

## Face-to-face and remote teaching in the COVID-19 pandemic: Reports of experience in the discipline of health care



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### Matheus Kawana Couto

State University of Maringá  
E-mail: ra117473@uem.br

### Amanda Yumi O. Valderrama

State University of Maringá  
E-mail: ra116844@uem.br

### Vitória Vasconcelos Logullo

State University of Maringá  
E-mail: ra117190@uem.br

### Ariane Laguila Altoé

State University of Maringá  
E-mail: ra106841@uem.br

### Isabela Larissa C. Bornelli

State University of Maringá  
E-mail: ra114508@uem.br

### Suzana Goya

State University of Maringá  
E-mail: sgoya2@uem.br

### ABSTRACT

After the creation of the Unified Health System (SUS), a restructuring of education began in the

country. Thus, it is sought, nowadays, an interprofessional education (IPE) that breaks with the traditional individualistic view and values communication and cooperation between professionals from different areas. To this end, universities have practical disciplines in their curriculums that place students in the daily context of the Basic Health Unit (UBS). However, with the SARS-CoV-2 pandemic it was necessary to adapt university education to the remote mode of teaching. In this context, the present work analyzes the strengths and weaknesses of the presential and the remote teaching models in a state university in Paraná, in an attempt to understand how these two teaching modalities can interfere in the quality of professional training and in their understanding of interprofessionality. Thus, 5 students have been interviewed, which have gone to the same UBS, randomly selected. There have been significant differences between the apprenticeship of each modality, in which an integration of both would be the solution to overcome their specific difficulties and would bring more richness to the professionalizing formation of the students.

**Keywords:** Health Education, Interprofessional Education, Unified Health System.

## 1 INTRODUCTION

The redemocratization of health policy in Brazil culminated in the creation of the Unified Health System (SUS) and the constitutional regulation of the right to health for all citizens (MENICUCCI, 2014).

In 1994, the Family Health Strategy (FHS) was implemented throughout the national territory, breaking paradigms in the way health professionals work and spreading a vision of multiprofessional cooperation. In this context, the process of adhesion of a discipline capable of promoting the integration of several health courses and that was included in the curriculum (BACKES *et al.*, 2014) begins; one of them is the discipline of Health Care, offered by the State University of Maringá (UEM) in Paraná.



Health Care was introduced at UEM in 2017, has a predominantly practical character (in *loco*) and is initiated in the first year of graduation and has as its proposal the insertion of students of health courses in a multiprofessional environment, aiming mainly at the construction of a collaborative and interprofessional vision in the care of the population (LIMA *et al.*, 2018). In addition, by presenting to students the history, components and guiding principles of the SUS and the Family Health Strategy (FHS), the discipline offers a knowledge base on health care in Primary Care, stimulating the development of collective practical skills to assist with community health complaints (VIEIRA *et al.*, 2007).

In December 2019, a new coronavirus (SARS-CoV-2) was identified, which later led to the installation of a lasting pandemic (CORRÊA *et al.*, 2020). With this, social isolation measures were adopted to avoid crowding, causing the suspension of face-to-face classes at UEM indefinitely (State University of Maringá, Office of the Rector. Resolution No. 004/2020-CEP, of May 7, 2020).

Given this scenario, Emergency Remote Teaching (ERE) was established as an alternative to continue the teaching and learning of students and, at the same time, reduce the spread of the virus (JOYE *et al.*, 2020; HODGES *et al.*, 2020). Because it is an essentially practical discipline, Health Care needed its schedule to be adapted to the context of the pandemic. The activities that previously required students to have personal and face-to-face contact with the routines of primary care services began to be experienced through a computer screen, generating challenges in how to harmonize the active methodology of the discipline in the online remote model without great harm to student learning (HODGES *et al.*, 2020).

Thus, the objective was a qualitative analysis between the face-to-face and remote emergency modality of the discipline of Health Care through the experience report of EMU students, evaluating the pros and cons of each teaching model to understand how each one interferes in the professional training of academics in the health area.

## 2 MATERIALS AND METHODS

Health Care was developed as a common discipline for undergraduate courses of the Health Sciences Center: Biomedicine, Physical Education, Nursing, Pharmacy, Medicine, Dentistry; and the Center for Humanities, Letters and Arts: Psychology of UEM.

The present work reports the face-to-face and remote trajectories of students who experienced both facets of the discipline of Health Care at UEM. On the one hand, the face-to-face classes of the discipline were held in Basic Health Units (UBS) of the Municipality of Maringá - PR, while the remote classes were held through meetings on the Google Meet® and Google Classroom® platform.

For the preparation of this article, a bibliographic review of the following databases was performed: PubMed, SciELO and Google Scholar. The following descriptors were used in Portuguese:



case report of disciplines, experience report, health teaching, health education, interprofessional education and remote education education, Unified Health System, remote teaching, COVID-19 pandemic.

In addition, 5 students were interviewed, among whom 2 experienced the face-to-face modality and 3 attended the discipline remotely (Chart 1). The sample was randomly selected among students who went through the same Basic Health Unit (BHU), but with different teaching models for comparison merit and who volunteered to be interviewed.

Chart 1 - Characterization of students according to the course and teaching model, code according to how they will be mentioned in the text.

<b>Student Code</b>	<b>Course</b>	<b>Academic year in which he attended the discipline</b>	<b>Teaching model</b>
<b>DP1</b>	Medicine	2018	Classroom
<b>DP2</b>	Dentistry	2019	Face
<b>DR1</b>	Medicine	2020	Remote
<b>DR2</b>	Dentistry	2020	Remote
<b>DR3</b>	Nursing	2020	Remote

This is a descriptive study containing experience reports with a qualitative approach, in which data were gathered using the personal experiences of the students.

Considering that learning is unique and individual and involves collective interaction and various reasoning styles, we used the testimonies of the academics interviewed individually and the discussion of literature about these factors that influence the educational development of the students. The documents were written aiming not only to report their formative trajectory within the innovative classes based on active methodology, interdisciplinarity and interprofessionality, but also to list the potentialities and weaknesses of the teaching modalities within primary health care, emphasizing the influence of positive and negative aspects within the professional construction of each area of training.

### **3 RESULTS AND DISCUSSION**

The discipline of Health Care (SA) is inserted in the curriculum of 7 courses in the area of health of UEM, as a compulsory subject, taught during a semester with classes containing up to 13 students of the different courses in the health area. It is, therefore, a discipline of interprofessional character that is developed with the purpose of providing the experience in Primary Health Care (PHC)



in the environment of the Basic Health Unit, under the mentorship of a tutor and with exclusively practical classes.

Given the atypical context marked by the SARS-CoV-2 pandemic, the application of the AS Discipline followed the ERE model. In the remote model, the course, lasting from January to March 2021, had classes with the same number of students and under the guidance of the tutor. The classes were exclusively synchronous and asynchronous online, through the Google Meet® platform and the Google Classroom® tool. Thus, it was possible to establish parallels between the two modalities starting from the main points of the Discipline based on previous studies and students' reports.

### 3.1 FIRST CONTACT WITH THE DISCIPLINE

One of the points highlighted concerns the students' first contact with the discipline. It is worth mentioning that Health Care has a great differential from other disciplines, when using the active teaching methodology. The insertion of the student in the daily context of the Basic Health Unit (UBS) allows the student to be the protagonist of his learning, encouraging him to seek knowledge.

"In the first contact we were presented with how the discipline would be developed and the importance given to the speech space for each of the students. The active methodology based on Maguerez's arc, which sustains the SUS itself, was the theoretical basis that allowed the discipline to be more fruitful, even in remote teaching." (DR1)

The discipline is based, especially, on the Arch of Maguerez, a strategy that proposes the observation of reality, identification of key points, theorizing, development of hypotheses for solution and application to reality. The use of this active teaching methodology promotes the strengthening of student autonomy and favors the development of critical reflection about reality. Thus, it is noteworthy that the discipline corroborates with the integral formation of the student, contributing to the formation of a professional capable of transforming his social reality (PRADO *et al.*, 2012; LEAL *et al.*, 2018).

In addition, another pillar of the discipline is the Interprofessional Education (IPE) that provides contact between students from different areas of health, contributing to the development of competencies related to teamwork, communication, in addition to valuing and recognizing the role of each professional inserted in PHC (TOASSI *et al.*, 2020). However, it is possible to observe from the individual reports collected that the students participating in the face-to-face model developed this skill more, since it was possible to have direct contact with the professionals and their routines and users.

"This multiprofessionality working together shows that we must see the patient as a whole, not just isolated organs but a complex system that works tirelessly to maintain their homeostasis. That is why the specialties intercommunicate making the professionals learn and need to work in groups, assimilating new knowledge learned from each other." (DP2)

Another factor that should be considered in the teaching-learning process is the duration of the



course. The students of the face-to-face form performed it over a semester, in a total of sixteen meetings, while the students of the remote model completed it in a reduced time - nine meetings and seven asynchronous classes, but this period may have been insufficient for the construction of relationships and concrete experiences, even more so in an online environment (TOASSI *et al.*, 2020).

### 3.2 THE BASIC HEALTH UNIT

In relation to the place where the discipline is developed, it is important to consider the structure of the UBS, the health care services offered there and its area of coverage. In this context, the students of the face-to-face model had in their learning process a dynamic environment, which enables direct contact with professionals, patients, territory and its characteristics, which provided the opportunity for home visits and the recognition of other points of attention of the Health Care Network (RAS), territorialization and identification with the community.

"The team toured the territory covered by the unit, followed home visits to the community, learned about the numerous workshops offered to individuals by the UBS [...] visited the Fire Department, the SAMU, the Municipal Hospital, the Psychosocial Care Center (CAPS) II, the Intermunicipal Health Consortium of the Setentrião Paranaense (CISAMUSEP), the Emergency Care Unit (UPA) South Zone, the Municipal Shelter for Children, the Municipal Hostel, the Ipiranga School, among many other places." (DP1)

Studies indicate that PHC represents a scenario with an important differential to promote contact with the SUS. By inserting students in the practice of health services and in the teaching-service-community process, the bases of interprofessionality, humanization and teamwork are evidenced (TOASSI *et al.*, 2020).

In contrast, students of the remote model had their experience limited to the digital geoprocessing platform Google Maps® and videos filmed and made available by the tutor. Considering the virtual context, it is undoubtedly that there was harm to the students, however, the alternative to fill this lack was the lecture given by a nurse working in the PHC, in which legal and organizational aspects of the SUS were addressed, concepts that would be exposed in practice. Thus, it stands out among remote learning students a gain in relation to theoretical content, since the virtual environment is more accessible to conduct research, seek support materials and online tools.

### 3.3 CONTACT WITH PROFESSIONALS

In person, the discipline provides a direct contact with the routine of the UBS and its professionals, through the division of pairs that accompanied for a day, each sector of the UBS - reception room, pharmacy, reception, vaccination room, dressing, nursing room, HiperDia, childcare.

"Some students visited another UBS, others accompanied the part of welcoming, pharmacy and nursing. In general, the population praises the care provided by UBS Zone 6, saying they are satisfied." (DP1)



"Witnessing the work of these professionals allowed us to truly understand the flow in the unit, such as, for example, in the HiperDia care where we had contact with two community health agents (CHA) and a nursing assistant who showed us, in practice, how care is provided to hypertensive and diabetic patients. As our meetings took place at the UBS, we were able to establish a relationship with the professionals who worked there, and also with participants of the Family Health Support Center (NASF) team, who helped us understand about multiprofessional work in practice." (DP2)

However, as the students of the remote modality did not have the opportunity of experiences like this, an online conversation circle between retired professionals and students was prepared by the tutor. Thus, each professional reported how their experience in the SUS was and how interprofessionality was applied in the daily life of the BHU.

"Despite these difficulties, the tutor provided us, through lectures and conversations with professionals already retired in the SUS, showing the reality of the users of the UBS and the characteristics of each professional within this context, in addition to the need of the other for the work to be effective, that is, the importance of interprofessionality in primary care." (DR1)

Face-to-face IPE was able to better prepare students for their work and improve their understanding of the importance of interprofessionality in comprehensive care to the needs of each patient. However, it is worth mentioning that such improvement does not occur exclusively by the practical classes taught in a UBS but, essentially, by the interaction, communication and cooperation between students in this environment (TOASSI *et al.*, 2020).

### 3.4 ACQUIRED SKILLS

The active methodology, structured by the Maguerez Arch, was valid in the face-to-face and remote modality. In face-to-face classes, this form of teaching occurred in the experiences at the BHU and home visits (HV) to its users. For the student, this condition is configured as an accumulation of experiences since the beginning of the graduation about the profession itself, especially the humanized aspect.

"At that moment [home visit], we had the first real contact with a patient during graduation and that's when inexperienced first-year college students began to realize the other side of their future professions, the side that goes beyond technical and scientific knowledge, the side that teaches us empathy and love for others demanding humanized care for patients." (DP2)

The students of the face-to-face model extolled the importance of practice when they observed that the results exceed what was predicted by the curricular component of the discipline itself. The syllabus of the discipline emphasizes "knowledge and insertion in the SUS and its interfaces and teamwork". However, the students of the face-to-face model reported understanding the importance of the SUS for the user himself through collective activities that added efforts of teachers, students and the UBS professionals themselves in the realization of the HV and culminated in discussions about the reality observed and the living conditions of the assisted area. Thus, field activities are important as



educational mechanisms of the discipline of Health Care for the formation of a more humanized care, the valorization of the work of the SUS by future professionals and interprofessionality (SOARES *et al.*, 2009).

"It was possible to understand that the SUS has a potential that goes beyond the visible; despite the most diverse adversities, failures and shortcomings, the importance of the SUS in the lives of citizens is undeniable." (DP1)

Therefore, with the face-to-face classes, an environment of learning and knowledge of reality is actively created, given the dazzle created by the experience, which is opposed to the ERE. In remote teaching, in turn, the learning of the organization and execution of PHC programs takes place within the scope of theory only, that is, the student has to do searches and research to gain the perception of how the SUS works. To expand the references of the students and bring more proximity to the UBS that would be worked, the tutor recorded a series of videos of the UBS and its area of coverage. The dynamics of working with these materials relied on the student's efforts to attend them before class and then discuss with the class about what had been observed. This methodology allowed dialogue between student and teacher and required the capacity for abstraction, since the student saw only part of reality and with the help of the tutor and the acumen had to expand the reasoning about the local potentialities or weaknesses (FERREIRA *et al.*, 2014).

"[...] we were encouraged to research on the most diverse topics within the SUS, from physical structures and services offered, such as CAPS, UBS and NASF, to the internal functioning and organization and the origin of SUS [...]." (DR2)

The understanding and valorization of interprofessionality as the target objective of the discipline were contemplated in different ways by the two models of education. For the students who attended the BHU, it was possible to see for themselves the accomplishment of the work of each professional and its importance for the functioning of the UBS, especially the functions of the CHA. This unique experience added to the coexistence with students from different courses provided knowledge about the importance of this care network and is configured, therefore, as a conquest of the affective domain of learning in the discipline, essential for the integral formation of the health professional (ROSSIT *et al.*, 2018).

"[...] The practical situations that force the student to engage with the events enrich learning through personal experiences and autonomy of knowledge." (DP2)

The report of the students in the remote way, regarding the acquired skills, shows that they obtained knowledge of interprofessionality through the group itself, since the execution of the research and discussions depended on the cooperation of the other for the evolution of the classes. Thus, the formation that breaks the traditional division between health courses and reveals the integration that



promotes different ways of exercising patient care is achieved (ELY; TOASSI, 2018).

"I realized at the first moment that they would be dynamic classes in which our interaction as a group would be essential for the development of learning, a point that interested me a lot and that highlighted the discipline for me, since in the other subjects we did not have this space for speech." (DR2)

The occurrence of the discipline in a remote model provoked the development of personal and innovative characteristics. In the remote model, the student depends much more on himself, his motivations, aptitudes and willingness to become a better professional (STANISLAU; MACHADO, 2021). It was evident in the classes that the students began to consume more scientific content, given the need for research to carry out activities and participate in the discussions; adapted to the context of isolation to attend the course; improved communication and exposure of ideas. Therefore, even with physical distancing, these students were able to share knowledge and experiences.

"The remote model allowed to work effectively some aspects such as communication, since with the guidance of the tutor all students were encouraged to express their ideas and opinions." (DR3)

### 3.5 INTERVENTION PROJECT

The positive relationship between students associated with contact with PHC, since the beginning of graduation, promotes a reflective competence and group work about the needs of the SUS (FERREIRA *et al.*, 2014). Therefore, it is an integral part of the discipline the execution of a project intervention. This project, which aims to solve some problem observed in the BHU, is therefore based directly on the method of problematization through the Maguerez Arch. Therefore, it was necessary for the students to conduct scientific research to formulate the theoretical basis of the project, in addition to the support provided by the professionals who work at the UBS and the tutor, who help in the viability of the actions. In this context, the development of the project was carried out in both teaching formats and took advantage of the engagement of all team members (LIMA *et al.*, 2018).

For the students who attended the UBS, the realization of intervention projects can count on a plurality of possibilities, which resulted in the execution of several actions. This occurs because, given the coexistence with the reality of the UBS and its area of coverage, the student acquires an understanding of the importance of the programs, the critical view of the place and its needs and also due to the need of the UBS to carry out health promotion activities (VIEIRA *et al.*, 2007).

"At the end of the course, it was proposed to organize an intervention project in the community – which ended up unfolding into three. The first intervention took place in the Support House provided by the Municipality of Maringá to UBS Zone 6. There, a June party was organized that was attended by employees of the unit, inhabitants of the area and students of the discipline. The second intervention was made at the Ipiranga School (Figure 1), where a conversation was elaborated with 7 classes about the internet and its dangers. The third and final intervention proposed was the collection of clothes for the Maringá Hostel." (DP1)





"At the end of the course, two intervention projects were developed, the first was a June party with the elderly (Figure 2) that was based on health promotion in the elderly. For the party to take place, it was necessary to work as a team, both from the students and the UBS employees. It was a time of great practical learning about teamwork and about promoting both physical and mental health in individuals of the best age. The second intervention was made in the Health Space, an event that took place in the Japan Park that also aimed to promote health and prevent diseases. In the place were set up several stations with activities such as Yoga, auriculotherapy, thinking games, among others. Our station was for distribution of massage balls with bladder and sand for muscle relaxation." (DP2)

Figure 1 - Lecture: "The Internet and its dangers" held at Colégio Ipiranga.



Figure 2 - Party with sensory activities of UBS Universo



In the remote model, the elaboration of the intervention project developed in the students the ability to adapt to the context. We opted for the virtual environment to run it, on the social network Instagram®. Its planning took place in a series of meetings, among them there were some in which the students discussed without the intervention of the tutor. This form of active methodology decreased the distance between the participants, since all students kept their cameras on and were encouraged to express their opinions for the construction of the initiative (GIL; PESSONI, 2020).

The project run by the remote learning class was an Instagram® page, whose goal was to bring reliable information about relevant health topics to the adult population. To this end, the students searched for articles in health databases and documents on the websites of the Ministry of Health,



studied and elaborated *posts* with accessible and objective language. The themes were focused on prevention and maintenance of a healthy life, among them: hydration of the elderly, dental avulsion, importance of preventive examination, use of sunscreen, and even issues in vogue, given the current pandemic context, such as the importance of vaccination.

"During the course, as a guideline of the Arco de Maguerez, we sought, as a team, a means in which we could add improvements to the functioning of our health unit. We ended up deciding to create an Instagram® page (Figure 3), aiming not only at the democratization of knowledge, but also at exposing to the general public the services offered by the Unified Health System." (DR2)

Figure 3 - (A) Instagram Page - Universo Saúde; (B) Banner made for UBS Universo.



### 3.6 EVALUATION METHODS

The intervention project together with the portfolio and the peer evaluation are the mechanisms of evaluation of the student in the discipline. The portfolio is an evaluation tool that is consistent with the active methodology, because the student is responsible for developing it throughout the course, under a reflective and scientific look, involving research and his own conception about experiences and learning (RANGEL, 2003). The portfolio was developed by students from face-to-face and remote learning. The students of the face-to-face model had a greater baggage of experience with the patients and the health team, in addition to the visits and the conviviality among themselves in a totally new place.

"We gathered our experiences in portfolios with reports of all the activities during the course, thus concluding that during the internship at the UBS we had the opportunity to experience closely the reality of "being in the health area", in addition to learning the importance of working in a multiprofessional team." (DP2)

The remote model provided students with many theoretical classes, which mainly addressed the structure and principles of the SUS, for this reason their portfolios had a more "contentist" character. However, the unprecedented approach in the context of isolation made his works contain the exposition



of his views on the Discipline and the atypical way in which it was taught. It was explained that the distance favored the students to develop the reflective ability about their own reality and the competence to act in the face of obstacles, which will positively influence their posture as future health professionals.

"As a result, it is concluded that the discipline had many losses due to its remote model, with exclusively theoretical classes, however, the way teachers and students developed the moments, avoided that the classes were purely expository and of little performance, also contemplating the affective domain of learning." (DR1)

According to the results presented, it was possible to compose a table with the parallel of the discipline of Health Care in the two teaching models: the Face-to-face and the Remote, as described in Chart 2.

Table 2 - Summary of the parallel between the teaching models

Category	Classroom	Remote
<b>First contact with The discipline - Active learning</b>	It provided better application of the active teaching methodology and allowed greater interaction between students, provided a good development of the expected skills.	Initially, there was a certain distance between the students, however, this condition was mitigated with the course of the discipline. It allowed emphasis on different activities and forms of interaction, which resulted in a good development of the expected competencies.
<b>The Basic Health Unit</b>	Living with all aspects that involve the BHU - physical and organizational structure; Professionals; territory and community - adding practical knowledge through experiences.	Contact limited to digital resources - photos; Videos; geoprocessing platform; legal documents and materials made available by the tutor - there was, therefore, gain in theoretical knowledge.



<p><b>Contact with professionals</b></p>	<p>The students had a direct contact with the professionals, enabling conversations and a closer relationship, in addition to observing the functions of each professional in the UBS.</p>	<p>Greater distance between professionals and students, since this contact occurred in a virtual environment. However, the students reported good performance and understanding about the theme.</p>
<p><b>Skills development</b></p>	<p>It was feasible to perform home visits, territorialization, the adequate development of skills related to communication, teamwork</p>	<p>Some activities were suspended due to the impossibility of carrying them out, such as home visits and territorialization. Meanwhile</p>
	<p>and knowledge about interprofessionality.</p>	<p>Through lectures and online conversation circles it was possible to fill this lack and have the development of skills and competencies consistent with the expected.</p>
<p><b>Evaluation Methods</b></p>	<p>The portfolio was developed, with reports of experiences and impressions during the semester. Peer review, in turn, gets good development within the face-to-face modality.</p>	<p>It is possible to notice that the portfolios of the students have become more contentious. Regarding the Peer Evaluation there was a good development within the remote modality.</p>
<p><b>Intervention Project</b></p>	<p>It was possible, in person, to develop more than one intervention project, which counted on the participation of the community and the professional team, promoting interaction and formation of bonds with the population of the area of scope of the BHU.</p>	<p>The planned intervention project took place through social media; This ensured that the content produced had great reach and contributed to the propagation of concrete information to the public.</p>

It can be verified that there are several weaknesses and potentialities of the teaching models in all learning topics, so it is verified that there is a need to reflect and discuss about a hybrid model of teaching that can contemplate the advantages of the two models.



#### 4 CONCLUSION

Based on the reports presented, it is understood that the objective of analysis between the teaching models was achieved. In addition, the positive impact of the AS discipline on the training of health professionals was explicit, both in the face-to-face and remote model. Although the good consolidation of theoretical knowledge in the ERE is indisputable, the discipline of AS taken at a distance has lost some of its wealth of practical knowledge arising from personal experiences that are acquired by experiencing the discipline in person. Face-to-face teaching is able to consolidate the theoretical part through practice, despite encountering certain barriers when it comes to access to technology. This shows that both modes have their advantages and their challenges.

The ERE made it difficult for many undergraduates to experience within the reality of the SUS, necessary for the formation of an integrated and humanized professional. For this reason, it would be of great value if the university offered the practical part of this discipline in person in the future for students who are interested and encouraged teachers to reformulate the didactics of the face-to-face discipline, bringing the learnings of remote teaching. Taking advantage of the available technologies would enrich and provide more dynamic and integrated teaching and learning.



## REFERENCES

- BACKES, D. S. et al. Trabalho em equipe multiprofissional na saúde: da concepção ao desafio do fazer na prática. *Disciplinarum Scientia. Série: Ciências da Saúde, Santa Maria*, v. 15, n. 2, p. 277-289, 2014. Disponível em: <https://periodicos.ufn.edu.br/index.php/disciplinarumS/article/view/1093>. Acesso em: 31 mar. 2022.
- CORRÊA, P. R. L. et al. A importância da vigilância de casos e óbitos e a epidemia da COVID-19 em Belo Horizonte, 2020. *Revista Brasileira de Epidemiologia*. 2020;23:e200061.
- ELY, L. I.; TOASSI, R. F. C. Integração entre currículos na educação de profissionais da Saúde: a potência para educação interprofissional na graduação. *Interface - Comunicação, Saúde, Educação*, v. 22, suppl. 2, p. 1563–1575, 2018. Disponível em: <https://www.scielo.br/j/icse/a/n7Pzvq8cjpgJ5VFt3fsnvnHC/abstract/?lang=pt>. Acesso em: 20 mar. 2022.
- FERREIRA, D. C. et al. A experiência da Medicina de Família e Comunidade enquanto disciplina no curso de graduação em medicina. *Revista Brasileira de Medicina de Família e Comunidade*, v. 9, n. 32, p. 304–310, 2014. Disponível em: <https://rbmfc.org.br/rbmfc/article/view/782>. Acesso em: 20 mar. 2022.
- GIL, A. C.; PESSONI, A. Estratégias para o alcance de objetivos afetivos no ensino remoto. *Revista Docência do Ensino Superior*, v. 10, p. 1-18, 2020. Disponível em: <https://periodicos.ufmg.br/index.php/rdes/article/view/24493>. Acesso em: 20 mar. 2022.
- HODGES, C. et al. (2020). The difference between emergency remote teaching and online learning. *Educause Review*. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- JOYE, C. R.; MOREIRA, M. M.; ROCHA, S. S. D. Educação a Distância ou Atividade Educacional Remota Emergencial: em busca do elo perdido da educação escolar em tempos de COVID-19. *Research, Society and Development*. 2020;9(7):e521974299.
- LEAL, L. B. et al. Método ativo problematizador como estratégia para formação em saúde. *Revista de Enfermagem UFPE Online*, v. 12, n. 4, p. 1139–1143, 2018. Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/231346>. Acesso em: 20 mar. 2022.
- LIMA, V. V. et al. Desafios na educação de profissionais de Saúde: uma abordagem interdisciplinar e interprofissional. *Interface - Comunicação, Saúde, Educação*, v. 22, suppl. 2, p. 1549–1562, 2018. Disponível em: <https://www.scielo.br/j/icse/a/HcKDyxGDbbtHpj8nphcZ5nv/abstract/?lang=pt>. Acesso em: 20 mar. 2022.
- MENICUCCI, T. M. G. História da reforma sanitária brasileira e do Sistema Único de Saúde: mudanças, continuidades e a agenda atual. *História, Ciências, Saúde - Manguinhos*. 2014; (21)1:77-92.
- PRADO, M. L. DO et al. Arco de Charles Maguerez: refletindo estratégias de metodologia ativa na formação de profissionais de saúde. *Escola Anna Nery*, v. 16, n. 1, p. 172–177, 2012. Disponível em: <https://www.scielo.br/j/ean/a/89NXfW4dC7vWdXwdKffmf4N/?lang=pt>. Acesso em: 20 mar. 2022.



RANGEL, J. N. M. O portfólio e a avaliação no ensino superior. *Estudos em Avaliação Educacional*, São Paulo, n. 28, p. 145–160, 2003. DOI: 10.18222/eae02820032174. Disponível em: <http://publicacoes.fcc.org.br/index.php/eae/article/view/2174>. Acesso em: 21 mar. 2022.

ROSSIT, R. A. S. et al. Construção da identidade profissional na Educação Interprofissional em Saúde: percepção de egressos. *Interface (Botucatu)*. 2018;22(Supl. 1):1399-410.

SOARES, L. C. et al. Educação em saúde na modalidade grupal: relato de experiência. *Cienc Cuid Saude*. 2009;8(1):118-123 .

STANISLAU, E.; MACHADO, J. L. M. Ensino Remoto de Infectologia: uma experiência bem sucedida. *The Brazilian Journal of Infectious Diseases*, v. 25, suppl. 1, p. 50-51, 2021. Disponível em: <https://www.bjid.org.br/en-ensino-remoto-de-infectologia-uma-articulo-S1413867020303044>. Acesso em: 20 mar. 2022.

TOASSI, R. F. C. et al. Ensino da graduação em cenários da atenção primária: espaço para aprendizagem interprofissional. *Trabalho, Educação e Saúde*, v. 18, n. 2, 2020. Disponível em: <https://www.scielo.br/j/tes/a/QsJJqQrDcq5cvqtGz4vhgNb/abstract/?lang=pt>. Acesso em: 20 mar. 2022.

UNIVERSIDADE ESTADUAL DE MARINGÁ, Gabinete do Reitor. Resolução nº 004/2020-CEP, de 7 de maio de 2020. Suspende o calendário letivo de disciplinas presenciais do ano 2020 da Universidade Estadual de Maringá, em regime de excepcionalidade e adota outras providências. Secretaria dos Colegiados Superiores da Universidade Estadual de Maringá. 7 de maio de 2020.

VIEIRA, J. E. et al. Instalação da disciplina de Atenção Básica em Saúde na Faculdade de Medicina da Universidade de São Paulo (2003-2006). *Revista Brasileira de Educação Médica*, v. 31, n. 3, p. 236–244, 2007. Disponível em: <https://www.scielo.br/j/rbem/a/TDmjdCyc8dVNhbG8gk5Fj6M/?lang=pt>. Acesso em: 20 mar. 2022.