Project-based Learning and Health Care Management: connecting theory and reality in the Unified Health System

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ABSTRACT

The Dentistry Course at Universidade do Vale do Taquari (UNIVATES) is organized through an integrated modular curriculum based on active teaching-learning methodologies. The aim of this study is to report the experience of students and faculty on the 'project-based learning' methodology adopted in the Health, Society, Citizenship and Human Rights VI axis of the Dentistry course in 2018. Students were divided into small groups in order to carry out three main activities: an initial case on health services management; health information systems workshop; and oral health service implementation project. After the completion of each activity, the students presented their work to the entire group for a dialogic analysis. This method aimed to provide full understanding regarding the context of health care spaces, from management to direct user care. The project included the following types of activities: visits to the Health Care Units, analysis of the municipal plans, supervision of the activities and the professionals, contact with users, data research in the health information systems, and analysis on the hiring process of professionals. It was concluded that the students had the opportunity to reflect on the management challenges while dealing with the demands of users and professionals of the Unified Health System (UHS). The teaching method was improved, allowing students and future professionals to build a more critical and expanded perception of the oral health care network. These reflections, based on real situations experienced in the oral health team practice, seek to qualify the work process by training students to work in the UHS.

Descriptors: Learning. Education, Dental. Collective Health. Case Reports. Health Care Management.

1 INTRODUCTION

Traditionally, the methodology used in the education of health professions consists in the professor as the central source of knowledge and of the content presented in the courses, while the student remains as a mere listener¹. For many years, dentistry degrees favored education aimed at individual practice,

focused on the private market, fragmenting the content of teaching and practice, with specialist professors². However, the current demands for health professionals presuppose an innovative thinking model with a careful judgement on the actions therein developed, with professionals capable of acting in both the public and private sectors¹.

Dentistry also needs to update its teaching methodologies to keep up with the needs of the population and of health professionals, who increasingly work in an interdisciplinary manner³. Since the publication of the National Curriculum Guidelines (NCG)⁴ in 2002, dentistry courses have been slowly changing, contributing to the education of better prepared and trained professionals who will work in the Unified Health System (UHS), as well as in the human and social sciences. Many Dentistry courses are already using several active learning methodologies as strategies and pedagogical tools to qualify teaching methodd^{5,6}.

Active learning methodologies contribute to the development of the desired skills in Dentistry graduates. According to the NCG, graduates in dentistry are expected to have a general, humanistic, critical, and reflective education, so as to work at all levels of health care, based on technical and scientific rigor⁴. Active methodologies are strategies, techniques, approaches and perspectives of individual and collaborative learning which involve and engage the students in the development of projects and practical activities. They are ways of developing the learning process used by professors in order to critically train future professionals. This favors student autonomy and curiosity, stimulating individual and collective decision-making through social practice⁷. The formative potential of active methodology is an important for education of strategy the health professionals, in view of the expectation of increased autonomy. These professionals are

expected to be able to solve problems through a global analysis of the context of each case⁸.

Project-based learning (PBL) is characterized as an active and collaborative learning modality in which students form groups with research and/or investigation tasks⁹. By stimulating students' critical thinking, by means of collecting information, formulating and refining questions, making predictions, and sharing ideas and conclusions, greater student engagement with the learning content is achieved¹⁰.

In dentistry, PBL is also becoming popular, providing opportunities for the generation of projects for technology development¹¹ as well as for the instruction of basic subjects¹². However, no studies were found on the use of PBL in the dentistry work process, especially on issues related to management. Regardless of the teaching strategy, the topic of health care management is, in general, little studied in undergraduate courses, that is, it counts few hours in the curriculum, and it is taught towards the end of the course¹³. Since it is an unknown subject for most students, the challenge for the educator is even greater.

Therefore, the purpose of this article is to report the experience of students and professors with the project-based learning methodology (PBL) adopted in order to work the subject of Health Care Management in the Health, Society, Citizenship and Human Rights VI axis of the Dentistry degree at the Universidade do Vale do Taquari (UNIVATES).

2 EXPERIENCE REPORT

This descriptive and exploratory experience report had as its research scenario the Dentistry undergraduate classes of the Health, Society, Citizenship and Human Rights (HSCHR) VI axis.

The Dentistry course takes place at UNIVATES, a private non-profit institution,

located in the city of Lajeado, Rio Grande do Sul. The course has adopted the active methodology of teaching and learning as its model. The Higher Education (HEI) Institution offers professors training and permanent education programs so that they can use different methodologies in their classes.

The Dentistry course is composed by 4,200 hours of classes divided into ten modules (semesters), for a total of five years. The modular model was chosen so as to approach the contents in an integrated way, without dividing them into disciplines. Within each module, the contents are divided into four different axes: Health, Society, Citizenship and Rights (HSCHR); Human Permanent Education (PE); Organization of Work Processes in Health (OWPH); and Integrality of Health Care (IHC). The course was structured on the basis of the desired competencies established in the NCG so as to change the general picture of the population's health by means of full health care, of leadership towards the population's needs, and ofthe necessary communication interprofessional work.

In the sixth semester of the undergraduate course (module 6), the HSCHR VI axis aims to analyze public and private health systems from the perspective of the method of care and the management of health systems and services with emphasis on the network of services. In order to do so, it was emphasized the understanding of the concept of health management, the identification and planning of actions in conformity with the regional and national plurality; the identification and use of management tools: understanding of the management of the health teams' work process, along with a health evaluation.

The axis was divided into eighteen weekly meetings, with a total of 60 hours in the semester, 3.30 hours per meeting. The fifteen students who were enrolled in the subject were

divided into groups for all the main activities, creating thus mixed groups, with students of distinct characteristics and profiles. The fictitious municipality of *Três Coquinhos* was used to conduct the initial task, and the municipalities where the students had internships were used for the other activities. All activities of the HSCHR VI axis were carried out in the institution's computer lab.

Initial case

As a trigger for the issues to be developed during the semester, it was presented case concerning public health management and the main difficulties faced in order to fairly and equally meet the health demands of the population, as well as the analysis on the best manner to organize the management.

Três Coquinhos is a municipality in the north of the state of Rio Grande do Sul, with approximately 30,000 inhabitants. The Health Secretary, Mr. Paulo, took office in the beginning of 2018, when the previous Health Secretary was removed because the population was very unhappy with the health services and constant complaints on local radio occurred. Paulo has no technical background in the health area, but he wants to please the population in order not to have the same fate as the previous manager. The problem is that he has no idea how to improve the health care services, since public funds are scarce and demands come from all sides: basic health units, specialized consultations, hospital, medications, lawsuits, etc. The mayor, who is Paulo's brother-in-law, said he would support him, provided population thewould complaining about the services.

Faced with this situation, the following guiding points for problematization were proposed in the classroom:

1) How should the Health Secretary

start?

- 2) What does he need to know to manage health care in Três Coquinhos?
- 3) To whom should he talk?
- 4) What information is needed for good management?
- 5) Where will he get the necessary information?
- 6) What is management?
- 7) Who participates in the management in the UHS?
- 8) Which management tools can the Secretary use?

The activities were carried out in a university space where computers and an internet network were available for information research. The students were given one week to finish the activity (out of class) and in the next class the answers were presented and discussed with the entire group. Doubts were raised and solved at that moment. Two meetings were used for the Initial Case.

This activity induced the students to think about real problems of the daily basis of municipal health administrations, considering the perspective of the three actors involved: manager, professional, and user. By doing so, the student could create favorable situations in order to solve the problem, researching and studying the issues addressed in a critical way.

Because the dynamic was carried out in groups of 3, the students shared ideas and thoughts, which made the assignment even more enriching and dynamic, stimulating dialogue, which is of utmost importance in the construction of knowledge. After this period of construction, reflection, and discussion among the three members, the results were presented to the entire class, as a puzzle, therefore the results counted on much deeper and broader reflections.

The professor was responsible for defining the general direction of the class in the first moment, providing content to support the continuation of the student's study/research in

the second moment of the meeting. The students gave their opinions and helped the professor in the development of the task, but he or she was responsible for the final orientation. For the professor, who had not been with the class in the previous semester, the initial case was a good tool to ascertain the students' level of theoretical knowledge, in addition to the evaluation of critical thinking and group dynamics.

The professor recapitulates the content covered in previous semesters and axes and approaches the necessary contents for the construction of knowledge in a different way. By being available to help the students, he or she shows interest in the various learning needs. Moreover, no position of power is imposed by the professor. He or she adopts a mediating attitude between the theoretical knowledge which he or she proposes and the students' previous knowledge. Even if the student does not show interest in the subject, or if he or she does not engage with the content and the work, he or she is responsible for specific tasks within the small group and is stimulated to participate in the group dialogue.

Health information systems workshop

In view of the information, data, and indicators required in the initial case, a Health Information Systems Workshop (HISW) was proposed. In the first moment of the class, the students were introduced to the main HISW. Subsequently, they were divided into groups and led to the collection of data from the municipalities where they performed their curricular internships.

In the second moment, a Case was given in order to guide the use and interpretation of the data obtained from the health information systems.

You have passed the contest to become a worker at the City Hall of Três Coquinhos and have been invited to take on the position of Oral Health Manager.

The mayor believes that the Oral Health team is not working well and has asked you to check the monthly production. Also, he knows that there are funds which the municipality may receive, and he wants more money, but currently there is no one controlling this.

In order to answer the mayor, you must elaborate a situational analysis of the municipality where you are currently doing your internship, which must contain:

- Information from the National Register of Health Establishments (NRHE) of the Primary Health Care Unit (PHCU)/Dental Specialties Center (DSC).
- -Information from the Strategic Management Support (SMS) regarding Networks and Programs; Management and Financing.
- Analysis of the three oral health indicators from the Performance Index of the Unified Health Care System (PIUHS) (calculate at least indicator n^o 21).
- -Outpatient production of the municipality's dental procedures from July to December 2017.

In this project, students were also asked to discuss the Ministerial Resolutions which regulate the financial incentive for Oral Health in Primary Care and Secondary Care; the control of outpatient production performed by UHS dentists; the method of payment in primary care and secondary care and the existence of a goal in oral health. Finally, the groups wrote an official document to be delivered to the mayor.

Due to the complexity of the task, class time was dedicated for data collection and interpretation. During the development of the activity, the students felt the need for a theoretical framework on Health Care Financing. The professor thus prepared a lecture/discussion, compiling the basic concepts

and the main resolutions of the Ministry of Health. Eight meetings were used in order to conduct the activities of the Health Information Systems Workshop.

After the study, the work was presented to the entire group. The professor did not define the form of presentation, and the students chose the way they deemed most pertinent and didactic (slides, text, or posters). Abdicating decisions traditionally made by professors does not come naturally, and it is an exercise for those who desire to work in a systemic and horizontal way with students.

From the students' point of view, the activity was undoubtedly more complex, requiring extreme attention and dedication in order to accomplish it. This task was a turning point because the students could understand how challenging it is to work in primary health care, consequently seeing their local internship supervisors with different eyes, henceforth. The students realized how the dentist, even without being in the coordination of the PHCU, has a fundamental role in the search for incentives to improve the oral health care of the UHS users along with the management. In addition, the database search was carried out autonomously, and the students experienced the complexity of these systems, collecting information which must be used for health care planning. It is important to point out that, even using a fictitious municipality for the task, the students collected information from the municipalities where they did their internships, working with the real problems perceived in the health team's daily routine. It is worth mentioning that the internships are part of the Permanent Education (PE) axis, in which students experience the work process in Primary and Secondary Health Care throughout the semesters. The HSCHR axis is exclusively theoretical.

Oral health service implementation project

After the delivery, discussion, and evaluation of the HIS Workshop, the students

received a letter with the answer from the mayor of the fictitious city, requesting the elaboration of an Oral Health Care Implementation Project.

Dear Dental Surgeon, Oral Health Coordinator

The situational analysis performed by your team was solid and comprehensive. The proposals were based on the health care needs of the population and on the possibility of greater financial support through federal incentives.

Considering the data presented and the alternatives suggested for the improvement of the network of oral health care in the municipality, I request a project for the implementation of a dental service system which will contribute to the improvement of the health indices of our population.

Thank you for your commitment in the search for the expansion of access and qualification of the service provided to our citizens.

I expect the project within 90 days as from the date of this letter.

The students were divided into groups of four and the tasks were presented during a lecture. The groups chose a type of dental service to be installed in the municipality (OHT linked to the FHS, OHT linked to the traditional PHU or to the Mobile Dental Unit); they identified the necessary procedures in order to install the new services (based on the conversation with the representative from the Health Care Bureau); they read the ordinances and national policies which regulate dental services, the duties and functions of the oral health team in the National Primary Health Care Policy of 2017, provided by the Ministry of Health, oral health protocols, books and articles on the topic (box 1); they prepared a survey in order to assess the health care needs of the target-population of the new service; they organized a schedule considering spontaneous demand, emergency, scheduled appointments, and multidisciplinary/intersectoral activities.

The students also worked on the construction of the oral health care network (flows) in the municipality, considering the reference and counter-reference teams, and, finally, defined the hiring method for the new team as well as the team's management model.

The recommended bibliography was previously provided online by the virtual library of UNIVATES and in physical form, also by the library. The articles were also sent by the professor by e-mail (box 1). In each class, a first moment was reserved for theoretical discussion and connection with the reality of the students' internship/life experience based on the previous reading; and in a second moment, the groups elaborated their projects.

All the activities were carried out in the university's computer lab, establishing a daily production of activities, combining theory and practice. The project was delivered to the professor and presented to the other classmates. Finally, the particularities, advantages, and disadvantages of the main choices were discussed. It was agreed at the beginning of the semester what the expected progress for the HSCHR axis would be. At each activity, the professor explained the objectives, accepted work methods, and the type of evaluation. Due to the need for theoretical explanation about Health Care Financing from the students' part, deadline adjustments occurred, with an increase in the class time for the completion of activities lecture/discussion conducted by the professor.

In addition to the themes initially proposed by the professor, the students raised real issues experienced during the Permanent Education (PE) axis, in their internships in Primary Health Care Units (PHU) and Dental Specialties Center (DSC). This approximation of theory and practice made the learning process more meaningful for the students. Eight meetings were reserved for the Oral Health Service Implementation Project.

Box 1. Recommended bibliography per meeting, according to the subject

SUBJECT	RECOMMENDED BIBLIOGRAPHY/ACTIVITY
Oral Health Management in the UHS Invited lecturer: Dental Surgeon of the State Health Care Bureau (SES-RS)	Federal and state legislation on implementation of oral health services
Evaluation of the organization of the agenda/demand of the internships	Search and analysis of an article about the organization of demand in Oral Health
Oral Health experiences and practices in the Family Health Strategy	Moysés ST, Kriger L, Moysés SJ. Saúde bucal das famílias: trabalhando com evidências. São Paulo: Artes Médicas, 2008.
Hiring methods in the UHS	Lara SM, Bordin R, Costa Filho LC. Remuneração dos serviços de saúde bucal: formas e impactos na assistência. Cad Saúde Pública. 2002; 18(6): 1551-59.
	Morais HM, Oliveira RS. O trabalho em saúde e os desafios para o UHS. In: Moysés SJ, Goes PSA. Planejamento, gestão e avaliação em saúde bucal. São Paulo: Artes Médicas, 2012. p. 93-100.
Public administration and management models in health services	Alcântara CM. Fundamentos da administração pública e novos modelos de gestão em saúde. In: Moysés SJ, Goes PSA. Planejamento, gestão e avaliação em saúde bucal. São Paulo: Artes Médicas, 2012. p. 83-89.
Result-based management	Ditterich R, Moysés SJ. Gestão baseada em resultados e processos de contratualização. In: Moysés SJ, Goes PSA. Planejamento, gestão e avaliação em saúde bucal. São Paulo: Artes Médicas, 2012. p.113-122.
Institutional support	Barros RS, Sousa LMO, Dias PB, Díaz PHP, Soster JC, Heinzelmann RS, et al. Gestão participativa e controle social. In: In: Moysés SJ, Goes PSA. Planejamento, gestão e avaliação em saúde bucal. São Paulo: Artes Médicas, 2012. p.135- 142. Case-based approach to discuss the role of the institutional supporter in primary care
Matrix support (two or more medical teams	Campos D. Apoio matricial e equipe de referência: uma metodologia para
provided health care in an interdisciplinary manner)	gestão do trabalho interdisciplinar em saúde. Cad Saúde Pública. 2007;
- reference and counter-reference team	23(2):399-407.

In addition to the themes initially proposed by the professor, the students raised real issues experienced during the Permanent Education (PE) axis, in their internships in Primary Health Care Units (PHU) and Dental Specialties Center (DSC). This approximation of theory and practice made the learning process more meaningful for the students. Eight meetings were reserved for the Oral Health Service Implementation Project.

The students evaluated the activity as extremely hard. However, they also found that it should be enforced in all health-related degrees. This is the moment when the student finds him/herself fully responsible for something important, concrete, and difficult to accomplish. This method enabled them to understand how complex and hard it is to be inserted in a public service and how future professionals must play an active role and collaborate in order to build a society with more

access to oral health.

3 DISCUSSION

Several challenges motivate a singular look at the new perspectives regarding education. The challenges spring up in thinking, elaborating, questioning, intervening, planning new practices and techniques which permeate the dental surgeon's work process in the UHS. The freedom to build something from the start may cause insecurity amongst the students as to which path to take firstly. In the same way, the professor worked on his or her vulnerability, as the class was not completely under his or her control. The issues raised by the students when they related the bibliography to their internship environments enriched the exchange of ideas and made the professor develop her didactic and critical thinking skills.

The management organization and the debate about health care systems are not usually

addressed in the training of professionals, which complicates any attempt to structure care and social control over the health sector 13,14. However, new approaches with the purpose of bringing students closer to the UHS's continuous management can provide a problematization and an expanded transformative view of management, combining simultaneously strategies which enable and information about learning, teaching, management and decision-making in the UHS¹⁵. The time spent in the classroom is of fundamental importance for the future of public health in the country, since the students have the opportunity to better understand management, even if they do not intervene directly. Discovering a complex reality and discussing about it with classmates and professors enrich construction of knowledge. In pedagogical scope, this favors the student's critical thinking skills and his or her way of acting on problems, difficulties, confrontations, and divergences, in addition to motivating the search for a solution to the problems encountered.

Education must be seen as a process which involves action-reflection-action, according to a dialogic method, based on local realities and students' previous knowledge¹⁶. By using the environments and difficulties perceived by the students in their internships in the UHS, it was possible to carry out a critical analysis on health care management. The professor sought to develop a horizontal dialogue with the class, in a dynamic space of learning and knowledge exchange. This model also contributed to the creation of a bond between the professor and the students. With an open attitude and leaving authority-based and conviction through fear methods behind (regarding the professor, the content and the evaluation), the relationships built in the classroom were healthier and more purposeful. The search for the construction of knowledge applies to everyone, not only to the students, once one recognizes that everyone has something to share and everyone can contribute with their knowledge and wisdom.

The NCG clearly reinforces the importance of interdisciplinary teamwork, which is extremely productive for health promotion⁴. Teamwork for the purpose of contributes building project development of skills and competences necessary for the dental surgeon, such as communication, decision-making, and health management. In a study conducted at a Brazilian university, undergraduate dental students reported preference and satisfaction with teamwork developed through a team-based approach, providing thus a greater sense of responsibility¹⁷.

Similarly, leadership and autonomy were improved through this activity plan. One must not simply expect a dentist to be capable of assuming team leadership. He or she must have had, during their training, concrete opportunities to develop this role, so as to be able to plan continuous strategies, administer and manage services, as well as learn continuously¹⁸.

The role of the professor in active learning methodologies is also crucial. He or she must be active, engaged with the students, and aware that he or she also needs to permanently update their knowledge. He or she leaves the center stage and the complete control over the sources of knowledge to become a facilitator/orientator of the construction process, stimulating the role of the student as the protagonist of his own learning¹⁴. This does not exempt the professor from having authority and setting limits. However, it does prevent unbridled authoritarianism, which creates a barrier between the professor and the class¹⁹. His or her theoretical knowledge is also fundamental so as to build credibility before the students. The fact that they build knowledge together does not exempt the professor from studying and knowing how to conduct the discussions in class. It is necessary that he or she creates a bond with the class, demonstrating theoretical knowledge and didactic management skills in order to include the students who present more difficulty in participating, shyness, or little interest in the proposed topics.

According to the Dictionary of Professional Health Education²⁰,

"... permanent health education (PHE) as a 'teaching-learning practice' means the production of knowledge in the daily life of health institutions, based on the reality experienced by the actors involved, with the problems faced in daily work and the experiences of these actors as a basis for questioning and change. Permanent health education is based on the concept of "problematizing education" (critically inserted in reality and without presuming superiority of the educator over the learner) and of "significant learning" (interest previous personal experiences of the students, challenging them to learn more), that is, teaching-learning based on the production of knowledge which responds to questions that belong to the universe of the learners' experiences and which induces questions about being and acting in the world "20.

The choice of using a fictitious municipality for the activities worked as a trigger for the discussion. After approaching the students with the theme (first activity), each group worked with health data from the municipalities where they carried out their internships (activities two and three). The students identified the real obstacles and possibilities of the UHS from their perspectives and worked on these issues in the activities of the teaching axis. Thus, the practice was not disconnected from the theory, management contents could be worked through a critical-reflexive perspective. The Permanent Health Education (PHE), by working with the issues encountered during the work process,

demands a broad reflection from health professionals. Teaching activities such as the one presented in this article are ways to connecting students to these tools, reinforcing the importance of PHE throughout their career.

Dentistry has suffered from historical delay compared to the traditional model of health work, requiring thus extra effort in order to integrate oral health within a new context of interdisciplinary and multiprofessional action, thus forming a professional with an adequate profile¹⁸. Since the publication of the NCG in 2002 until the year 2020, many professors and researchers have used teaching tools and methodologies to qualify undergraduate dental schools^{3,5,6}. This study, as well as many others published in recent years, is a stimulus for other institutions to rethink their way of working with students. The exchange of knowledge should not only occur between professor and students, but among the entire academic community through a collaborative construction.

Since this was the first experience of both the educator and the students in this activity format, there were some limitations and points to be improved. The class management improved as the bond was formed. However, it is clear that the proposal needs to evolve during its experience in future interventions. In addition, strategies for evaluation of the proposal by the students and other actors involved, such as the health professionals who receive the students in the health care units, also need to be developed and improved.

4 FINAL CONSIDERATIONS

In view of the report presented, it is clear these activities contributed to professional training focused on the UHS, its creation and operation. In the UNIVATES Dentistry school, in addition to studying and participating in the UHS work processes, the students learn about Public Health Management. Hence, the students reflect on the complexities of the system, both as professionals and as possible managers, not to mention that they are all UHS users.

It is worth mentioning the difficulty faced with the vast legislation that dictates the functioning and financing of the UHS. The Consolidation Ordinances²¹ aimed to unify the legislation about the UHS documents currently in force. However, it is clear that few professionals and students have knowledge on the subject and are mostly unaware of research mechanisms on laws, ordinances, and decrees, such as the Health Legis, Health Legislation System, which was established by the federal government in 2006 and contains the normative acts pertinent to health services.

The profile of the professor is essential for the construction of the work because he/she must let go of traditional methodologies and believe in the autonomy of the students during the classes, stimulating and guiding them. The methodology and the way the assignments were given provided the opportunity for an active and constant search for scientific knowledge and allowed a critical view of the Brazilian health system. The time available in class allowed the students to ask different questions and, along with the professor's guidance, it was possible to problematize and discuss the issues whilst building knowledge.

It is necessary to update and make the curricular contents more dynamic, diversifying the teaching methodologies and using the resources and technologies available in the institution. In this sense, the active teaching and learning methodologies and the construction of projects are valid options for Dentistry courses, as they will contribute to the education of their students with a critical and broad vision of practical, theoretical, and social processes. Practices such as the one presented in this study improve the students' education by instigating a critical-reflexive attitude while they help the development of decision-making and leadership skills, without the exhaustion of theoretical content.

The empowerment which is desired in health care depends on the attitude which teachers foster in the classroom. It is not enough to wish for "patients" to be autonomous and professionals to be co-responsible for the population's health if this attitude is not provoked within the students during their training process.

RESUMO

Aprendizagem Baseada em Projetos e Gestão da Saúde: aproximando teoria e realidade no Sistema Único de Saúde

O Curso de Odontologia da Universidade do Vale do Taquari (UNIVATES) é organizado em um currículo modular integrado, baseado nas metodologias ativas de ensino aprendizagem. O objetivo deste estudo é relatar a experiência de discentes e docente sobre a metodologia 'aprendizagem baseada em projetos' adotada no eixo de Saúde, Sociedade, Cidadania e Direitos Humanos VI do Curso de Odontologia em 2018. Os estudantes foram divididos em pequenos grupos para realizarem 3 atividades principais: caso problema inicial sobre gestão em saúde; oficina de sistemas de informação em saúde; e projeto de implementação de serviço de saúde bucal. Após a realização de cada atividade, os estudantes apresentavam ao grande grupo, para uma análise dialogada. Buscou-se entender o contexto existente nos espaços de saúde, desde a gestão até o cuidado direto ao usuário. Realizouse visita nas Unidades de Saúde, análise dos acompanhamento planos municipais, atividades e dos profissionais, conversa com os usuários, buscas de dados nos sistemas de informação em saúde, além de análise na forma de contratação dos profissionais. Conclui-se que os discentes refletiram sobre o desafio da gestão ao lidar com as demandas dos usuários e profissionais do Sistema Único de Saúde (SUS). ensino foi aprimorado e qualificado, permitindo que discentes OS profissionais construíssem uma percepção mais crítica e ampliada da rede de atenção em saúde bucal. Essas reflexões, baseadas em situações da prática da equipe de saúde bucal, buscam qualificar os processos de trabalho na medida em que forma estudantes voltados para o SUS.

Descritores: Aprendizagem. Educação em Odontologia. Saúde Coletiva. Relatos de Caso. Gestão em Saúde.

REFERENCES

- Mitre SM, Siqueira-Batista R, Mendonça JMG, Morais-Pinto NM, Meirelles CAB, Pinto-Porto C et al. Metodologias ativas de ensino-aprendizagem na formação profissional em saúde: debates atuais. Ciênc Saúde Coletiva. 2008; 13(Supl 2):2133-44.
- Toassi RFC, Souza JM, Baumgarten A, Rosing CK. Avaliação curricular na educação superior em odontologia: discutindo as mudanças curriculares na formação em saúde no Brasil. Rev ABENO. 2012; 12(2):170-7.
- 3. Carrard VC, Montagner F. A iminente revolução no ensino: estamos preparados? Rev ABENO. 2019; 19(3):1.
- Brasil. Resolução CNE/CES nº 3, de 19 de fevereiro de 2002. Diretrizes Curriculares Nacionais do Curso de Graduação em Odontologia. Diário Oficial da União 2002; Seção 1:10.
- 5. Couto SDAB, Souza PHC. Metodologias ativas como estratégia pedagógica para promoção do ensino-aprendizagem em Odontologia: relato de experiência. Rev ABENO. 2019; 19(2), 91-100.
- 6. Haddad AE, Macedo MCS, Antoniazzi JH, Souza M, Abdalla CG. Ensinar e aprender por projetos: experiência das disciplinas de teleodontologia e docência universitária. Rev ABENO. 2013; 13(1):72-3.
- Filatro A, Cavalcanti CC. Metodologias inov-ativas na educação presencial, a distância e corporativa. Saraiva Educação SA; 2018.
- 8. Paiva MR, Parente JR, Brandão IR, Queiroz AH. Metodologias ativas de ensino-

- aprendizagem: revisão integrativa. SANARE, 2016;15(2):145-53.
- 9. Karahoca D, Karahoca A, Uzunboylub H. Robotics teaching in primary school education by project based learning for supporting science and technology courses. Procedia Computer Science 2011; 3:1425-31.
- 10. Bender WN. Aprendizagem baseada em projetos: educação diferenciada para o século XXI. Penso; 2015.
- 11. Queiroz JRC, Olivera MDFJ, Cruz Souza DM, Lima AL, Araújo S, Fuscella MAP. Aprendizagem por projeto e inovação tecnológica: união por competências. Rev ABENO. 2016; 16(2):2-6.
- 12. Costa-Silva D, Côrtes JA, Bachinski RF, Spiegel CN, Alves GG. Teaching cell biology to dental students with a project-based learning approach. J Dent Educ. 2018; 82(3): 322-31.
- 13. Rocha NB, Higarashi IH. Ensino de gestão em saúde nos cursos paranaenses de Odontologia. Rev ABENO. 2019; 19(3): 78-86.
- 14. Ceccim RB, Feuerwerker L. O quadrilátero da formação para a área da saúde: ensino, gestão, atenção e controle social. Physis: Rev Saúde Coletiva. 2004; 14: 41-65.
- 15. Stein C, Warmling CM, Tôrres LHN, Rech RS, Martins AB, Pires FS et al. Laboratório no estágio de gestão do SUS: integração ensino, pesquisa e gestão. Rev ABENO. 2018;18(2):166-73.
- Freire P. Pedagogia do Oprimido. 60^a
 Edição. Rio de Janeiro, Paz e Terra.
- 17. Matos EMO, Arreguy IMS, Jamelli SR, Souza FB, Carvalho EJA. Aprendizagem Baseada em Equipes no ensino odontológico: o que pensam os estudantes? Rev ABENO. 2019; 19(4), 91-101.
- 18. Morita MC, Kriger L. Mudanças nos cursos

- de Odontologia e a interação com o SUS. Rev ABENO. 2004; 4(1):17-21.
- 19. Freire P. Pedagogia da Autonomia. 50^a Edição. Rio de Janeiro, Paz e Terra.
- 20. Ceccim RB, Ferla AA. Dicionário da Educação Profissional m Saúde. Educação Permanente em Saúde. [Cited: March 18, 2020]. Available from: http://www.sites.epsjv.fiocruz.br/dicionario/verbetes/edupersau.html.
- 21. Brasil. Portaria de Consolidação nº 1, de 28 de setembro de 2017. Consolidação das normas sobre os direitos e deveres dos

usuários da saúde, a organização e o funcionamento do Sistema Único de Saúde. Brasília: Ministério da Saúde; 2017. [Cited: March 18, 2020]. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/g m/2017/prc0001 03 10 2017.html.

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