

ACTIVE TEACHING AND LEARNING STRATEGIES: PERCEPTIONS OF NURSING STUDENTS

ESTRATÉGIAS ATIVAS DE ENSINO E APRENDIZAGEM: PERCEPÇÕES DE ESTUDANTES DE ENFERMAGEM

ESTRATEGIAS ACTIVAS DE ENSEÑANZA Y APRENDIZAJE: PERCEPCIONES DE ESTUDIANTES DE ENFERMERÍA

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ABSTRACT

In view of the need to change the traditional teaching and learning model, a group of professors of the subjects Child Health Care and Women's Health Care at a Public University decided to incorporate active teaching methodologies. This study aimed to understand the experience of students after changes in the teaching method and the process of implementation of the new strategies. Data collection was carried out in June 2016 with a group of students who studied the discipline. A questionnaire for the evaluation of the discipline composed of closed and open questions was applied with the intention of making the students to elaborate a narration. Descriptive statistical analysis and content analysis were used to analyze the data. The main results showed that in the general evaluation of the subject, the majority of the students attributed excellent and good concepts. The most cited aspects were "teachers", "fields of practice" and "laboratory classes". In clinical practice, "autonomy", "case discussion" and "nursing consultation" were highlighted as positive points. Among the negative points, the following were pointed out: "relationship with the nurses at the internships" and "reception of the team". Based on the content analysis of the narrations, the following themes were found: "living the active methodology", "observing the association between theory and practice", and "going beyond technique". In the process, the students highlighted experiences beyond technical learning, such as acquisition of moral values, growth as human beings, importance of citizenship, respect and sensitivity in human relations, and incorporation of concepts such as comprehensiveness, horizontality and autonomy.

Keywords: Education, Nursing; Education, Higher; Obstetric Nursing; Pediatric Nursing; Students, Nursing.

RESUMO

Diante da necessidade de mudança no modelo tradicional de ensino e aprendizagem, um grupo de docentes das disciplinas Atenção à Saúde da Mulher e da Criança de um curso de Enfermagem de uma universidade pública decidiu incorporar metodologias ativas de ensino. Este estudo teve como objetivo compreender a vivência do estudante após mudanças no método de ensino e bem como o processo de implementação das novas estratégias. A coleta de dados foi realizada em junho de 2016 com o grupo de estudantes que cursou a disciplina. Foi aplicado questionário de avaliação da disciplina composto por questões fechadas e uma questão dissertativa, com o intuito de que os estudantes elaborassem uma narrativa. Foram realizadas análise estatística descritiva e análise de conteúdo dos dados. Os principais resultados mostraram que, na avaliação geral da disciplina, a maioria atribuiu conceito ótimo e bom, os aspectos mais citados foram "professores", "campos de prática" e "aulas de laboratório". Na prática clínica foram destacadas "autonomia", "discussão de casos" e "consulta de enfermagem" como pontos positivos; entre os negativos foram identificadas a "relação com o enfermeiro do serviço" e "recepção da equipe". Da análise de conteúdo das narrativas emergiram os seguintes temas: "vivendo a metodologia ativa", "observado associação entre teoria e prática" e "indo para além da técnica". No processo vivenciado, os estudantes destacaram experiências para além do aprendizado técnico, como aquisição de valores morais, crescimento como ser humano, importância para a cidadania, respeito e sensibilidade nas relações humanas, incorporando conceitos como integralidade, horizontalidade e autonomia.

Palavras-chave: Educação em Enfermagem; Educação Superior; Enfermagem Obstétrica; Enfermagem Pediátrica; Estudantes de Enfermagem.

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RESUMEN

Ante la necesidad de cambiar el modelo tradicional de enseñanza y aprendizaje, un grupo de docentes de las asignaturas Atención a la Salud de la Mujer y del Niño del curso de Enfermería de una universidad pública decidió incorporar metodologías activas de enseñanza. Este estudio tuvo como objetivo comprender la vivencia del estudiante tras los cambios en el método de enseñanza y el proceso de puesta en práctica de las nuevas estrategias. La recogida de datos fue realizada en junio de 2016 con el grupo de estudiantes que cursó la asignatura, mediante un cuestionario de evaluación con cuestiones cerradas y una cuestión disertativa para que los estudiantes elaborasen una narrativa. Se realizó el análisis estadístico descriptivo y de contenido de los datos. Los principales resultados mostraron que la asignatura fue considerada como óptima y buena por la mayoría; los aspectos más citados fueron "profesores", "campos de práctica" y "clases de laboratorio". En la práctica clínica realizaron como positivos "autonomía", "discusión de casos" y "consulta de enfermería"; entre los negativos fueron señalados "relación con el enfermero del servicio" y "recepción del equipo". En el análisis de contenido de las narrativas surgieron los siguientes temas: "viviendo la metodología activa", "observado la asociación entre la teoría y la práctica" y "yendo más allá de la técnica". Los estudiantes subrayaron experiencias más allá del aprendizaje técnico, como adquisición de valores morales, crecimiento como ser humano, importancia para la ciudadanía, respeto y sensibilidad en las relaciones humanas, incorporando conceptos como integralidad, horizontalidad y autonomía.

Palabras clave: Educación en Enfermería; Educación Superior; Enfermería Obstétrica; Enfermería Pediátrica; Estudiantes de Enfermería.

INTRODUCTION

The change in health care models from the perspective of comprehensiveness requires health professionals to have an increased knowledge of objective, subjective and social dimensions, as well as the way to produce management and care.^{1,2}

In this sense, there has been a growing movement of re-organization of the curricula of higher education courses, as well as the search for the implementation of active teaching-learning methodologies (ATLM), as they enhance student proactivity, favor the development of professional autonomy³ and prioritizes the health needs of a given population. However, the challenge is to break with the rigid structures of traditional teaching models that keep theory distant from practice.⁴⁻⁶

In the last decades, several ATLM have been developed, including problem-based learning (PBL), problematization, project-based learning, and the use of teams, games and simulations.³ However, regardless of the strategy adopted, the assumptions are similar: the student is the central protagonist, the teacher is the facilitator of the educational process, prior knowledge has to be considered, practice scenarios are valued and diversified, and there is the understanding that knowledge implies access and constant reconstruction of information.⁷

ATLM can provide the students with the ability to reflect on their own conceptions, aid in the training of critical-reflexive individuals, lead to the process of learning to learn and to train individuals to be agents of change, as the responsibility for learning and acquiring new knowledge starts to be shared.^{3,8}

This new conception of teaching is able to define directions for professional training, which can have impacts in the practice of the health field. In this thought, the field of nursing is conducive to the use of active methodologies, considering a teaching that aims to train professionals committed to their social role, and professionals who are humanist, critical and reflective.^{8,9}

The subjects Child Health Care and Women's Health Care of a Nursing school at a public university in the country side

of São Paulo occurred separately until the year 2008 and were organized according to the traditional model. In 2009, a group of teachers initiated a gradual process of insertion of ATLM with systematic assessments to each course offered in order to promote changes and overcome the identified obstacles. It is worth mentioning that there are still some moments of traditional teaching, which are being rethought every year with the aim of giving priority to active teaching and learning strategies.

In view of the above, the following research question was outlined: *what are the perceptions of Nursing students regarding active teaching and learning strategies implemented in the subjects Child Health Care and Women's Health Care?* Thus, the present study aims to describe the perceptions of Nursing students of the incorporation of active teaching and learning strategies.

METHOD

This is a descriptive research with a cross-sectional design carried out at a public university in the country side of the state of São Paulo (BR). Twenty-eight students enrolled in the seventh semester of the undergraduate nursing course participated in the study. The criterion for eligibility was to be an undergraduate student of the Nursing course who was enrolled in the above mentioned subjects in the year 2016. It is pertinent to point out that the other students who had attended these subjects in previous moments were not included because of the non-standardization of the instrument of assessment of the subjects and because of the lack of previous ethical appreciation.

With regard to active teaching and learning strategies, we highlight the use of problem-based learning (PBL) triggered by "problem situations" and activities of simulation of professional practice. According to the literature, PBL consists of seven steps, namely: clarification of terms and expressions in the text of the problem; definition of the problem; analysis of the problem; systematization of the analysis and hypotheses to explain

or solve the problem; elaboration of learning objectives; identification of sources of information to acquire new knowledge at individual basis; synthesis of this knowledge; and revision of the initial hypotheses for the problem.³

Data collection was carried out in June 2016, during the final assessment of the subjects. An instrument called "Instrument for assessment of the subject" was validated among the teachers involved. The instrument contained three sections: the first one related to sociodemographic data; the second one with closed questions that allowed to attribute the following concepts: adequate, partially adequate, inadequate to evaluate the relevance of the subjects, the theoretical content, the hourly workload, the articulation between theory and practice, the active teaching and learning strategies and the assessment methods. It is worth mentioning that, although the objective of the present study is to describe the students' perceptions about active teaching and learning strategies, the authors considered it relevant to present the concepts attributed to the other aspects of the subject, taking into account that these aspects are directly or indirectly related to the strategies adopted.

The third section contained a space to describe the experiences of the students, as well as for them to register their perceptions about their personal and professional training, understood as a personal document. According to the literature, personal documents correspond to any narration in the first person that describing actions, experiences, and beliefs. In these documents, people may write on their own initiative, or may be asked to write. An advantage is the assurance that a certain number of people write about the same event.¹⁰

The data collected in sections 1 and 2 were stored in a structured Microsoft Excel® spreadsheet, from double typing to eliminate possible errors and ensure reliability. Absolute and relative frequencies were used to describe the variables. For the analysis of personal documents, the content analysis method was used, following the steps: pre-analysis; exploration of material or coding; treatment of results, inference and interpretation. Thus, the personal documents were deconstructed and reconstructed into overarching themes and then grouped into categories, which consist of a set of elements or aspects with common or interrelated features.¹¹⁻¹³

The research made it possible to detect the following categories: "living the active methodology", "observing the association between theory and practice", and "going beyond technique".

The research was approved by the *Comitê de Ética e Pesquisa* (CEP) (REC) of the *Universidade Federal de São Carlos* (UFSCar), according to Protocol nº 1,602,550. Students were identified with the Letter "S" and listed as they returned the assessments.

RESULTS

Twenty-eight students who were enrolled in the subjects "Child Health Care" and "Women's Health Care" in 2016

participated in the study. The mean age was 24.43 years and the median was 24 years, with a minimum of 21 years and maximum of 31 years. There was a predominance of females (92.9%). All declared to be of Brazilian nationality (100%) and 78.6% were from the country side of the state of São Paulo. Regarding religion, 39.3% of the students were Catholic and 17.9% were Spiritists. The majority declared to be white (71.4%) and had attended high school in private institutions (57.1%). Fourteen students (50%) were not enrolled in their regular academic semester (known as Academic Profile in Brazil) (set of subjects of each specific semester), that is, they were not attending the subjects of the semester they should attend according to the year of entry in the Nursing school, probably due to failure to be approved in previous subjects along the course. Table 1 presents the characterization of the students participating in the research.

Table 1 - Socio-demographic characteristics of Nursing undergraduate students who attended the subjects Child Health Care and Women's Health Care at a public university in the country side of São Paulo, Brazil, 2016

Variables	n	%
Sex		
Male	02	7.1
Female	26	92.9
Original city		
City where the Nursing school is	03	10.7
State's capital	01	3.6
Country side of the state	22	78.6
Other states	02	7.1
Self-reported skin color		
White	20	71.4
Brown	05	17.9
Black	01	3.6
Not informed	02	7.1
Religion		
Catholicism	11	39.3
Spiritist	05	17.9
Evangelical	03	10.7
Other (Protestant, Messianic, Buddhist)	01	10.7
Not informed	06	21.4
Secondary education		
Private schools	16	57.1
State schools	12	42.9
Enrolled in the regular Academic Profile		
Yes	14	50.0
No	14	50.0

Regarding the concepts attributed by the students as to the relevance of the subject, content covered, workload, articulation between theory and practice, active teaching and learning strategies, and assessment forms, it was observed that most of the students considered the evaluated items as adequate. However, it is pertinent to highlight that some students attributed the concept “partially adequate” to the items workload, active teaching and learning strategies, and assessment forms. Table 2 shows the distribution of the concepts assigned according to the evaluated aspects.

Table 2 - Distribution of concepts attributed by Nursing undergraduate students who attended the subjects Women’s Health Care and Child Health Care at a public university in the country side of São Paulo, Brazil, 2016

Variables	Adequate n (%)	Partially adequate n (%)	Inadequate n (%)
Relevance	28(100)	0(0)	0(0)
Theoretical content	27(96)	1(4)	0(0)
Workload	21(75)	7(25)	0(0)
Articulation between theory and practice	27(96)	1(4)	0(0)
Active strategies	23(82)	4(14)	1(4)
Assessment forms	25(89)	3(11)	0(0)

The thematic analysis of the narrations constructed by the students culminated in the following categories: “living the active methodology”, “observing the association between theory and practice”, and “going beyond technique”.

LIVING THE ACTIVE METHODOLOGY

The experience of the students with active methodology is not a novelty for most of them. Other subjects in the department use this model. The students identified positive and negative points in the subjects Women’s Health Care and Child Health Care. The positive points portray benefits in learning from the use of search engines and discussions in the formulation of new syntheses. The students highlighted in their reports the doubts, yearnings, concerns at the beginning of the first experiences with the small group and the challenge of leaving the comfort zone provided by the traditional method. In the course of the experiences they began to visualize the movement of progress, when they gained confidence and consequently calmness and trust in the process. The following excerpts portray this evolution.

At first I found the method very challenging, having to get out of my comfort zone, both because I have to expose myself before the group, and also because I have to

go after the content. But I see this as a very good thing for my personal and professional growth, as I will have to put myself before the team and I’ll have confidence in myself. It also makes us develop autonomy in the search for knowledge and favors integrated reasoning, because the themes are not seen separately (S9).

It made us make research and discuss, it made us think more than we would do in an expository class in which we would be more often memorizing, and this makes us become more critical professionals and take this to our professional performance (S10).

It was a challenge in the beginning... in the end I realized that I learned and retained much more knowledge when compared to the experience of the common methodology (S14).

It is noteworthy that, among the ATLM approaches, this experience used Problem-Based Learning (PBL) and some simulated laboratory activities. When experiencing the method in this particular subject, the students identified negative points that are very important to consider, since it is by analyzing their explanations that teachers will be able to improve the use of ATLM. It was evident the need to rethink a model of assessment more aligned with the ATLM, the perception of superficiality in the discussion of certain themes and also the need for the student to expose their ideas was highlighted as a negative point, which for some students this can be difficult. The following accounts exemplify these aspects.

The method has many advantages and facilitates the learning. However, in some moments the content was superficial due to lack of time for discussion (S5).

Although it is a methodology that stimulates research and the self-learning... it is not a methodology that I like, because it ends up privileging more extroverted people (S6).

The methodology is very good but it could be interspersed with traditional lessons due to the time. There was no time to delve into some topics (S16).

OBSERVING THE ASSOCIATION BETWEEN THEORY AND PRACTICE

One of the points emphatically highlighted by the students was the articulation between theory and practice provided by the method, as well as the need to retake other themes, as the experience in the field of practice led to detect

gaps. The discussions carried out during clinical practice provided an expanded view of the role of the nurse as a critical reflection on the general context of women's, children and the family health, going beyond the biologicist perspective. The discussions also pointed to the importance of both technical procedures and aspects related to health education to value the educational role of nurses.

As I would get more familiar with the scenarios, I was able to exercise the practice gradually, adapting the local reality to the content learned, identifying my gaps and seeking to solve them (S8).

The fields expanded my view of what is a nurse; the differences of the fields brought the contents seen in theory (S9).

We can link theory to practice. I was able to visualize the learning of theory in the practical fields and carry out health education, besides performing technical procedures (S10).

Contents that were not reinforced in theory were covered in practice, as well as new knowledge. The autonomy and confidence I developed were very important for my personal growth (S21).

REFLECTING BEYOND TECHNIQUE

The students' experience in articulating the two areas of knowledge - woman and child - and the use of more participative teaching strategies provided not only scientific technical learning, but also emphasized the learning of moral values, growth as a human being, the importance of citizenship and respect for others and the constant need for listening, interest and sensitivity in human relations. Beyond technique, the subject provided a more far-reaching view on the living conditions and health-disease process of users, incorporating concepts such as comprehensiveness, horizontality in the relationships with others, overcoming obstacles and developing autonomy and communication skills. The method also promoted a greater approximation and respect in the relationships between teachers and students, as well as among students themselves.

[...] more than theoretical and practical knowledge, this subject allowed us to learn values... a model that I will take to my personal and professional life (S2).

This subject contributed not only to my academic training, but to my personal growth as a human being

and an integral part of an expanded context of citizenship (S3).

I was able to understand the importance of the socio-cultural environment and its influences in the elaboration of an adequate care plan (S23).

Throughout the subject I felt very comfortable to expose my knowledge, experiences and doubts, to actively participate in what was proposed. I believe that discussions in small groups are fundamental not only to discuss theory, but as a space for encouraging dialogue and a closer interaction with teachers (S28).

DISCUSSION

The profile of this class of students was a young adult female audience from the country side of São Paulo. Most of them had attended high school in private schools. Another result that called attention was that half the class in the time of the research was not enrolled in their regular academic semester or Academic Profile because they had failed to be approved in previous subjects along the course. These data lead us to believe that there are difficulties to reach approval in subjects of the basic area, which mostly rely on the traditional teaching method. Contact with ATLM only occurs in some specific subjects in the field of Nursing. In this sense, they are students who have good and bad memories of previous experiences.

A study that analyzed the use of active methodologies in the supervised traineeship of a Dentistry course highlighted the challenge for both teachers and students imposed by a traditional curriculum in which knowledge is fragmented and theoretical and practical aspects are dichotomized. This model persists due to the fact that there is a large generation of teachers who were trained in the traditional model and they repeat it in their teaching.¹⁴ The data of the present study showed that the students themselves also show resistance, often resulting from their trajectory during secondary education based on the traditional teaching model, or because they had experiences with the active method that were not satisfactory.

Despite some difficulties of acceptance, the data indicate the students have a positive perception of the use of the active methodology and of the articulation between theory and practice. This data is in line with other studies in the field of health education that evaluated the perception of students on the incorporation of a new teaching model and also identified that active methodology strategies favor the learning process and the interaction between knowledge and practical activities.^{5,8,9,14}

In this study, the good acceptance of the method is due, in part, to the way in which the process of changes in teaching-

learning took place. Each year, the subject is evaluated by the group of teachers taking as parameter the perception of the students as to ATLM and the difficulties the teachers met, allowing adjustments over the years.

One of the main points in the proposal of active methodologies is that the entire teaching-learning process be student-centered. This differs from traditional pedagogy, in which the teaching actions are centered on the transmission of knowledge from the teacher to the student. In the latter model the teacher alone is responsible for conducting the educational process, and he has a maximum authority with respect to teaching strategies. In turn, critical pedagogy arises as a new pedagogical and innovative tendency in which the teacher assumes the role of mediator and leads students to the observation of reality and understanding of the content that they extract from it. Such an educational process aims at social, economic, and political transformation as well as overcoming social inequalities.¹⁵

In this context, one of the great challenges in the incorporation of active methodologies is the attitude of students before the new method of teaching. The expression “leaving the comfort zone” appeared in the speeches of the students and is linked to the need for the group of students to become protagonist of the learning process, in order to enhance the development of autonomy.¹⁶ On the other hand, this study demonstrated a high level of anxiety in the students, which shows to be part of the process of understanding their role in learning. The more students experience the method, the better they manage these feelings and perceptions as well.¹⁷

Another aspect that deserves to be highlighted is the perception of superficiality in the approach of certain themes. Such trait indicates difficulties of the group of students to understand their role and the intentionality of the method, as well as the need for constant evaluation and training of the group of teachers in the use of ATLM.

As shown in another study, there is a perception on the part of students that they do not feel fully qualified for professional exercise without the support of the teacher.¹⁴ This is a challenge that requires communication in the dialogical relationship between teachers and students. This closer interaction allows knowing the particularities of each student, reflecting in the adoption of strategies and proposals so that the teaching-learning process may be effective, pleasurable and also transformative.

In this process of transformation, the resistance to change and the challenges faced by both students and teachers must be constantly considered because most of them come from traditional school and university models, where curricula do not favor innovative teaching strategies. It is also necessary to take into account the subjectivities of the students, as one of the participants pointed out in this study, that this type of methodology favors more extroverted people. At this context,

it is necessary to open up to diversity and apply strategies to aid students to develop new abilities and concomitantly discover their potentialities.

In this sense, a study that aimed to analyze PBL stated that the method promotes the development of autonomy of students, as it considers the need to develop “learning to learn” as a process to be lived and improved. This active teaching and learning method has been widely used in health education.

In the “management of knowledge”, the ability of learning to learn becomes indispensable for professional success. It is then necessary to search for alternatives that allow students to have moments of critical reflection in the practice and in the restructuring of knowledge.¹⁸ This reflection is in line with the findings of the present study, according to the experiences of the students with respect to the skills that were acquired through the implemented changes. In this sense, the autonomy highlighted in the results is validated by this study, present in the experiences of the group of students, to the extent that they need to feel subjects of the training process and not objects of it, so that they participate in the decision making and the questioning about the population’s health needs.¹⁹

In the field of nursing, the use of this strategy is able to prompt the development of autonomy early during graduation, which is indispensable for professional practice.^{5,20}

In this scenario, it is essential that students from the health area, and particularly Nursing training, go beyond their technical skills. There is a need for the improvement of intra and interpersonal skills. It is necessary to problematize the political commitment with education and society, as well as the historical understanding of the current moment of Nursing teaching in Brazil.²¹ The results of this study show that for the students, the experience of the active methodology reflected directly in the practice of care as they highlighted the following points: facilitation in the articulation between teaching, service and community; union between theory and practice throughout the activities; problematization of social situations and contexts; awareness of the social and health needs of the population; opportunity to experience the reality of SUS users; critical reflection on the reality; and the protagonism of students.

The incorporation of active methodologies in the curricula of health courses must be constantly improving. One of the ways to improve teaching is by understanding the experience of the students, considering their perceptions, complaints and recommendations. A study that aimed to analyze the satisfaction of students with the introduction of active methodological techniques in a subject of health ethics is in agreement with the present investigation, as it also identified the workload as a limiting factor for the good performance of students.²²

In this process, one of the aspects that deserves attention is the development of critical and problematizing reasoning

on the part of the students. One of the studies showed that students who experienced the active methodology in small groups, mediated by a tutor, reported that although they felt insecure, they realized that the movement to carry out their own searches, instigated by their doubts and needs, made it possible a better elaboration of the themes studied as well as personal growth as part of the construction of knowledge.⁸

The experience of a public university with the incorporation of active methodologies in undergraduate training in Social and Health Sciences emphasized that when restructuring a subject, it is possible to elaborate new conceptions of health and education and turn the relations between teachers and students more democratic.⁹

This new conception of teaching is able to establish new directions for professional training, with an impact in the health care practice. In this thought, the field of nursing is conducive to the use of active methodologies, since training aims to produce professionals committed to their social role, which is humanist, critical and reflective. For this, it is necessary to break with the distance between theory and practice and take into account the diversity and the contemporary context within the classrooms. Besides training good professionals, the university needs to assume its social role and contribute to the training of critical, reflective citizens and agents of transformation.

FINAL CONSIDERATIONS

The paths followed by the subject show the constant need to evaluate the teaching practice, taking into account that only through reflection and self-reflection are able to foster the necessary and motivating movement, not only to “do things differently”, but also to “do them better” from the point of view of the constant evaluation of the teaching practice and of the training of students as human beings. The methodological proposal of teaching adopted by the subject synthesizes a strong desire to promote meaningful learning by inserting spaces and dialogues that are alternative to traditional and expository classes. It is believed that the formation of critical, reflexive and socially responsible professionals permeates the knowledge and academic insertion in the complexity of social problems.

This study had limitations; the main one was the evaluation of only one class since the implantation of new ways of teaching and learning were incorporated. However, the study highlights important elements, especially the autonomy and social and ethical commitment with a humanized, resolute and respectful care. It also highlights challenges such as overcoming the difficulties for students to get out of the “comfort zone”, provided by the traditional method, rethinking strategies to overcome the perception of superficiality in the discussion of certain themes and review an assessment method bet-

ter aligned with ATLM. Therefore, further studies addressing these aspects are recommended for the achievement of innovative health teaching and practice.

REFERENCES

1. Taroco APRM, Tsuji H, Higa EFR. Currículo orientado por competência para a compreensão da integralidade. *Rev Bras Educ Méd.* 2017[cited 2017 Nov 20];41(1):12-21. Available from: <http://www.scielo.br/pdf/rbem/v41n1/1981-5271-rbem-41-1-0012.pdf>
2. Lima VV, Feuerwerker LCM, Padilha RQ, Gomes R, Hortale VA. Ativadores de processos de mudança: uma proposta orientada à transformação das práticas educacionais e da formação de profissionais de saúde. *Ciênc Saude Coletiva.* 2015[cited 2017 Nov 20];20(1):279-88. Available from: http://www.scielo.org/scielo.php?script=sci_arttext&pid=S1413-81232015000100279&lng=en.
3. Lima VV. Espiral construtivista: uma metodologia ativa de ensino-aprendizagem. *Interface (Botucatu).* 2017[cited 2017 Dec 10];21(61):421-34. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-32832017000200421&lng=en.
4. Freire P. *Pedagogia da autonomia: saberes necessários à prática educativa.* 36ª ed. São Paulo: Paz e Terra; 1996.
5. Paranhos VD, Mendes MMR. Currículo por competência e metodologia ativa: percepção de estudantes de enfermagem. *Rev Latino-Am Enferm.* 2010[cited 2017 Nov 14];18(1):109-15. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0104-11692010000100017&lng=pt. doi: 10.1590/S0104-11692010001000017.
6. Freitas RAMM. Ensino por problemas: uma abordagem para o desenvolvimento do aluno. *Educ Pesq.* 2012[cited 2017 Dec 12];38(2):403-18. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1517-97022012000200009.
7. Almeida MTC, Batista NA. Ser docente em métodos ativos de ensino-aprendizagem na formação do médico. *Rev Bras Educ Med.* 2011[cited 2017 Oct 28];35(4):468-76. Available from: <http://www.scielo.br/pdf/rbem/v35n4/a05v35n4.pdf>
8. Luna WF, Bernardes JS. Tutoria como estratégia para aprendizagem significativa do estudante de medicina. *Rev Bras Educ Med.* 2016[cited 2017 Oct 14];40(3):653-62. Available from: http://www.scielo.br/scielo.php?pid=S0100-55022016000400653&script=sci_abstract&tlng=pt.
9. Gomes MPCC, Ribeiro VMB, Monteiro DM, Leher EMT, Louzada RCR. O uso de metodologias ativas no ensino de graduação nas ciências sociais e da saúde: avaliação dos estudantes. *Ciênc Educ.* 2010[cited 2017 Oct 10];16(1):181-98. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1516-73132010000100011.
10. Bogdan RC, Biklen SK. *Investigação qualitativa em educação.* 12ª ed. Portugal: Porto Editora; 2013.
11. Bardin L. *Análise do conteúdo.* São Paulo: Edições 70; 2011.
12. Minayo MCS. *O desafio do conhecimento: pesquisa qualitativa em Saúde.* 14ª ed. São Paulo: Hucitec; 2015.
13. Silva AH, Fossá MIT. Análise de conteúdo: exemplo de aplicação da técnica para análise de dados qualitativos. *Rev Eletrônica Qualit@S.* 2015[cited 2018 June 10];17(1):1-14. Available from: <https://oficinas.incubadora.ufsc.br/index.php/Lucasfranco/article/view/2336/2155>.
14. Ferraz Júnior AML, Miranda NR, Assunção R, Silva SA, Oliveira FAM, Oliveira RG. Percepção de estudantes de Odontologia sobre metodologias ativas no processo de ensino-aprendizagem. *Rev ABENO.* 2016[cited 2017 Dec 03];16(3):666-77. Available from: <https://revabeno.emnuvens.com.br/revabeno/article/view/272/248>.
15. Prado ML, Velho MB, Espíndola DS, Sobrinho SH, Backes VMS. Arco de Charles Maguerez: refletindo estratégias de metodologia ativa na formação de profissionais de saúde. *Esc Anna Nery Rev.* 2012[cited

- 2017 Dec 09];16(1):172-7. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-81452012000100023&lng=en. <http://dx.doi.org/10.1590/S1414-81452012000100023>.
16. Mitre SM, Siqueira-Batista R, Girardi-de-Mendonça JM, 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 [cited 2017 Oct 31];13(Supl.2):2133-44. Available from: http://www.scielosp.org/scielo.php?script=sci_arttext&pid=S1413-81232008000900018&lng=en.
 17. Bento LMA, Andrade LP, Sales A, Souza AP, Souza AFP, Batiston GT, *et al*. Percepção dos alunos de medicina quanto a aprendizagem x ansiedade na metodologia ativa. *Rev Ensino Educ Cienc Human*. 2017[cited 2018 June 03];18(2):178-82. Available from: <http://pgsskroton.com.br/seer/index.php/ensino/article/view/4612/3586>
 18. Silva RHA, Miguel SS, Teixeira LS. Problemática como método ativo de ensino-aprendizagem: estudantes de farmácia em cenários de prática. *Trab Educ Saúde*. 2011[cited 2018 June 02]9(1):77-93. Available from: <http://www.scielo.br/pdf/tes/v9n1/v9n1a06.pdf>.
 19. Valença CN, Germano RM, Malveira FAS, Azevêdo LMN, Oliveira AG. Articulação teoria/prática na formação em saúde e a realidade do Sistema Único de Saúde. *Rev Enferm UERJ*. 2014[cited 2017 Oct 04];22(6). Available from: <http://www.facenf.uerj.br/v22n6/v22n6a17.pdf>
 20. Campos LR, Ribeiro MR, Depes VB. Autonomia do graduando em enfermagem na (re)construção do conhecimento mediado pela aprendizagem baseada em problemas. *Rev Bras Enferm*. 2014[cited 2017 Dec 29];67(5):818-24. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672014000500818&lng=en.
 21. Mulato SC. Enfermagem tradicional, atual e do futuro: a visão de docentes de enfermagem. *Rev Enferm UERJ*. 2010[cited 2017 Nov 05];18:572-7. Available from: <http://www.facenf.uerj.br/v18n4/v18n4a12.pdf>
 22. Christofoletti G, Fernandes JM, Martins AS, Oliveira Junior SA, Carregaro RL, Toletto AM. Grau de satisfação discente frente à utilização de métodos ativos de aprendizagem em uma disciplina de Ética em saúde. *Rev Eletrônica Educ*. 2014[cited 2017 Nov 05];8(2):188-97. Available from: <http://www.reveduc.ufscar.br/index.php/reveduc/article/viewFile/823/334>.
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