJ	SP	RS	PI	TOTAL
Poetry	2		6	3			2		1	14
Pictures	33		22	1	4	1	21			82
Videos							6			6
Texts	3			1						4
Assessments	1	2	4	1	1	1	43			53
<b>TOTAL</b>	<b>39</b>	<b>2</b>	<b>32</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>72</b>	<b>0</b>	<b>1</b>	<b>159</b>

States of Brazil: CE = Ceará, PE = Pernambuco, BA= Bahia, DF= Federal District, SE=Sergipe, RJ=Rio de Janeiro, SP=São Paulo, RS=Rio Grande do Sul, PI=Piauí.

The qualitative analysis sought to prioritize the expressions of experiences lived, perceptions, doubts and confessions, and how it contributed to the development and success of the Program and personal growth of the participants.

Even though the use of all spaces had been instructed, there was a certain confusion in the posting. We can mention as an example the news forum, which was used to share reports on experiences lived during the course, in addition to requests for support regarding the procedures and use of the OWC.

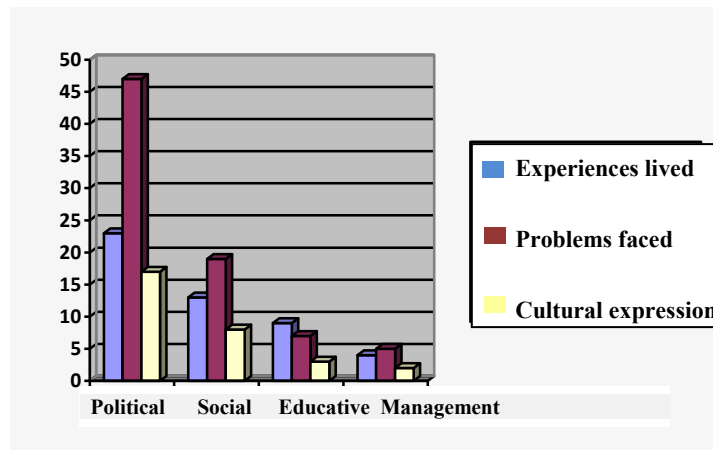
We noted that Learning Instructors (LIs), Popular Educators (EPs) and Mediators prioritized the posting of information on what was done (experiences) in the class-attendance moments, field work and impressions, as a way of sharing their experiences, which fact ratifies the hands-on learning of popular education. One of the most interesting contributions reported in the OWC was the mediators' efforts to create electronic addresses (e-mail) for the students, in order to allow them to access the OLC. The expectations and concerns related to this activity were often shared in the OWC, in the Mediators' Room space.

For the analysis of the speech of the subjects, in the OWC online spaces, also according to Rocha and Deusdara (2005), the researcher makes a *floating reading*, which is the basis for him or her to formulate his or her hypotheses, to be validated or not in the subsequent stages. After that, the researcher extracts criteria to classify the results obtained into *categories of signification* (p.313). On the other hand, for the same writers the Speech Analysis Works on the meaning, and not only the content, seeking to bridge the distance between the research question and the question aimed at the participant, integrating textual organization (contents) and social context. The text is, thus, seen as the materialization of the speech (p.321).

Thus, the analysis tool 157 posts in the OWC interaction spaces into account, of which the floating Reading as made, based on which 3 dimensions were formulated: experiences lived (97 posts), problems faced (more recurrent, with 112 posts) and cultural expressions (52 posts). Based on the dimensions surveyed, signification categories emerged, shown in Table 2. The "Political" category proved to be the most significant one for the participants, as shown by Graphic 1.

Table 2. Signification categories identified based on the posts to the OWC

DIMENSIONS	CATEGORIES	POSTS AT THE OWC
EXPERIÊNCIAS LIVED	POLÍTICAL	Let's not be afraid to create... let's dare! Going over the institutional walls doesn't mean <b>only opening the range of multiple possibilities of creation of knowledge.</b>
	SOCIAL	As a learning subject... I acquire voice and speech... here among you... I am concrete existence... turned into living contents.
	EDUCATIONAL	The search for acknowledgment of the forms of resistance of the community, as well as potentials, organization and popular mobilization, considering the development of a critical and reflective thinking on the concrete reality lived by the healthcare professionals in their daily work lives and their territory, connecting popular education to life.
	MANAGEMENT	Knowledge of reality – knowing a bit of the local healthcare network, the history of the neighborhoods, of the people who live there, respecting the colleague, exchanging experiences, respecting the popular knowledge, listening to the community.
PROBLEMS FACED	POLÍTICAL	The public policies confine the healthcare work with the communities to epidemiological surveys (filling out of forms). <b>The data is more importante than people.</b>
	SOCIAL	Inability to handle social problems affecting the community's healthcare levels: violence, alcoholism, drugs.
	EDUCATIONAL	Adaptation of the teaching models to the Popular Education reality
	MANAGEMENT	Social inclusion also comprises digital inclusion.
CULTURAL EXPRESSIONS	POLÍTICAL	For the implementation of a policy with the PENEPS-SUS..."change is necessary", for the forms of healthcare education... there must be "new reflections" and for the professionals and the community to realize that.
	SOCIAL	Cultural expression as an element of community integration (the <i>vaquejada</i> holiday, <i>bumba meu boi</i> , rhyming, verse, poetry and <i>cordel</i> ,
	EDUCATIONAL	Cultural expression in the healthcare educational practices - speaking the "language" of the population in the communities.
	MANAGEMENT	The expressions, discoveries of potential, a new look of the community.



Graph 1. Posts on to the OWC pertaining to the signification categories

## 4. CONCLUSIONS

One of the challenges faced by the PNEPS-SUS is the social insertion of the Brazilian disadvantaged communities. The path taken was the improvement of the basic healthcare levels through the qualification of the educational practices in the health segment, carried out by the healthcare agents that work in such communities. The barriers of access to production goods for the majority of the Brazilian communities has historically confirmed, in Popular Education, class attendance in the courses as a path for exchange and fight, materialized as popular movements that prioritize art and culture, a context that can explain the wealth of the products shared in the OWC in spite of the difficulties in using it, pointed out by the participants. Note that mediators could only post products due to its direct contact with students in person meetings.

The hands-on nature of Popular Education, which stood out in the posts to the OWC, revealed the speech of the educators and teams, pointing out the potential and challenges of the territory and the need for change, both of the professional's outlook on his or her own work process and of the ways of teaching and working with health in the communities that are, still today, very centered around authoritarian models that defend medical authority.

The qualitative analysis revealed the "Problems Faced" dimension to be the most frequent and, based on that, the "Political" category to be the most significant one for the participants, contributing to the systematization of the participants' speech in relation to the feeling of increased precariousness of the work of the community healthcare agents and health surveillance agents, which before the PNEPS-SUS was limited to the filling out of epidemiological questionnaires, leading to the interpretation that the numeric data are more important than people.

Such result confirms the importance of the PNEPS-SUS as a policy that, in addition to acknowledging the importance of such professionals for rendering the concept of health promotion concrete and spreading it by means of dialogue (FREIRE, 1997), a step-up from the purely biological concept that works with the disease, also focuses on *dialogue, care, discussion, shared construction of knowledge, emancipation and commitment to the construction of a democratic and popular project* (AGADIR and WIMMER, 2013, p. 16). In addition to the political dimension, the work also contributed to the systematization of the educational dimensions, in the individual and collective understanding of the role of each professional and health promoting agent, and thus assigning a new meaning to the practice thereof; of management, insofar as both educators and teams join efforts to reach consensual goals, and finally healthcare as it related to the singularity of each subject, or how individual experiences his or her illness, considering such act to be the result of a process of reflection on the reality that triggers the will to change, to do something, producing new meanings.

Such training contributed to the creation of spaces for the support to online access in the states, in order to ensure the access by students and educators.

For the second stage of the awareness course, the educators will be expected to be able to use the Online Community and its functionalities, identifying the OWC as the center of exchange among peers and especially of educational support, aiming at contributing with the qualification in Basic Healthcare by means of the shared construction of a new outlook on the educational practices in the communities.

The OWC, as a means for human integration, contributed both for promoting meetings and for recording the wealth of human production within a concept of sharing and collective production. The use of Online Environments in educational processes already finds, in the literature, solid references to its role as an instrument of support to shared construction. This paper, however, sought to evidence the use thereof as an instrument that collaborates to the implementation of public policies, having Popular Education as a theoretical and practical guideline, within the Brazilian healthcare segment, which by itself evidences its innovative nature.

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