



HEALTH EDUCATION AND SOCIETY IN MEDICAL TRAINING:

*problemатization as a
teaching resource*

**WALKIRIA SILVA SOARES MARINS
ADILSON PEREIRA**

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ADILSON PEREIRA

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PRESENTATION

This e-book was prepared with the objective of providing a didactic support material to teachers working in the areas relevant to Collective Health, Health and Society. This material proposes activities of a practical nature that can be used both in the classroom and in the field of internships. Although it is a proposal for the medical course can be used in different courses in the health area, because it is an interdisciplinary theme with regard to the field of health.

The activities proposed here follow the active methodology of problematization based on the theoretical approach of interactionism. The authors of this work work in the teaching of undergraduate medicine and it was submitted to peer review. Our expectation is that this material contributes to the teaching-learning process of the students and for this the activities proposed here seek to develop not only cognitive skills, but also relational ones, allowing the student to reflect and develop self-management of knowledge.

INTRODUCTION

When we are faced with a work of art like an impressionist painting by Monet, we think how hard that artist has strived to produce it; every detail, the incidence of light, the retraction not of the real, but of how reality presents itself to it. However, before positioning himself in front of the screen and flowing the pictorial construction, he chooses the colors, shapes, brushes and, in each stroke, will give his touch. The work of art requires a meaning, which goes beyond the proposition of the artist, because, who contemplates it, also interprets it in an optics that is defined by subjectivity. The value of the work, of course, cannot be measured only by material cost, nor by the tools and techniques used, but by how much the work itself affects the observer, producing a unique experience.

A possible interpretation to describe the teaching-learning process would be this metaphor. There is no way to produce new knowledge without being affected. The construct of our cognition is somehow tied to the meaning we give to the given object of study. The scenario, the actors, the content, are built in a limited governance movement, where the active subject is invited to expose himself. The praxis of teaching can only allow an effective action, capable of producing new meanings if it is significant, I dare say that it needs to have meaning for both the student and the teacher. Teaching needs to be pleasurable, critical, reflective, potential trigger and empowering.

The knowledge that is built in a medical course is not unrelated to subjectivity, as much as some consider what is produced by this way of thinking considered as non-scientific, there is no way to completely undress the i of the object of knowledge. For the production of knowledge, we use methods. These, as far as he is concerned, must have a certain flexibility when faced with the unpredictable, which escapes our governability in planning as Carlos Matus (1991) would say, to be able to recreate new constructs, new approaches to what the path presents to

us. For Matus, the plan is actually surrounded by uncertainties, so when we plan we should elaborate a situational diagnosis where problems should be detected and explained based on the situation that occurs in order to allow the action and coping of these. From this point of view the plan becomes a kind of social game, where other players with other perspectives present themselves.

The teaching method should anchor its bases in a plan that meets these uncertainties, which allows the other actors inserted in the process to be more than co-participant, but bring their experiences to the construction. The same author mentioned above will present to us that a situational strategic plan should be based on two aspects: an action plan and one of demands and complaints resulting from the cooperation or opposition of the other actors.

Well, what we pointed out earlier leads us to an inquiry: to be an educator is to transmit knowledge? Is this your role? If we believe in this proposition we are bankrupted by the failure of what we call educational empowerment. The authorship of this work is by a physician who works in Family Health, with knowledge in Public Health and who accompanies students of the medical course of an institution, having experience the promotion of contents related to the collective health/health and society axis. The perception that students produce better knowledge when immersed in experiences has gained an approximation to the theoretical scope of interactionism, which argues, among other things, that learning has better development when mediated between peers.

In a specific way, the practice of preceptorship of the medical course in modules 1, 2 and 3, in addition to those implemented in the boarding school, opportunityed to observe how the relationship between peers who interact students of different modules occurred spontaneously and how much knowledge was produced in these interactions. The experience was more enriching in the Teaching and Work Program (PET-interprofessionality), realizing that the training was often built on breaking borders, in a process of approximation, estrangement, bottleneck

and expansion. The approach took place in the search to find affinities of instructional baggage, strange ness when they perceived themes in common in fields of knowledge and different ways of thinking about the same issue, bottleneck to find a synthesis in exchanges and expansion when they perceived that knowledge had several faces.

All the actors in this process have some baggage, a story, which can produce conflicts because they are different, but capable of generating new knowledge. In this sense, it is necessary to have spaces that allow interaction and consensus about the new knowledge that arises from the relationship between differences.

As we pointed out earlier, interactionism represents a path to this approach and the adoption of pedagogical resources such as active methodologies represent a gain of knowledge, development, skills and competencies. This is, therefore, the synthesis of our proposal for intervention with the students of the medical course, having as object the teaching based on the implementation of a tool called Problem Basic Learning (PBL), as an active methodology to be implemented in the teaching-learning of contents related to the collective health/health and society axis. In summary, the PBL enables a teaching methodology based on problematization and problem-based learning. Thus, it emerges as a fundamental question of this e-book: how to approach the teaching of contents related to the theme Health and Society in medical graduation, using as an instrument the problematizing methodologies?

In this sense, we present the proposal of this material, in order to solve the question set out. Therefore, this material aims to equip teachers who work in medical training for the use of didactic methods based on problem-based problematization and learning, being an active methodology that provides with the purpose of developing competencies established in the curricular parameters of medicine. To this end, the material has been segmented into the following chapters:

- 1 History of medical education;
- 2 Interactionist theories and meaningful learning;
- 3 Differentiation of practices: Methodology of Problematization and Problem-Based Learning;
- 4 Proposal of practical activities with methodology of problematization and problem-based learning on the themes:
 - Health Management (SUS organization; epidemiological surveillance; health indicators; worker health; teamwork);
 - Health and environment education;
 - Management of care and doctor-patient relationship;
 - Family Health Strategy.
- 5 Complementary themes in Public Health.

In the following pages we will present situations to be used in the classroom (problem-based learning) and ways of working on problematization in internships and boarding schools. Remembering that they are didactic suggestions, but nothing prevents the teacher from creating new situations with the students. Welcome to our didactic walk in health teaching and society/collective health.

CHAPTER 1: THE HISTORY OF MEDICAL EDUCATION

Medical education as we know it today has undergone different transformations until we have reached what we conceive today as medicine. In this chapter, we will discuss the historical construction, knowledge of the field of medicine, as well as the model called Flexerian was gradually undergoing changes from new ways of thinking about medical training. Thus, concepts such as biomedical model (Flexerian), preventivism model, (40s and 50s), model of community medicine (60s), social medicine (late 60s and early 70s) and collective health (late 1970s), which at the end of the 1980s, when in contact with knowledge of the social sciences, emerged as a model of medical training, based on the relationship between Health and Society, will be addressed here. (OSMO; SCHRAIBER, 2015).

The history of the construction of medical knowledge was based on some aspects of thought: philosophy, religiosity, mysticism, empiricism, modern science, among others. Thus, the healers with their practices that mixed with magic, the barbers who visited the communities with their techniques, including tooth extraction and potions, and the first (scientific) systematizations produced by the so-called physicists were expressed as forms of understanding and instrumentalization of medicine in some moments of history. The conception of the disease and the way it dealt with the body issue is also something that underwent impactful transformations, in the beginnings the conception of disease was tied to religious punishment (NOGUEIRA, 2007). In the film *the physical*, we can perceive under the cinematographic translation the difficulties that medical science encountered to explore his knowledge about medical physiology, since the manipulation of the body was something forbidden and the first theories were based on assumptions and the transmission of this knowledge was restricted to few who could afford it. (film "the Physical"; POLIGNANO; GUSMÃO, 2004).

Since ancient Greece, philosophers already spoke on the question of the body, Plato attributed the pre-existence of the soul to the body,

Aristotle in turn believed that there were two constituent principles of organisms, matter and form. The Greeks of this period attributed the disease to the punishment of the gods. Hippocrates (460 a.C.) seeking to explain the disease of the body, presents four types of organic fluids that will call moods, they are: black bile, yellow bile, phlegm and blood. The disease would occur in this way, from the imbalance of these moods. (CASTRO, 2006).

Claudio Galeno (130-200), physician of the Roman emperors, presents the conception that in the blood vessels there was blood and not air as the scholars of the time believed, although maintaining the theory of humors adds the 4 temperaments: blood, phlegmatic, melancholic and choleric. In the same period the treatments were based on herbs, purgatives and sangrias. In the Middle Ages, it was medieval, the disease will be seen as punishment and its treatment was based on prayers. Even Galileo we can observe that basically the doctors used as method, observation and experimentation. Thomas Sydenham (1624-1689) will state that learning medicine should be done at the bedside of the sick and that there was a natural history of diseases. It is in the 19th century that experimental animal research began with Claude Bernard, Pasteur discovers the "microbes", and the first anesthetic practices emerge, introducing the foundations of current medicine. It is still in this century that they arise to radiography and anatomical advances. The 20th century begins with the discovery of electrocardiogram, insulin, hormonal therapies, penicillin and antibiotics. The emergence of various diagnostic and therapeutic procedures contributed to a more academic medical training. (GOTTSCHALL, 2010).

Many barriers have been established in medical training. Brazil itself had its first doctors trained in Europe during the colonial and imperial period, which had also restricted the portion of the population that had financial conditions to pay it privately. The population living in Brazil during this period still had fears about the treatments proposed by medical practice that used purgatives and bloodletting. (FILHO, 2008).

In the 20th century, with the expansion of medical schools, there is a need for a systematization and standardization of the training of this professional. A well-known model among those who are dedicated to teaching with a view to medical training is the Biomedical, also called flexenerian, which arises with the preparation of the Flexner Report in 1910 in the United States and Canada. This model was based on positivist scientism, where the body considered healthy was that disease-free, there was in this conception the centrality over the physician, who was part of the elite. The curricula should be based on a grade considered basic (with knowledge offered in laboratories) and a clinic. The disease should be seen as individual, in this perspective medicine should not deal with the collective or the social. (PAGLIOSA; ROS, 2008).

Another characteristic related to this biomedical model was the centrality of medical practice in the hospital, considered as a place/laboratory of constitution of medical knowledge, hence the resulting expansion of medical knowledge in the form of specialties. (CRUZ, 2013).

Brazil has also been influenced by this model, as different countries in the world, having great impacts on the structuring of medical school curricula. The transition of the biomedical model also went through preventivism (1940s and 1950s), community medicine (1960s), social medicine (late 1960s and early 1970s) and collective health (late 1970s). (OSMO; SCHRAIBER, 2015; MOTA, 2018).

During the republic what prevailed was the sanitary model, also called the sanitary police, which had Oswaldo Cruz as a striking figure. Where campaigns were made based on immunization and fights against epidemics such as yellow fever, plague and smallpox. In 1923, through the Elói Chaves Law, the first form of social security in Brazil, of railroad workers, where they guaranteed taxpayers retirement, medical and drug treatment. Later, in the 1930s in the government of Getúlio Vargas, the first forms of expanded health care emerged, such as CAPs (Retirement and Pension Funds), followed by the IAPs (Institute of Retirement and Pensions) and INAMPS. Assistance to the poor population was imple-

mented by some programs in Health Centers: vaccination, childcare, leprosy, tuberculosis, sexually transmitted diseases and women's health, more specifically prenatal care. (FILHO, 2008).

The Declaration of Alma Ata (1978) and the Ottawa Charter in Canada (1986), where they advocated health for all in 2000 and health promotion respectively served as precursors to the Brazilian health reform. Another important milestone in Brazil was the VIII National Health Conference in 1986 where health begins to acquire the character of law. The Constitution of 1988 and law 8080/90 are the primary documents for the institution of the SUS. (MENDES, 2004; UGLY, 2015; GIOVANELLA et al., 2019).

In 1991, the PACS (Community Health Agents Program) was founded, whose team consisted of CHA (Community Health Agents) and nurses. This first program, worked in regions of the interior of our country. The number of infectious diseases has begun to decline and the number of immunizations begins to be increased. As the impact was great on health indicators, the Federal Government decided to expand the program by establishing in 1994 the FHP (Family Health Program), which was composed of CHA, nursing technicians, nurses and physicians. The program had some characteristics, worked with adstrita area, number of families registered, consultations of general practitioners (attended children, adults, elderly and women's health). With the success of the program came to expansion, motivated by the support of users, the Ministry of Health proposed the conversion into a strategy that would order primary health care, without expected termination.

Currently, the ESF is composed of general practitioners or specialists in family health, or family and community physicians, the general nurse or specialist in family health, nursing assistant or technician and CHA, and may or may not incorporate oral health. The latter is composed of a generalist dentist or family health specialist and auxiliary, or oral health technician. Each ACS professional must be responsible for a maximum of 750 people, being accepted up to 12 CHA per team. The area should be accommodated up to 4000 people (the recommended

average is 3000 inhabitants). (BRAZIL, 2017). In 2006, Ordinance No. 648 of the Ministry of Health establishes the FHP as a priority strategy to organize primary care and is based on universal and continuous access to quality health services. This ordinance will reaffirm the basic principles of the SUS: universalization, equity, decentralization, integrality and community participation; these principles will be mediated by the registration and linking of users. The ordinance also defines the characteristics of the family health work process and the work process of primary care teams. (BRAZIL, 2006).

Another document of extreme relevance in the design of the health system that currently prevails in our country was the construction of operational guidelines: pact for life, in defense of the SUS and Management in 2006. The agreement formulated between the managers of the three spheres of government allowed the establishing of priorities, guidelines and initiatives. (MACHADO, 2009).

In the Pact for Life, six priorities were established that could have an impact on the Brazilian population, setting goals. Among them: health of the elderly, control of the In the Pact for Life, six priorities were established that could have an impact on the Brazilian population, setting goals. Among them: elderly health, control of cervical and breast cancer, reduction of infant and maternal mortality, strengthening of response capacity to emerging diseases and endemic diseases (with emphasis on dengue, leprosy, tuberculosis, malaria and influenza; health promotion and strengthening of primary care). (BRAZIL, 2006).

In the pact in defense of the SUS, the guidelines are based on the commitment of managers to consolidate health reform and articulate actions that effect the SUS as a public policy. Whose initiatives are also social mobilization and ensure the financing of health actions. In the body of these actions are the preparation and publication of the Charter of the rights of users of the SUS, the regulation of constitutional amendment no. 29 and approval of PL No. 01/03 and approval of budgets in the three spheres of government.

The Management Pact establishes some guidelines such as decentralization, regionalization, financing, planning, agreed and integrated PPI programming, regulation, participation and social control, work management and health education. (BRAZIL, 2006). The laws and pacts of this period in Brazil will contribute so that primary health care becomes not only the gateway to the health system, but that it is the organizer of health work processes. The Health Care Network (RAS) according to Ordinance No. 2,430 of 2017 should be operationalized by guiding principles and guidelines. The principles being: universality, equity, integrality and its guidelines: regionalization and hierarchization, territorialization, enrolled population, person-centered care, problem-solving capacity, longitudinality of care, coordination of care, network ordering, and community participation. (BRAZIL, 2017).

In October 2018, with the participation of the World Health Organization (WHO), the United Nations International Emergency Fund for Children (UNICEF) and the Government of Kazakhstan, the Global Conference on Primary Health Care was held in Astana, with the purpose of renewing the commitment to achieve universal health coverage and the Sustainable Development Goals. (GIOVANELLA et al., 2019).

Parallel to the transformations in the practical field, in the reorganization of the health care network and in the work process, medical education has undergone model changes in order to meet these new perspectives that favor primary care as the gateway to the health system. Given the new paradigm, the training of health professionals permeates the structuring sits in their curricular curricula. Disciplines engender new aspects in your body theoretical. Collective Health itself will also suffer a great impact from the social sciences, creating the scope of health and society content. The mentality that comes into force in recent decades is really abandoning the biomedical model in favor of the person-centered model, seeking a more holistic view of the subject (bio-psycho-social perspective).

This view permeates changes in the legislation itself, the DCNs (National Curriculum Guidelines) of the undergraduate studies in medicine point as competencies for the profile of the graduate of this course. According to Brazil (2014, p. 1):

(...) general and humanistic training, critical, reflexive and ethical, with the capacity to act at different levels of health care, with actions of promotion, prevention, recovery and rehabilitation of health, in the individual and collective spheres, with social responsibility and commitment to the defense of citizenship, human dignity, integral health of the human being and having as transversality in its practice, always, the social determination of the health and disease process.

Teaching, in this conception, seeks to promote the development of competencies in medical students that make them a more critical, interactive and humanized subject. In this way of managing learning, methodological teaching practices that prioritize meaningful and active learning are in the scenario.

Thus, the social sciences strengthen their ties with medical education gaining a field in their formation. It is now a medicine based on the really conception of the person-centered model.

This conception brings a more holistic view of the subject and brings health professionals closer to the subject in an interprofessional way. This strategy seeks to offer learning opportunities together with other professional categories to develop attributes and skills necessary for collective teamwork, reflecting on an effective and comprehensive health needs. (REEVES, 2016; PARO, 2018).

The search for a medical education more consistent with these perspectives has required teachers to look new, because the steps are still short in this journey. Every day new proposals for teaching methodologies emerge, including teaching-learning experiences in practical field with students from various health courses, simultaneous.

This requires an interprofessional education, understood as one in which “students from two or more professions learn about others, with others and among themselves to enable effective collaboration and improve health outcomes”. (WHO, 2010, p. 10), allowing “to develop attributes and skills necessary for collective teamwork”. (PARO, 2018, p. 1578).

The deepening of learning theories and teaching methodologies will be our goal in the following chapter.

CHAPTER 2: INTERACTIONIST THEORIES AND MEANINGFUL LEARNING

The teaching-learning process brings us to several questions: how does this movement take place? Does the teacher teach or are you a facilitator? How to arouse the interest of the student? Are the tools we have capable of effective teaching-learning mechanisms? Do we know and know how to use the tools we have?

The transformations resulting from the era of artificial intelligence, technological expansion, globalization have promoted a restlessness in the field of research in teaching. Today we are met with the ease of access to information in real time, scientific productions and innovations become obsolete in a short time.

We experience a generation where the issue of teaching is no longer based only on access to knowledge, but on how to manipulate it. We are moving from a formative intelligence based on theoretical knowledge, to a relational intelligence where the emphasis is on the skills to solve problems, develop creative and socio-interactionist skills. The crucial point now is no longer in the content itself, although it is extremely relevant, but in how much and how we can use it. Thus, teaching in a technological age requires more instrumentalization of teachers.

Before we look at our reflection on the new methodologies we have, we must first know the theories of teaching learning.

The initial question, perhaps rooted in philosophy, is: what is knowing an object? Our mind seeks the possibility of knowing reality. This construction is based on a discursive action that promotes a sense for presented reality. Cognition works with the principle of truth, the criterion of which would be based on a correspondence with reality. This truth validated by the mind can prioritize subjectivity or objectivity. While the subjective principle can build coherent knowledge with regard to the field of common sense, myths, ideology and religion. In the field of

the objective, metacognition is emphasized, where the mind thinks and reflects on itself, thus requires thinking the subjective with objectivity. Metacognition is defined by the way of rational knowledge, for this it makes use of transcendence. In this vision for validation to occur, it is necessary to aim at knowledge.

Seeking to understand the formulation of different fields of knowledge we find epistemology, which is the branch of philosophy that investigates the construction of this objectivity, studies the discourse that validates knowledge (the objectivetruth). This work is based on Piaget's genetic epistemology and aligns with the learning theories advocated by the interactionism model.

The interactionist theories received this name for conceiving the teaching-learning process as the result of the subject/object relationship. In this perspective, knowledge is not innate or given a priori and is not passively submitted to the actions of the environment, being an active and relational process. With this, spaces are opened for discussions, not only cognitive, but social, historical, cultural and affective.

Some theorists have devoted themselves to this line of thought, among them three, whose works have been frequently revisited by educators: Jean Piaget (1896-1980) - Constructivism, Lev Semiovitch Vygotsky (1896-1934) - socio historical-cultural interactionism, and Ausubel with significant learning.

2.1 Constructivism

The theoretical representative of this approach is the well-known Piaget who proposed in his studies 4 stages of cognitive development: sensormotor (0 to 2 years), preoperative (2 to 6 years), concrete surgery (6 to 12 years) and formal surgery (12 years). Each stage is based on the form of relationship and construction of the knowledge of the human being. In higher education we perpetuate the formal internship.

The stages refer more to the capacity of cognitive structures. However, how would the learning be built? The assumptions of this line indicate that the action, the act of knowing, takes place internally and externally as the subject assimilates, accommodates and operates in his reality. This process takes place in an active and procedural construction. Rizzon (2010, p. 7) points out that the pedagogical act in the Piagetian view aims at "the full development of cognitive functions of the learning subject". In this way, the teacher assumes the role of articulator and mediator of learning.

Constructivism works with the pillar of student empowerment. To this end, it advocates the creation of facilitating environments, capable of serving as instruments to promote independence and critical spirit, in a more qualitative than quantitative view of teaching. (FERREIRA et al., 2017).

Although Piaget is considered one of the pillars of psychogenetic learning theories, some authors consider vygotsky to also be part of this line of thinking.

2.2 Sociointeractionism Cultural History

Vygotsky (1896-1934) was a contemporary of Piaget, but only had contact with his work in the 1920s. His works are also categorized as psychogenetic approach. His main ideas are based on the individual/society relationship, on the role of culture in the internalization process as a historical organization, the brain as a biological basis, the issue of symbolic mediation (technical instruments and sign system). His theory is against reductionism and points to human consciousness as a historical-cultural product. The three questions that guide his studies were: The relationship between the human being and his environment in a physical and social way, work as an interventionist aspect of the relationship of the individual and his environment, and the third concerns the role of instruments and the construction of language.

Vygotsky dedicates part of his work talking about the role of school, formal education. Rego in his book *Vygotsky a historical-cultural perspective in education* (1995, p. 108) points us to the view of this theoretician stating that:

The school will play its role well, to the extent that, starting from what the child already knows... it is able to expand and challenge the construction of new knowledge... In this way it can stimulate internal processes that will eventually take effect, starting to build the foundation that will enable new learning.

One of the key concepts for this theoretician is the Proximal Development Zone, where for him there is the real development of the subject, what he can do alone and the potential that is what he is only capable of doing with his peers, but that one day he will be able to accomplish as an individual. The potential would be the part of the knowledge that the student is in the process of construction and internalization. In this way we can perceive how important socialization and cooperation are in the teaching-learning process.

2.3 Significant learning

Significant learning dialogues with Piagetian constructivism and other educators such as Paulo Freire. It has its basis in genetic epistemology. Ausubel's idea is that learning is influenced by what the learner already knows. He will call this prior knowledge a *subsunçor* where the new knowledge will connect filling gaps. (FARIAS et al., 2015).

David Paul Ausubel (1918-2008) presented his theory in 1963, introducing the concept of meaningful learning, where knowledge and ideas existing in the mental structure could relate to new cognitive contents thus expanding the concepts of individuals. It is an anchoring system; where the *subsunçores* and the new learnings change. This same theoretician proposes that there is another possibility of learning that would be the mechanics, where this interaction would not occur, but if an extremely new subject for the subject needs to be introduced and

there are still no subsunçors, the latter can be used until structures capable of serving as anchors are formed.

Ausubel also takes up the importance of the meanings given to the signs, which reminds us of Vygotsky. This first classifies that meaningful learning can occur by reception or discovery and that the information is stored hierarchically, with broad and specific concepts, but obeying a dynamic process. Moreira, according to Frasson, will complement the expansion that knowledge should not only be seen as the construction of concepts, but also of attitude deswes from interactive processes. (SILVA et al., 2017; FRASSON et al., 2019).

We can observe that although interactionist theories at times present some different concepts, they present a complementary vision. While Piaget works on the idea of cognitive schemes, which are formed by major balancing and that would serve as mental subsidies for the construction of new knowledge, in a maturation process; Ausubel will emphasize that if the new content inserted in the learning process is anchored in previous knowledge and produces new meanings, it may be more effective. Vygotsky adds that if teaching-learning is composed of peers we can favor the potential development of the student by expanding the Proximal Development Zone.

The approximation of these interactionist theories bring the pillars of what the objectives inherent to the practices of active methodologies, as we will see below, where the student and teachers are actors in the process, in a more emancipatory relational conception of the student.

CHAPTER 3: ACTIVE METHODOLOGIES AND DIFFERENTIATION BETWEEN PROBLEM-BASED LEARNING AND PROBLEMATIZATION

For Luckesi (1994, p. 37) education can be understood in three different senses: "education as redemption; education as reproduction; and education as a means of transforming society."

If as educators we propose to base our pedagogical action on the third sense proposed by this philosopher, we will be faced with a practice that allows the student to play the role of protagonist of his learning.

The first signs of active methods date back to the 18th century with Jean Jacques Rousseau (1712-1778) who prioritized experience over theory. Later Dewey will propose, with the movement known as new school, that education should be by action and focused on the students. The latter also affirms that learning must be integrated into life, practice and the reconstruction of experience. Active methodologies arise as well as a process that nourishes the practice of self-learning, critical positioning, and interaction among students (DEWEY, 1978; DIESEL, 2017).

The active methods need to evoke some principles as Farias (2015) points out, they are: constructivist, collaborative, interdisciplinary, contextualized, reflective, critical, investigative, humanist, motivating and challenging. In this perspective, the teacher assumes the role of mediator, in a process of orientation that aims to assist the student in the construction of thought autonomously, seeking to develop skills such as communication, reasoning and teamwork. (MOREIRA, 2016). Moran (2015) points out the teacher's role to welcome, support, stimulate, value, guide and inspire. Thus, the teacher assumes the position of a learning manager.

Interactionist theories approach this type of methodology, as their discussions prioritize the subject-object relationship, and support the principles pointed out above. Education, when it aims to respond to

emerging social relations, should present itself as a collective, supportive, committed act, seeking to build networks. Thus, significant learning incorporates the process: action-reflection-action, not only on content, but also on values. (MITRE, 2008).

Among the active methodologies are the so-called problematizers that are: problem-based teaching (EBP), also known as PBL; team-based learning, problematization, project-based learning and the constructivist spiral.

Bloom taxonomy has been used to evaluate the efficiency of knowledge in problematization theories. It works with two aspects, the cognitive process and the dimensions of knowledge. The first refers to the capabilities of: creating, evaluating, analysing, applying, understanding and remembering. The second is related to metacognition (where the student recognizes his own form of learning), procedural (where the strategy for solving tasks is objective), factual (is related to the memory of the facts) and finally the conceptual one where interrelations and generalizations are constructed. (FARIAS, 2015).

In Problem-Based Learning (BPA), situations based on a given theme of study are elaborated, which become problems presented to the student. The latter will look for hypotheses to solve it or explain it, this task allows the student to produce some theory. The basis of this methodology presupposes that the problem and its objectives are already predefined by the teacher. This predetermination does not give up the active role of the student in the teaching-learning process, since it awakens investigative capacity, cooperation, critical analysis, understanding, discernment, technical, cognitive and athetodial skills, in addition to the interaction between the actors involved. (CYRINO, 2004; SOUZA, 2015; GOMES 2019).

Mc Master University in Canada in the 1960s pioneered the use of the method. In 1984, The Havard School of Medicine proposed a curriculum based on abp (problem-based learning) that ran parallel to the traditional.

After the evaluation of the experience, it was decided to develop a single curriculum, where bpa was used as a teaching strategy. (CYRINO, 2004).

The bpa structure is based on the work in small groups of a maximum of 10 students and occurs in 4 stages:

- 1 The elaboration of the problematic scenario or context;
- 2 Signaling of problem issues;
- 3 Problem resolution;
- 4 Presentation of results and evaluation.

Roman et al. (2017, p. 353) describes step by step the operationalization of this methodology:

Presentation of the problem and reading by the group; clarification of doubts; definition of the problems to be discussed; realization of a brainstorming section for problem analysis, using the students' previous knowledge and identification of areas of incomplete knowledge; development of hypotheses to try to explain the problem; definition of learning objectives; individual study and search for information; sharing the results of the individual study and application in understanding the problem collectively; finally, the tutor observes the learning and evaluates the group.

In problematization, the analysis situations emerge from a real scenario. This is tied to a constructivist ideal and the political-critical-social dimension. In the area of health, this methodology has its beginnings in 1980, where Charles Maguerez proposes that the problematization of reality follows 5 steps that will be called the Maguerez arch: Observation of reality (problem); key points; theorization; hypotheses of solution; application to reality. (CYRINO, 2004).

In the fifth Phase of the Arco de Manguerez the student seeks applicable solutions, but also develop the ability to generalize the seized, in this way acts in the current reality and develops the ability to discriminate in which situations to use a posteriori such knowledge. (FERREIRA, 2013).

Thinking about the theories of problematization as a learning teaching resource, based on the interactionist conceptions as discussed earlier, during the next chapter are proposed some activities to be developed with the students in order to develop both cognitive, instrumental and relational skills. Thus favoring the construction of significant knowledge and generating new learning.

CHAPTER 4: PROPOSAL OF PEDAGOGICAL ACTIVITIES

4.1 Health Management

1st CLASS: HEALTH MANAGEMENT AND STRATEGIC PLANNING

We suggest that this lesson theme be addressed in 3 meetings.

- CONTENTS:
 - › Law 8080/90;
 - › Pact for Health;
 - › Situational Strategic Planning;
 - › Concepts of incidence and prevalence.
- GENERAL OBJECTIVE:
 - › Discuss the management process of the Health System at the municipal level.
- SPECIFIC OBJECTIVES:
 - › Know the principles of the SUS;
 - › Differentiate the concepts of Incidence and Prevalence, describing their importance in health planning;
 - › Develop proposals for intervention in the problems detected based on the situational strategic planning of Carlos Matus (see chapter V).
- METHOD:
 - › Problem-based learning.
- MATERIAL RESOURCES:
 - › Paper, pens, books, articles, mobile phones and/or computers, Datashow.
- EVALUATION:
 - › Presentation of groups;
 - › Construction of the conceptual map and organization chart (see chapter V).
 - › Evaluation form of the students in relation to their performance in the group and their evolution in the process.

SITUATION PROBLEM 1:

Lara is a newly graduated doctor who was invited to take over the health department of a small municipality in the interior of Rio de Janeiro, called X, with 25,000 inhabitants. Upon arriving in the municipality, he came across the following structure: 8 modules of primary care, 1 emergency room with extension of 6 hospitalization beds, but without maternity. Only a few streets were paved, some neighborhoods had no basic sanitation, no running water. There were 8 elementary schools and 3 schools offered high school. The city's economy consisted in part of agriculture and utility goods and services, with no large local company present. 30% of the population lived in rural areas, with restricted access to the city center due to deficiency in the number of public transport. The population was basically composed of 30% of the elderly, 40% of adults and 30% of children, adolescents and young people. The per capita income of citizens ranged from 1 to 3 minimum wages.

When analyzing the records, Dr. Lara realized that the prevalence of mortality in recent years received greater impact of cause by chronic diseases. In morbidity, prevalence stood out in three instances: chronic diseases, STDs and verminosis. The vaccination coverage rate did not reach 70% of children under the age of 5 years. Only 50% of the pregnant women had prenatal care. Only 30% of women over 40 years of age had mammography and only 40% over 25 years of age were on time with the preventive.

In conversation with the mayor and councilors, Dr. Lara was invited to elaborate a plan to meet the health demands of the municipality. Although the money is not much, they knew that they could count on some subsidies from the state and federal government.

1ST MEETING:

After reflecting on the above situation, students should:

- Define the problems encountered that impact the health of the population;
- Analyze each selected problem highlighting the actors involved and the capacity for governability;
- Identify what previous knowledge the group has about the concepts that arose in the problem situation;
- Select materials (articles, laws, books...) using digital sources or the library itself, to get closer to the concepts presented and the problems. Each participant will study individually the themes proposed in the group discussion for the second meeting.

2ND MEETING:

- Students will share the materials found;
- Construction of a collective report on the group's research;
- Preparation of a strategic action planning composed of:
 - › Situational diagnosis (problems detected);
 - › actors involved;
 - › governance capacity;
 - › proposed strategies.

3RD MEETING:

- Presentation of groups;
- Construction of an organization chart of the health care network, highlighting the use of intersectoral partnerships in the process.

The suggestion of the evaluation form of the classes will be presented in the annex at the end of the chapter of activities.

2nd LESSON: HEALTH SURVEILLANCE.

We suggest that this lesson theme be addressed in 3 meetings.

- CONTENTS:
 - › Concepts of Prevention and Promotion in Health;
 - › Health surveillance: epidemiological, environmental, sanitary and worker health;
 - › Ordinance 1,378 of the MS of July 2013.
- GENERAL OBJECTIVE:
 - › Understand the role of surveillance in the organization of health actions.
- SPECIFIC OBJECTIVES:
 - › Differentiate the concepts of prevention and health promotion;
 - › Describe the attributions of each health surveillance.
 - › Build a proposal for prevention action or promotion for problem situation.
- METHOD:
 - › Problem-based learning.
- MATERIAL RESOURCES:
 - › Pens, paper, cardboard, pilot, datashow, cell phones.
- EVALUATION:
 - › The presentations of the groups;
 - › Completion of the evaluation form.

SITUATION PROBLEM 2:

A few weeks after starting her work in County X, Dr. Lara noted that some things would need to be reviewed. The rainy season was ending and some cases of arboviruses were beginning to emerge (Dengue, Zika, Chikungunya), but notifications were not yet being made, so there was

no real number of affected. Spending on diabetic foot treatment and cardiovascular complications was only increasing, due to the increase in the number of hospitalizations. There was a lot of garbage scattered throughout the city and in some parts of the city the number of people with verminosis had been growing. In the W neighborhood they had two families with cases of tuberculosis.

Due to all this panorama, Dr. Lara decided to talk to her team and came to the conclusion that there should be more intervention of health surveillance and would need to propose prevention and promotion actions in the municipality.

1ST MEETING:

Students will be invited to:

- select problems that can be intervened;
- Identify the previous knowledge that the group has about health surveillance, prevention and promotion.
- Select materials relevant to the theme that will be studied individually.

2ND MEETING:

- Students will share the content searched with the group.
- Each group constructed a conceptual map on health surveillance.
- Develop a proposal for activity in the city that is for prevention or promotion.

3RD MEETING:

- Presentation of the groups in the form of video or advertisement of the activity that will be carried out in the city.
- Presentation of the duties of health surveillance. (each group will present to its specific).

3rd CLASS: HEALTH PLANNING AND STANDARDS.

- CONTENTS:
 - › COAP (Organizational Contract for Public Health Action).
 - › PPI (Agreed Plan of Intermanagers);
 - › Consortia in Health;
 - › Health indicators;
 - › Compulsory notification and death certificates;
 - › Consolidation Ordinance No. 4 of September 28, 2017.
- GENERAL OBJECTIVE:
 - › Learn the operation of consortia in health and their applicability.
- SPECIFIC OBJECTIVES:
 - › Learn how to fill out compulsory notification forms and death certificates;
 - › Select health indicators to build a PPI;
 - › Develop a COAP in a simplified way.
- METHOD:
 - › Problem-based learning.
- MATERIAL RESOURCES:
 - › Paper, pens, books, articles, mobile phones and/or computers, Datashow.
- EVALUATION:
 - › The presentations of the groups;
 - › Completion of the evaluation form.

SITUATION PROBLEM 3:

Dr. Lara had been summoned to a meeting of health secretaries and mayors of the region for the preparation of COAP (Organizational Contract for Public Health Action). She knew that her town was small and was not able to offer some services. In this way, it would be a great

opportunity to guarantee the inhabitants the right of completeness and access. The health secretary called as a matter of urgency that same week a meeting with Nurse Luci, responsible for the Surveillance of the Municipality to help her with health indicators, incidences and prevalence of comorbidities.

Nurse Luci took the opportunity to expose her complaints regarding the deficiency of the information provided in death certificates, in the forms of notification of diseases and injuries, which was hindering the consolidation of some health indicators. The two were willing to think of strategies to better organize these notification systems.

1ST MEETING:

- Students will have contact and fill out a death certificate and a compulsory notification form.
- Students will be divided into small groups where they will simulate the simplified elaboration of a COAP (groups should have access to supporting texts).

2ND MEETING:

- A plenary discussion will be held with the students about the difficulties encountered in the process of filling out the forms and then each group will go through a representative to show what they proposed in the COAP.
- Students will fill out the evaluation form.

4.2 HEALTH AND ENVIRONMENTAL EDUCATION:

4TH CLASS: HEALTH EDUCATION.

PROPOSED ACTIVITY TO BE PERFORMED IN STAGE FIELD.

- CONTENTS:
 - › Health Surveillance.
- GENERAL OBJECTIVE:
 - › Develop aspects of health surveillance in the service.
- SPECIFIC OBJECTIVES:
 - › Highlight the relevant health problems in the area enrolled;
 - › Search for information and content related to detected problems;
 - › Present a method of intervention of health education.
- METHOD:
 - › Problematization.
- FEATURES:
 - › Articles, cell phones, books, manuals of the Ministry of Health, posters or serial album, or other health education resources available to the student.
- EVALUATION:
 - › Presentation by the students of a waiting room;
 - › Filling out the activity evaluation form.

SITUATION 4: PROBLEMATIZATION ACTIVITY

- The internship group will choose a health problem detected in their experiences in the Health Unit in the given period;
- The group will discuss aspects of integrality (Bio-psycho-social) of the problem;
- Each individual in the group will do research on the subject;

- The group will meet together with the tutor/teacher and each student will expose the contents of their research.
- Together they will build the form of presentation of a waiting room in the unit (objectives, content, resources, evaluation of the activity...).

The presentation of the waiting room will be held for service users and professionals present.

5th CLASS: ENVIRONMENT

- CONTENT:
 - › Environment;
 - › Epidemiological concepts of transmission chain.
- GENERAL OBJECTIVE:
 - › Understand the importance of the environment in the relationships of the health disease process.
- SPECIFIC OBJECTIVES:
 - › Point out the role of surveillance in environmental intervention;
 - › Propose activities to be carried out in order to impact the chain of health-disease-environment relationships.
- METHOD:
 - › Problem-based learning.
- MATERIAL RESOURCES:
 - › Pens, paper, articles, books, Datashow, cell phones.
- EVALUATION:
 - › The presentations of the groups;
 - › Completion of the evaluation form.

SITUATION PROBLEM 5:

Finally Dr. Lara after the first three months had already managed to organize some things. Even managing to implement the system of notification of diseases and diseases of compulsory notification, some problems related to the environment still impacted the incidences of some pathologies. She realized that knowledge of epidemiological data was not enough if there was no intervention at the local level.

The garbage continued to accumulate in the city, the problem of lack of sewage network, the disposal of waste used in the sites, farms, the emergency room and municipal laboratory, the use of waters of dubious provenance and without proper treatment, there were so many problems that it would take a real teamwork. He then remembered the collective health classes and the importance of intersectoriality in solving some problems that impact health. I couldn't waste any more time, he assembled a task force team, invited the secretary of education, the nurse responsible for surveillance, the secretary of the environment, the coordinator of primary care and the school health program.

The proposal was to develop activities and interventions that would somehow help the environment and bring health benefits. He reminded the team that they should divide the proposals, those of immediate action, those planned for a short time and those that would require a longer process, but that needed to be initiated. To do so, they would select the most critical nodes, and establish the places of intervention. Everyone was willing to start the action project.

1ST MEETING:

- The class will be divided into groups where each will receive a role with their character:
 - › secretary of education;
 - › the nurse responsible for surveillance;
 - › the environment secretary;

- › the primary care coordinator;
- › the coordinator of the school health program;
- › the health secretary.
- The passive problems of action will be indicated.
 - › The group will select the materials that will be used to support the actions. Be it documents, related articles, booklets, etc. and will do your individual research for the next meeting.

2ND MEETING:

- The group will choose a rapporteur for planning who should record the group's movements and discussions;
- The following housing scans will be placed for students, school, health post, common area of the city, other institution;
- Each group shall propose one or more interventions for each of the proposed boxes;
- After the groups will be opened in wheel, where will be presented and discussed the proposals and voted which will be used as strategies for city X;
- Filling out the activity evaluation form.

4.3 CARE MANAGEMENT AND PATIENT MEDICAL RELATIONSHIP.

6TH CLASS: CARE MANAGEMENT

- CONTENTS:
 - › Reception and matrix support;
 - › Unique therapeutic project;
 - › Individual and family approach;
 - › Integrality and interdisciplinarity in Primary Care.
- GENERAL OBJECTIVE:
 - › Develop relational skills;

- SPECIFIC OBJECTIVES:
 - › Build strategies to strengthen the patient patient relationship
 - › Propose ways to favor the patient's treatment and user empowerment;
 - › Create an interdisciplinary situation to meet the user of the situation presented.
- METHOD:
 - › Problem-based learning.
- FEATURES:
 - › Articles, cell phones and books, datashow.
- EVALUATION:
 - › Staging by the students;
 - › Filling out the activity evaluation form.

SITUATION PROBLEM 6:

Dr. Lana, who worked in a Family Health Strategy Unit in municipality X, went to make a home visit with community agent Maria dos Anjos. The visit had been scheduled by the team, because Mr. Jeofrancis had not been to the unit for almost a year and was an insulin-dependent diabetic patient. Upon arriving at his house, they came across several complaints from this gentleman who was 67 years old and lived with one of his daughters and his son-in-law. Jeofrancis already showed signs of loss of visual acuity in the right and left eye, peripheral neuropathy and a left foot injury that had been a month and instead of healing the lesion began to expand further. The daughter reported difficulty in applying the insulins and that her father said he could not do it because he did not see the needle in the syringe. The daughter Raquel who lived with her father was the youngest and complained that her father was having lunch 3 times a day and that there was no point talking, because the same was very stubborn.

Raquel claimed that she was very tired and that she had to take responsibility for everything, because her other four brothers even though they lived nearby did not care about their father. They claimed that it was the only one that lived in the house that belonged to the parents. Dr. Lana requested new laboratory tests and referred her to the ophthalmologist and neurologist. He promised to return the following week with other team members and asked that the other children be present.

The situation of his Jeofrancis was taken to a team meeting where they attended the Family Health strategy team and representatives of the NASF team and oral care. Dr. Lana proposed that they build together a unique therapeutic project for that patient and return to his home the following week with an interprofessional group.

1ST MEETING:

- Students will receive cards with different colors where they will represent their workgroup. The following functions must be included on the cards. Physician, nurse, dentist, nutritionist, physiotherapist, social worker, psychologist, nursing assistant and ACS;
- Each group must build a therapeutic project to be worked on in the proposed case.

2ND MEETING:

- Students must present their proposal in the form of a theater.
- Fill out the activity evaluation form.

7th LESSON: DOCTOR-PATIENT RELATIONSHIP AND THE BAD NEWS.

- CONTENTS:
 - › Individual and family approach;
 - › Language and communication;
 - › Spikes Protocol.

- GENERAL OBJECTIVE:
 - › Develop relational and communicative skills.
- SPECIFIC OBJECTIVES:
 - › Build strategies to strengthen the doctor-patient relationship;
 - › Apply the Spikes protocol in a presented situation.
- METHOD:
 - › Problem-based learning
- FEATURES:
 - › Articles, cell phones and books, datashow.
- EVALUATION:
 - › Staging by the students;
 - › Filling out the activity evaluation form.

SITUATION PROBLEM 7

(In this activity we can use different forms of problem situation such as scenes from a movie, videos, or narration of a story.)

Dr. Felipe, who worked in a Family Health Strategy Unit in municipality X, received in his office Mr. Francisco with his daughter Laís, both of which were very concerned. Dr Felipe's mind came to the scene a year ago when they discovered Mr. Francisco's descending colon cancer and how much he still suffered from the acceptance of the use of the colostomy bag. The scenario of that man's life had changed sharply, the same as before was active and always made amusing comments now showed signs of depression and discouragement. Since the previous diagnosis, he accompanied him with an oncologist, but he did not stop passing on the information of his treatment to his doctor and nurse at the UBSF.

When Dr. Felipe saw the bag in that gentleman's hands, he knew that the new tracking tests had arrived. The daughter Laís, who always

accompanied her father in the consultations, handed the examinations on the doctor's hand with a frightened look and reporting that she did not have the courage to see the results of the chest scan and that even if she saw them she could not understand those written medical terms. It was a time of extreme tension, Dr. Felipe opened the exam report and found something he preferred not to have seen, the patient had metastasis in the lungs. Knowing the seriousness of the case, and what the family had already gone through, he thought for a moment how to communicate that diagnosis.

DATE:

- The teacher must present the six steps of the Spikes protocol. We suggest reading the article: "Use of the Spikes protocol in teaching skills in the transmission of bad news." (LINO, et al., 2011).
- Students must be divided into groups of three and experience the characters in the group;
- In the second moment the students will make a conversation wheel where participants will review report and discuss three points:
 - › What was it like to experience the character?
 - › What are the difficulties encountered in this situation?
 - › How was using the Spikes protocol?

4.4 FAMILY HEALTH STRATEGY

8th CLASS: FAMILY HEALTH STRATEGY (HISTORY AND FUNCTIONING)

In 2006, Ordinance No. 648 of the Ministry of Health establishes the FHP as a priority strategy for organizing primary care.

- CONTENTS:
 - › LAW 8080/90;
 - › Ordinance 2,488 of October 21, 2011;
 - › Ordinance No. 2,436 of the MS 2017;
 - › History of PACS and ESF.

- GENERAL OBJECTIVE:
 - › Understand the history and functioning of the Family Health Strategy.
- SPECIFIC OBJECTIVES:
 - › Build a timeline on the formation of the PACS and the ESF;
 - › Develop a framework on the main characteristics of the Family Health Strategy and the attributions of each actor in the work process.
- METHOD:
 - › Problem-based learning.
- FEATURES:
 - › Articles, cell phones, books and datashow.
- EVALUATION:
 - › Presentation of the students.
 - › Filling out the activity evaluation form.

SITUATION PROBLEM 8:

Dr. Lara, Health Secretary of city X decided that it would be necessary to provide training for professionals working in the Family Health Strategy, because many of them seemed to be unfamiliar with the history, objectives, actions of the strategy and even their attributions in the work process. I knew that there would be some resistance, because some former network professionals who were directed to act on the strategy thought that they did not need anyone to tell them how to work. Dr. Lara trying not to cause much controversy, invited Dr. Luciano a friend of his who was A Sanitarist Doctor and specialist in Family Health and Nurse Luci to teach the course with the following speech: the network needed to work in a more unified and communicative way, and that this moment would allow greater exchange of experiences.

Dr. Lara, Dr. Luciano and Nurse Luci met to build the planning on the contents and how the training would be taught, but they needed to prepare a small handout in order to facilitate the consolidation of the issues. Thinking in a practical way they defined that it would be built as follows:

- SUS Training Timeline to ESF
- Objectives of the strategy
- Operation of the Strategy
- Staff of physicians, nurses, nursing technicians and CHA.

DATE:

- Students can be divided into groups of no more than 10 people to perform this activity (suggestion).
- Each group must put together a table with the above information.
- Each group had presented a theme of the board through a draw, proposing how the content drawn could be worked if they were responsible for the training. (This presentation can be scheduled for a second meeting if necessary).
- Students must complete the activity assessment form.

9th CLASS: MENTAL HEALTH AND FAMILY HEALTH STRATEGY.

PROPOSED ACTIVITY TO BE PERFORMED IN STAGE FIELD.

- CONTENTS:
 - › Mental Health and CAPS.
- GENERAL OBJECTIVE:
 - › Relate mental health as a field of Primary Care in the territory.
- SPECIFIC OBJECTIVES:
 - › Seek information on psychiatric reform in Brazil and the role of CAPS;
 - › Describe the role of the Family Health team in mental health care in the territory;

- › Develop a training for the Family Health team on the approach of the mental health patient.
- METHOD:
 - › Problematization.
- FEATURES:
 - › Articles, cell phones, books, manuals of the Ministry of Health, posters or serial album, or other health education resources available to the student.
- EVALUATION:
 - › Training of the professionals of the family health team where the students are inserted;
 - › Filling out the activity evaluation form.

SITUATION 9: PROBLEMATIZATION ACTIVITY

- Students will pay a visit to the caps of the city where they should talk to professionals and participate in a moment of experience with users;
- The group should select the issues that should be addressed with the health professionals of the UBSF after the visit;
- The group will discuss the aspects of integrality (Bio-psycho-social) of users and how the care network could favor this clientele;
- Each individual of the group will do research on the subject;
- The group will meet together with the tutor/teacher and each student will expose the contents of their research;
- Together they will build the form of presentation of a training for the Family Health team to which they are inserted during the internship in collective health (objectives, content, resources, evaluation of the activity...);
- The training of the unit's professionals will be carried out;
- Fill out the evaluation form.

10th CLASS: FAMILY HEALTH STRATEGY, INTEGRATIVE PRACTICES AND VULNERABLE POPULATIONS.

- CONTENTS:
 - › Law 8080/90- Subsystem of Indigenous Health Care;
 - › Vulnerable populations;
 - › Integrative practices.
- GENERAL OBJECTIVE:
 - › Understand that health care should be integral and appreciate equity.
- SPECIFIC OBJECTIVES:
 - › Propose activities of integrative practice for the inhabitants of city X.
 - › Propose actions for an indigenous population.
- METHOD:
 - › Problem-based learning.
- FEATURES:
 - › Articles, cell phones and books, Datashow, paper and pens.
- EVALUATION:
 - › Presentation of the students.
 - › Filling out the activity evaluation form.

SITUATION PROBLEM 10:

Dr. Lara, health secretary of city X, went to a Family Health congress where one of the topics addressed was: "integrative practices and vulnerable populations." Considering the theme of extreme relevance, he considered it necessary to deepen his knowledge on such themes. After reading articles on the subject he decided to implement some actions of this type of practice in his municipality. Invited the ESF teams to a training, followed by proposals from the teams to implement these integrative practices.

DATE:

In this activity we suggest that teachers make the texts on the theme available in advance.

- The students will be divided into groups and will receive roles where their roles will be defined: physician, nurse, nursing technician and CHA (community health agents);
- The group should develop an action project based on an integrative practice that could be carried out by an ESF team and an action to be carried out with an indigenous population based also on this practice;
- The groups will present their proposals in the form of reporting;
- Students must fill out their evaluation forms.

EVALUATION SHEET:

Evaluation is an integral part of the teaching-learning process. Luckesi (2011) points out that the act of evaluation is a qualitative investigation of reality, which allows us to promote interventions in pedagogical action if necessary. Learning should promote the development of the educating's consciousness by stimulating the ability to understand oneself and the world critically. Didactics and its methods should be proposed to mediate this construction process. Therefore, the qualitative evaluation of the learning process should go beyond the cognitive aspects.

Ferraz et al. (2019) in the student evaluation chapter: what changes and how to adapt to the new guidelines? Organized by Oliveira (2019), it presents us that "the evaluation criteria should be related to the competencies to be developed and be verifiable in the activity being evaluated". (p. 214). Thus, we elaborated a proposal of an evaluative form that seeks to analyze not only cognitive skills, but also relational as recommended by the new NCDs.

This form will consist of three moments: self-assessment, peer evaluation and evaluation of the process. If the teacher deems it necessary, he/she can adapt the new proposals.

SELF-ASSESSMENT:

Assessed skills/concepts	Unsatisfactory	Satisfactory	Good	Very good
Learning new content and ability to share them with the workgroup.				
Ability to relate new content with previous ones.				
Ability to position yourself in the group/communication.				
Ability to detect the problems presented.				
Ability to formulate strategies for problem solving.				

EVALUATION OF COLLEAGUES IN THE GROUP.

Assessed skills/concepts	Unsatisfactory	Satisfactory	Good	Very good
Communication capacity in the group.				
Interest in activity.				
Ability to detect problems.				
Ability to develop strategies.				
Collaborative capacity in: material collection, resolution problems and presentation.				

PROCESS EVALUATION:

Criteria evaluated/concepts.	Unsatisfactory	Satisfactory	Good	Very good
The objectives of the activity were clear.				
The content was significant, clear and pertinent to discipline.				
The activity favored communication between the students of the group.				
The activity allowed the formulation of passive problems of discussion by the group.				
The learning developed in the activity contributed to his academic training.				

CHAPTER 5: COMPLEMENTARY THEMES IN PUBLIC HEALTH

CARLOS MATUS AND SITUATIONAL STRATEGIC PLANNING

Situational strategic planning has its pillars based on a Chilean economist theorist named Carlos Matus, having its beginnings in the 80s. Its concepts and planning strategies were embraced by the field of public health as a local management tool, allowing the organization of processes and implementation of actions thus expanding the problem-solving capacity of services. (KLEBA, 2011).

Matus works with the concepts of governability, scenery and actors. The actors would be the participants of the scenario for which the planning is intended. The term governance would refer to the ability to control the situation, where it proposes that there are problems whose governability is possible by the actors belonging to the process and others that are subject to higher instances or independent bias and thus distance themselves from governability in planning.

The PES, as the Situational Strategic Planning is called, consists of four moments: explanatory, normative, strategic and tactical operational moments. (GENTILINI, 2014).

In the explanatory moment, we seek to describe the problem, to seek objective and subjective information about it. In this step the critical nodes should be established, which would be like the key points of the problems. From this theoretician's perspective, problems can be configured from different points of view such as: threat, possibilities or deficiencies.

At the normative moment it is the one where the objectives and results that are desired to be achieved are defined, as well as to define the actions necessary for this purpose.

Strategic moment evaluates the available resources, conflicts of interest, motivation and insertion of actors in the process.

Tactical-operational moment, provides for the implementation and evaluation of actions.

Reading suggestions:

GENTILINI, J. A. Actors, scenarios and plans: situational strategic planning and education. **Research Notebooks**. v. 44, n. 153, p. 580-601, Jul/Sep, 2014.

KLEBA, M. E.; KRAUSER, I. M.; VENDRUSCOLO, C. Situational strategic planning in the teaching of family health management. **Text and context - nursing**. v. 20, n. 1, p. 184-193, Florianópolis: Jan/Mar, 2011.

• CONCEPT MAP

The conceptual map is a pedagogical strategy used to assist teachers in the construction of scientific concepts. It had its origins in the 1970s, where it was proposed by Joseph Novak, based on David Ausubel's conceptions of meaningful learning. With this feature it is possible to hierarchize the concepts, select the main ideas of the text and promote a visual impact of conceptual relations. (Junior, 2013).

The construction of conceptual maps follows the concept of hierarchy of concepts based on two assumptions, the first refers to the progressive differentiation of concepts (where one concept can be unfolded in others) and the second, integrative reconciliation (where a concept that arises from a given conceptual branch is related to another from a distinct branching). (Tavares, 2007).

Reading suggestions:

JÚNIOR, V. C. The use of Conceptual Maps as a Didactic Resource for the construction and Interrelation of Concepts. **Brazilian Journal of Medical Education**. v. 37, n. 3, p. 441-447, 2013.

TAVARES, R. Building concept maps. **Science and Cognition**, v. 12, p. 72-85, 2007.

• RECEPTION AND MATRIXING

The reception is a techno-assistance tool that is part of the National Humanization Policy. This tool presupposes improvements in the quality of the relationship of the health professional and the user of the service, seeking the empowerment of the latter and strengthening its active role in interactions. Its objectives are: qualification of listening, construction and strengthening of bonds, guarantee of access and resolution, always based on ethics. (LAZZAROTTO; CASTRO, 2017).

Thus, welcoming is presented as a care tool in order to qualify relationships in health work. The quality of care permeates from the perspective of integral care of the subject, where three terms define the scenario in question: access, accountability and autonomy. In this sense, a new concept comes into play, matrix support.

Matrix support functions as a logic of work organization, where seeking to meet the demands of the user in an integral way, a network of sectoral and intersectoral cooperative practices emerges as potentiating health practices. Among the spheres that are part of this scenario of cooperative practices in the SUS (Unified Health System) is the ESF (Family Health Strategy), the NASF (Family Health Support Center) and the CAPS (Psychosocial Care Center) in a perspective of horizontal relationship between the said reference teams and those of matrix support. (Medeiros, 2015).

Matrix support allows attention that directs more effective therapeutic projects. Where the user's link with the reference team becomes more significant, emphasizing accountability in the care process. It brings together the multiprofessional view of forming a form of cooperative and interdependent care. (BRAZIL, 2004).

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• UNIQUE THERAPEUTIC PROJECT:

The singular therapeutic project aims to trace interdisciplinary therapeutic approaches for a subject (whether in the individual or collective, as families), respecting the selection by vulnerability. These actions seek to meet the singularities or differences found in the case to be studied, as bases to be articulated by health professionals. This project should be based on four stages: diagnosis (organic, psychological, social); definition of targets (short, medium and long term), division of responsibilities and reassessment. (BRAZIL, 2007)

The PTS thus presupposes a movement of co-management of care. It seeks to empower the subjects, narrowing of bonds, construction of contractualities and resolution in the health care process. (SILVA et al., 2016). According to Ferreira et al. (2015), this tool aims to stimulate self-care, health education, valuing the history and culture of the subject and not only biological aspects.

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