

PROBLEMATIZATION WITH MAGUEREZ'S ARC FOR HEALTH TEACHING: AN INTEGRATIVE REVIEW**L. T. RAPOSO NETO¹, R. O. COSTA², D. A. C. M. S. Morano³, G. S. CERQUEIRA⁴**

Instituto Federal do Ceará, Campus Umirim

Programa de Pós graduação em Ciências Morfofuncionais

ORCID ID: <https://orcid.org/0000-0003-1885-607X>*torresraposo@gmail.com*

Submitted march 4th, 2024 - Accepted june 6th , 2024

DOI: 10pts.15628/holos.2025.16978

ABSTRACT

The traditional model of health education encourages early specialization, with training focused on a biological and mechanistic context. In this scenario, the methodological path adopted in the practice of health education is based on traditional methodologies. However, contemporaneity raises different approaches to the teaching and learning process, rethinking the classroom through active methodologies. Thus, the research aims to map the methodology of problematization with the Magueretz Arch for health

teaching. An integrative literature review was carried out in the databases, google scholar and CAPES. The criteria adopted were original studies with human beings, published from 2013 to 2023, with the application of the Arco Margueretz methodology. It is concluded that the studies present successful evidence in the use of the problematization methodology with innovative characteristics aimed at health teaching, and that its targeted application has positive impacts on learning.

KEYWORDS: Problematization, Arco de Magueretz, Health teaching, active methodology.

PROBLEMATIZAÇÃO COM O ARCO DE MAGUERETZ PARA O ENSINO DA SAÚDE: UMA REVISÃO INTEGRATIVA**RESUMO**

O modelo tradicional de ensino em saúde incentiva a especialização precoce, com uma formação voltada para um contexto biológico e mecanicista. Neste cenário, o caminho metodológico adotado na prática do ensino da saúde fundamenta-se em metodologias tradicionais. Contudo, a contemporaneidade suscita diferentes abordagens para o processo de ensino e aprendizagem, repensando a sala de aula por meio de metodologias ativas. Assim, a pesquisa tem como objetivo mapear a metodologia da problematização com o Arco de

Magueretz para o ensino da saúde. Foi realizada uma revisão integrativa da literatura nas bases de dados, google acadêmico e CAPES. Os critérios adotados foram estudos originais com seres humanos, com publicação de 2013 a 2023, com aplicação da metodologia do Arco Margueretz. Conclui-se que os estudos apresentam exitosas evidências na utilização da metodologia da problematização com características inovadoras voltados para o ensino da saúde, e que, sua aplicação direcionada, apresentam impactos positivos na aprendizagem.

Palavras chave: Problematização, Arco de Magueretz, Ensino da saúde, metodologia ativas.

1 INTRODUCTION

The teaching-learning process involves the cognitive spheres of learning and teaching. Such concepts are related in a set of substantial behaviors that form a junction of interactions and correlates. Thus, they should not be portrayed as two independent categories, because there is no teaching process without the student's conducive learning. Therefore, the elementary transmission of knowledge does not designate the act of teaching in the absence of changes in the behavior of the student (Bushell, 1973).

The fact is that learning, singularly, is a continuous procedure. The act of learning directly influences the development of the singular individual, as well as his/her social and affective relationships, corroborating the construction of a teaching process with meaning and responsibility (Abreu & Masetto, 1996).

The scope of teaching and learning is related to central constituents, including the one who learns, the one who teaches, the one who teaches, and the place that teaches. Each of these aspects has peculiarities that provide the fundamental constituents for the realization of learning. The student, for example, is the holder of the cognition to learn, while the teacher is the holder of the content that must be learned and must have the attitude of an educator.

The interaction between these elements is what defines the general teaching-learning process, and these elements can be instigated or modified to improve the process. The teaching-learning process refers to a dynamic event, in which "learning" and "teaching" are interconnected and codependent. The interaction between these two spheres of knowledge is the target of a vast number of studies that help in the understanding of this process and in the formulation of effective educational practices.

Among these, the researches related to active methodologies stand out, in which the student becomes an active agent of his own learning process. According to Berbell (2012), active learning methodologies allow individuals to have the necessary tools to reflect on what they learn and how they learn it. In this way, the Arco de Magueréz is a Problematization Methodology, a type of active teaching methodology. This methodological tool was proposed by Charles Magueréz, in 1970, and has five steps: observation of reality, key points, theorizing, hypothesis of solution and application to reality. The starting point is the process of reflecting on problems and developing solutions.

Thus, with the purpose of preparing students to care in a humane and holistic way, higher education courses in the area of health have been instigated to implement didactic pedagogical proposals that provide opportunities for the acquisition of skills and competencies (Manakatt et.al., 2021).

In view of the aspects raised, the following question arises: does the methodology of problematization with the Arco de Magueréz help in the teaching and learning process in health teaching? Thus, the present research aims to map the methodology of problematization with the Magueréz Arch for health teaching, through an integrative review.

It is known that health education has a 4-stage plan, namely, diagnosis, action plan, execution, and evaluation (Dias et. al., 2022). These steps are part of a process of data collection,

prioritization of intervention, setting objectives, operationalization, and implementation of the action plan. This description, due to its similarity with the Arco de Maguerez, makes this methodology a strong strategy for teaching health education (Faria et al., 2018).

The use of active methodologies, with or without the involvement of technological resources, can be a great ally in understanding health education. It is noteworthy that the literature on the application of the Arco de Maguerez methodology in health teaching is still scarce, which justifies this research.

2 Methodology

The research is classified as an integrative literature review, with qualitative parameters. The descriptors were selected from the Health Sciences Descriptors (DeCS). The structured and multilingual vocabulary DeCS was created by BIREME to serve as a unique language in the indexing of articles from scientific journals, books, conference proceedings, technical reports, and other types of materials, as well as to be used in the research and retrieval of subjects from the scientific literature in the sources of information available in the Virtual Health Library (VHL) such as LILACS, MEDLINE and others.

For this research, the following descriptors were used: Arco de Maguerez, Health Education. Two search strategies were constructed: Arco de Maguerez and Health Teaching.

In the search strategies, in google scholar and CAPES, it was decided to configure the search in the period from 2013 to 2023, in the languages, English and Portuguese, excluding patents and citations, thus, we obtained approximately in the database with 2,530 studies in google academics, 54 in Capes presented, 10 studies per page.

After the first screening of duplicates, verification of the first 10 pages with the verification of the title, in google scholar 30 studies were for analysis. A more detailed analysis of the titles and abstracts was then carried out, as well as the full text. Of these, 24 studies were excluded because they did not meet the inclusion criteria, and 6 studies were included.

The inclusion criteria adopted were original research studies with human beings, published from 2013 to 2023, in English, Portuguese with the application of the Arco Marguerez methodology. Thus, abstracts, editorials, literature review articles, and articles that were in duplicate were excluded. Theses, dissertations or monographs related to the theme were also excluded. The process of selecting the articles was based on the following steps: 1) Reading and analysis of the titles and abstracts of the articles; 2) Organization and ordering of the identified studies; 3) Reading the articles in full. The following variables were collected: title, authors, year, study objectives; methodological intervention, main results.

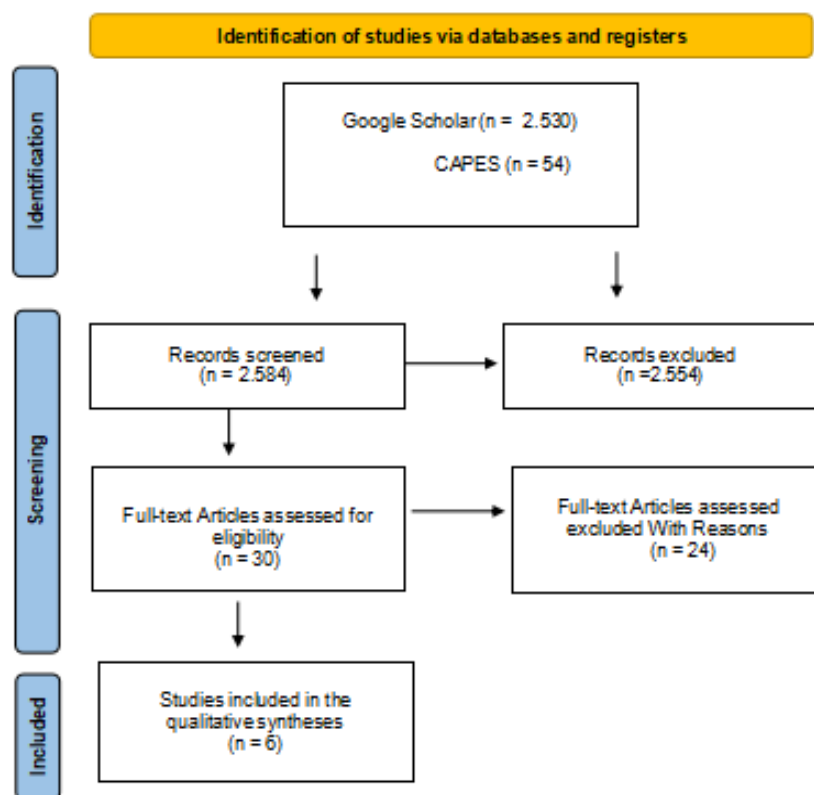


Figure 1: Study selection flowchart for the integrative review

Adapted from Moher et al. (2009). n = number of articles

The variables collected were organized in an Excel database and presented in a table with their main characteristics. It is important to state that there is no conflict of interest and conflicts of interest in the research.

3 RESULTS AND DISCUSSIONS

The variables collected were organized and presented in a table with their main characteristics. For analysis, the following variables were collected: author and year, methodology, objective, interventions methodologies Chart 1. The following are the main results and conclusions.

Chart 1 – Variables related to the studies: Title, authors, year, study objectives; Methodological intervention, main results

Article Title	Authors and year Database	Goals	Methodological Process	Main Results
Use of the Arch of Maguerez in the conception of an education on integrative and complementary practices.	Pires Junior et al., 2023. Googlo Scholar	To report the experience of using the Problematicization Methodology with the support of Arco de Maguerez in the undergraduate course in Nursing, as well as the results achieved.	Experience report based on the problematization methodology. The group of students was composed of 5 individuals from a public higher education institution located in Uberlândia, Minas Gerais.	The experience resulted in the application of an educational action and a continuing education. This educational action focused on the comprehensiveness of care, as it cooperated for holistic care, and added to all those involved knowledge of alternative methods for the promotion and prevention of mental and physical health problems through integrative and complementary practices.
The Arch of Maguerez as a methodological proposal for training in health education.	Engers et al., 2021 Google Scholar	To verify the applicability and possibilities of the Problematicization Methodology as a method of training in health education.	This is a qualitative study of exploratory character. A total of 18 subjects participated, including basic education teachers, academics and health professionals. A training in health education was carried out in the	It was observed that the use of the Problematicization Methodology based on the Maguerez Arch has potential as a methodology for continuing education, enabling an interactive-reflective training, through collaborative participation from

			format of a workshop based on the Methodology of Problematization with Arco de Maguerez.	the beginning of the Arch path.
Active learning methodologies: possible paths to Innovation in Health Education.	Macedo et al., 2018 Google Acadêmico	To report the experience of professors in the discussion of active learning methodologies as a problematizing pedagogical strategy for higher education in health.	This is an experience report carried out with the participation of professors from a public university in the northwest region of the state of Rio Grande do Sul, Brazil. Six pedagogical workshops were implemented with the professors of the nursing, nutrition and biology courses based on the Arch of Charles and Maguerez. The use of active methodologies in health education was problematized and the themes "evaluation, reflective portfolio and concept map.	The problematization with the Arch of Charles and Maguerez facilitated the understanding and applicability of active methodologies. There are perspectives of including active learning methodologies in the practice of teachers, which can become a pedagogical strategy and meet the DCNs in this scenario.
The Arch of Maguerez as	Da Silva et al., 2020	Analyze and reflect on the use of the Arco de Maguerez, an	A qualitative methodology was adopted to guide	It was observed that it is possible to make a question regarding the

Active methodology in training Continued in health.	Google Scholar	active methodology used for the continuing education of professionals of the health area, based on document analysis.	our analyses, providing flexibility in the investigative process, with a critical approach. The problematizing methodology based on the Arco de Maguerez, as an active method in the continuing education of health professionals, develops in the subjects a reflective, critical and also investigative posture, identifying the problem and instigating them to form a critical reasoning for the selection of the proposed solutions.	process of applicability of the Arch of Maguerez, which is: the hospital environment in which the studies presented here are environments that allow the flexibility of the work and learning process? It is possible to reflect on this question, as it exposes the weaknesses of the biomedical system/method present in hospital environments. If the Arco de Maguerez presents flexibility and autonomy in carrying out the process of observation and transformation of reality, is it possible to discuss its usefulness and performance as a transformative strategy?
The use of the Arco de Maguerez problematization methodology in an undergraduate nursing school clinic.	Da Silva, et al., 2021 Google Scholar	OBJECTIVE: To describe the experience of nursing students at Gamaliel College in the face of the difficulties encountered during the curricular internship, using	This is an experience report study with reflective analysis, characterized by PM through the use of the Maguerez Arch, which is demonstrated according to Bordenave and Pereira (2004)	The experience resulted in the development of an objective form to control local nursing production, in order to streamline the screening process and aggregate information necessary to guide the local nursing

		the Problematization Methodology (MP) associated with the Maguerez arc.	through the five stages: the first being Observation of reality; the second Identification of Key Points; Theorizing in the third stage; in the fourth stage, the Solution Hypothesis and in the fifth stage, the application to Reality.	care plan, in addition to providing reliable data for the academic community to develop scientific studies in the health area.
Arc of problematization for health education planning in the perception of nursing students.	Days; Saints; Lopes, 2022. CAPES	To unveil the perception of nursing students regarding the use of the Arc of Problematization in the teaching of educational planning in health.	This is a descriptive study, with a qualitative approach, conducted with 15 undergraduate nursing students, developed at a public university in the Northern Region of Brazil from April to May 2019. The discipline researched is part of the second year of the nursing course and focuses on the development of health education. Data collection took place through semi- structured interviews guided by a script of guiding questions.	The students understand and perceive the Maguerez Arch as an eligible strategy for educational planning in health, as they admit the relationship between the tools and consider that the Arch proposes democratic teaching-learning relations, values previous knowledge and dialogues with the reality of the target audience.

It is noteworthy that of the 6 studies analyzed, all are directly related to the application of the Arch of Maguerez. In the study by Pires Junior et al., (2023) was related to the use of the

Maguerez Arch in the conception of health education on integrative and complementary practices, in the research by Engers et al., (2021) the Maguerez Arch was presented as a methodological proposal for training in health education, in the study by Macedo et al., (2018) active learning methodologies are highlighted: possible paths for innovation in health education, in the study by Da Silva et al. (2020), the Arco de Maguerez as an active methodology in continuing education in health, in the study by Da Silva, et al., (2021) the use of the Arco de Maguerez problematization methodology in an undergraduate nursing school clinic and finally, in the study by Dias, Santos and Lopes, (2022) Arc of problematization for health education planning in the perception of nursing students.

Regarding the proposed objectives of the studies, Pires Junior et al., report the experience of using the problem-solving methodology with the support of the Arco de Maguerez in the undergraduate course in Nursing, Engers et al., (2021), seeks to verify the applicability and possibilities of the Problem-Solving Methodology as a method of training in health education., Macedo et al., (2018) report the experience of teachers in the discussion of active learning methodologies as a problematizing pedagogical strategy for higher education in health, Da Silva et al. (2020) present an analysis and reflection on the use of the Arco de Maguerez, an active methodology employed for the continuing education of health professionals, based on document analysis, Da Silva, et al., (2021) describe the experience of nursing students at Gamaliel College in the face of the difficulties encountered during the curricular internship, using the Problematization Methodology (MP) associated with the Maguerez arc, while Dias, Santos and Lopes, (2022) Unveil the perception of nursing students regarding the use of the Problematization Arc in the teaching of health educational planning.

What we can perceive is that the application of the Arco de Maguerez methodology dialogues with regard to rethinking and innovating the process of health education. In the current educational scenario, it is important to reflect on teaching practices in a context that transcribes and dialogues with the needs of professional training in contemporary times.

Thus, the Arco de Maguerez is a methodological proposal that provides opportunities for the student's relationship to problems in a practical and work sphere, reflecting that they cooperate for academic training (da Mata Fujita et al., 2016).

We can see that the objectives outlined in the different researches seek, through the application of the Arco de Maguerez, a reconfiguration of the teaching and learning processes, since teaching presented for many decades a plastered and traditional configuration. Thus, its resignification takes place in a process that seeks the student as the protagonist, as well as the development of meaningful learning.

In short, the studies present the efficacy and success of the proposed objectives for health education. Of the 6 studies analyzed, all showed significant results. Thus, we can observe the effectiveness in the use of the Arch of Maguerez, for the construction of effective learning.

In the 21st century, decentralizing learning and knowledge construction is a central need of education. Thus, teaching and learning gain a dialectical character, that is, of constant movement and construction on the part of those who carry it out, where teaching is directly related to learning: the educator is no longer the one who only educates, but the one who, when

educating, is educated. Both, equally, become subjects of the process (Delors, 2001). Therefore, it is urgent to recognize the subject as the author of the process, stimulate criticality, autonomy, the development of social, ethical and technical awareness, stimulate the student to intervene in real problems and attract students to classes (Berbel, 1998).

As a methodological process, in the studies Pires Junior et al., (2023), Macedo et al., (2018) and Da Silva, et al., (2021) present experience reports. In the studies by Engers et al., (2021) presents a qualitative study of an exploratory nature, Da Silva et al., (2020) adopted a qualitative methodology to guide our analyses, providing flexibility in the investigative process, with a critical approach, in the study by Dias, Santos and Lopes, (2022) a descriptive study, with a qualitative approach.

In the study by Pires Junior et al., (2023), this is an experience report based on the problematization methodology. The proposal of the activity was developed according to the requirements of a discipline of the Undergraduate Nursing course of a Brazilian federal university. The group of students was composed of 5 people. The theoretical basis used in the present study was based on the five stages of the Arco de Maguerez (Bordenave; Pereira, 2005), namely: Observation of reality and identification of the problem; Key points; Theorizing; Solution hypotheses; Application to reality.

In the work of Engers et al., (2021) presented a qualitative study characterized as exploratory research. The structuring of the workshop was based on the methodology of problematization and followed the same path as the Arco de Maguerez (Bordenave; Pereira, 2005; Colombo; Berbel, 2007), contemplating the five stages, as described below: Observation of reality; Key points; Theorizing; Hypotheses of Solution and Application to reality.

In the study Macedo et al., (2018) this is an experience report of a teacher qualification project, based on the educational action developed through pedagogical workshops for teachers of higher education in health at the Federal University of Santa Maria (UFSM), Palmeira das Missões Campus. The project was conceived and conducted by two professors from the UFSM Nursing Course, Palmeira das Missões Campus and one from the UFSM Main Campus, and by a professor from the Physical Therapy Course at the Federal Institute of Rio de Janeiro (IFRJ), all with experience in the use and training of teachers. Six pedagogical workshops were held with the professors of the nursing, nutrition and biology courses, six pedagogical workshops based on the Arch of Charles and Maguerez. The use of active methodologies in health education was problematized and the themes "evaluation, reflective portfolio and concept map" were theorized.

Da Silva et al., (2020) adopted a qualitative methodological proposal to guide our analyses, providing flexibility in the investigative process, and our study has a critical approach. In order to obtain information for analysis and reflection, it was considered to know what was published related to continuing education, having the Arco de Maguerez as a methodological contribution. To this end, the delimitation in the search for dissertations and theses that dealt with the theme in question, using the Brazilian Digital Library of Theses and Dissertations (BDTD), with the following descriptors in the advanced search: "Arco de Maguerez"; "Education", Permanent"; "Continuing education"; and "Health".

Da Silva, et al., (2021) This is an experience report study with reflective analysis, characterized by the Problematization Methodology through the use of Maguerez's Arch, which is demonstrated according to Bordenave and Pereira (2005) through the five stages: the first being Observation of reality; the second Identification of Key Points; Theorizing in the third stage; in the fourth stage, the solution hypothesis and in the fifth stage, the application to the Realidade.Com this, the methodological proposal reported sought to define the difficulties observed during the learning process experienced, contributing to the reflection and construction of scientific knowledge on the theme, since it emphasizes all the points related to the performance recommended by the nursing team within a teaching clinic.

Dias, Santos, and Lopes (2022) dealt with a descriptive study, with a qualitative approach, carried out at a public university in the Northern Region of Brazil. The study was developed in a discipline of Educational Processes in Health inserted in the second year of the nursing course, focusing on the development of health education. The research was carried out with a class of 34 students who were in the second year of the undergraduate nursing course. The use of the criterion of participation in 100% of the practical activities was justified by the fact that the stages of the Arco de Maguerez were developed on different days during the practice period. Of the 34 students, only 15 met the criteria established for the application of the semi-structured interview.

As the main conclusions of the works that make up this study, Pires Junior et al., (2023), The methodology of problematization as Arco de Maguerez provided dialogue and exchange of experiences with the audiences served with the teaching-learning process centered on students. Through this, the development of the educational action "Untying Knots" and the conversation circle, enabled the connection between the students and the practical field, through the solution of the issues raised as it brought health promotion to all involved.

In the work of Engers et al., (2021), based on the findings in the present study, it can be inferred that the use of the Methodology of problematization with the Maguerez Arch as a methodology for continuing education has potential in the sense of providing interactive-reflective training, through collaborative participation from the beginning of the course, enabling reflections on practices until the formulation of solution proposals. Another point that demarcates the potential of the problematization methodology as a training methodology is the organizational path that allows a previously organized script without being plastered, on the contrary, the direction takes place during the discussions and needs pointed out by the reality of that context, enabling a collaborative training that is closer to the professionals.

In the study by Macedo et al., (2018) the findings provided teachers with the opportunity to know, discuss and reflect on innovative strategies, as well as to propose opportunities and ways to apply learning activation. It promoted understanding through the experience in the workshops. The training of health professionals who are critical, reflexive and transformative of their realities is intimately linked to pedagogical conceptions that encourage learning to learn, which can be adopted in the professional practices of health education for users, families and communities in which they will work. Thus, the discussion and experience of these methodologies can become an important strategy for the instrumentalization and performance of these teachers.

In the findings of Da Silva et al., (2020), the problem-solving methodology strategy as an active method in the continuing education of health professionals develops in its learners a reflective, critical and, above all, investigative posture during the stages of its assimilation, identification and explanation of the problem. In this way, also instigating them to the formation of a critical reasoning in the selection of the proposed solutions. Thus, within the process of reflection and criticism, it is necessary for the subject to start looking at himself and knowing his role in the process of transforming reality.

In the study by Da Silva, et al., (2021), given the above, it is understood that nursing production is an essential factor in understanding the determinants in health, so the development of this technology would optimize the screening time, making it more efficient, directing concrete data to guide effective care plans, in addition to fostering scientific studies focused on the health area, strengthening the teaching triad, research and extension important for the construction of knowledge for academics.

Dias, Santos and Lopes (2022) found that the arch is potential for teaching educational planning in health, as the academics demonstrated learning about the theme, when using the Arch of Maguerez, in addition to the method having characteristics of participatory educational planning corroborating for a liberating education in health, in search of meaningful learning. The students perceive that the arch is an eligible strategy for the planning of health education, when they make the relationship between the stages of the two methods and consider it a tool that proposes democratic teaching-learning relations, that values previous knowledge and that dialogues with the reality of the target audience.

In this sense, the study shows the great potential of the application of the methodology of the Arc of Maguerez, for the formation and development of health education, as a possibility to be used in different scenarios, with different audiences and contents.

CONCLUSION

In this research, we sought to synthesize, through an integrative review of the literature, information related to the application of Maguerez's arc in health education. It is suggested that health education has strategies that present different and complex curricular changes that have provided a new methodological involvement, developing significant learning and protagonists.

Thus, the use of active methodologies are useful and necessary tools for the implementation of the teaching and learning process. This practice breaks with the molds of technicism and traditionalism in health education that for centuries were centered on mechanical and traditional procedures, making it uninteresting.

In view of the above, it is concluded that the analyzed studies present strong and successful evidence in the use of the problematization methodology with innovative characteristics aimed at health teaching, and that, when applied in a targeted and well-planned way, they have positive impacts on learning. In view of what was found, we emphasize that the theme is not exhausted, it is suggested the formulation of new studies and research, as it is a theme of great wealth and scientific relevance for health practices.

REFERENCES

- ABREU, M. C., & MASETTO, M. T. (1996). O professor universitário em sala de aula: prática e princípios teóricos. *São Paulo: MG*.
- Berbel, N. A. N. (2012). A metodologia da problematização com o Arco de Magueréz: uma reflexão teórico-epistemológica. *SciELO-EDUEL*.
- Berbel, N. A. N. (1998). A problematização ea aprendizagem baseada em problemas: diferentes termos ou diferentes caminhos?. *Interface-Comunicação, Saúde, Educação*, 2(2), 139-154.
- Bordenave, J., & Pereira, A. (2005). A estratégia de ensino-aprendizagem(26ª ed.).Petrópolis: Vozes.
- Bushell, P. J. (1973). Mapeamentos de contração métrica e positiva de Hilbert em um espaço de Banach. *Arquivo para Mecânica Racional e Análise*, 52, 330-338.
- Caldeira, D. M., Guedes, M. R., de Oliveira, A. C. C. P., Silveira, M. B., de Moura, A. M., & do Nascimento, N. R. (2022). Relato de caso-uso do Arco de Magueréz: correlação entre atividade ocupacional e movimentos repetitivos na síndrome do túnel do carpo. *Research, Society and Development*, 11(16), e463111638330-e463111638330.
- Colombo, A. A. (2007). A Metodologia da Problematização com o Arco de Magueréz e sua relação com os saberes de professores. *Semina: ciências sociais e humanas*, 28(2), 121-146.
- da Mata Fujita, J. A. L., de Mecena, E. H., Carmona, E. V., & Shimo, A. K. K. (2016). Uso da metodologia da problematização com o Arco de Magueréz no ensino sobre brinquedo terapêutico. *Revista Portuguesa de Educação*, 29(1), 229-258.
- da Silva, L. A. R., Junior, O. P., da Costa, P. R., Renovato, R. D., & de Moura Sales, C. (2020). O Arco de Magueréz como metodologia ativa na formação continuada em saúde. *Educação*, 8(3), 41-54.
- da Silva, A. C., da Veiga, A. G. S., dos Santos Adriano, A. P., Dantas, A. K. R., Souta, E. S., Barbosa, M. E. S., ... & Almeida, S. N. S. (2021). O uso da metodologia da problematização Arco de Magueréz em uma clínica escola da graduação de Enfermagem. *Research, Society and Development*, 10(7), e15410716194-e15410716194.
- Delors, J. (2001). Educação: Um Tesouro a Descobrir. Relatório para a UNESCO da Comissão Internacional sobre educação para o século XXI—6ª Edição. São Paulo.
- Dias, G. A. R., Santos, J. P. M., LOPES, M., & BRAGANÇA, M. (2022). Arco da problematização para planejamento educativo em saúde na percepção de estudantes de enfermagem. *Educação em Revista*, 38, e25306.
- Engers, P. B., Soares, R. G., Copetti, J., & Ilha, P. V. (2022). O ARCO DE MAGUERÉZ COMO PROPOSTA METODOLÓGICA PARA FORMAÇÃO EM EDUCAÇÃO EM SAÚDE. *Vivências,[SL]*, 18(35), 55-67.



Farias, Q. L. T., Azevedo, S. G. V., Bastos, I. B., Vital, A. C. P., Cavalcante, A. S. P., Rocha, S. P., & Vasconcelos, M. I. O. (2020). Acolhimento com classificação de risco na Estratégia Saúde da Família: implantação a partir do Arco de Maguerez. *Revista Brasileira De Pesquisa Em Saúde/Brazilian Journal of Health Research*, 22(1), 106-112.

Pires Junior, I. A. P., Gomes, A. J. F., Fernandes, M. M., Ramos, G. S. A., Oliveira, C. P., & da SILVA, G. (2023). Uso do Arco de Maguerez na concepção de uma educação em saúde sobre práticas integrativas e complementares. *Revista ELO–Diálogos em Extensão*, 12.

Manakatt, B. M., Carson, Z. W., Penton, R. L., & Demello, A. S. (2021). Virtual learning experiences in population health nursing course during the COVID-19 pandemic. *International Nursing Review*, 68(4), 557-562.

Macedo, K. D. S., Acosta, B. S., Silva, E. B., Souza, N. S., Beck, C. L. C., & Silva, K. K. D. Metodologias ativas de aprendizagem: caminhos possíveis para inovação no ensino em saúde. *Esc Anna Nery*. 2018; 22 (3): e20170435.

MAGUERES, C. (1970). Elementos para uma pedagogia de massa na assistência técnica agrícola. Relatório apresentado à Coordenadoria de Assistência Técnica Integral da Secretaria da Agricultura do Estado de São Paulo. Campinas.

Melo, M. C. D., Queluci, G. D. C., & Gouvêa, M. V. (2014). Problematizando a residência multiprofissional em oncologia: protocolo de ensino prático na perspectiva de residentes de enfermagem. *Revista da Escola de Enfermagem da USP*, 48, 706-714.

Sousa, J. D. D. N. D., Fernandes, C. D. S., Ximenes, M. A. M., Caetano, J. Á., Galindo Neto, N. M., & Barros, L. M. (2021). Efetividade do Arco de Maguerez no ensino de enfermagem sobre cateterismo vesical: estudo quase-experimental. *Revista Gaúcha de Enfermagem*, 42.

HOW TO CITE THIS ARTICLE:

Oliveira da Costa, R., & Luiz Torres Raposo Neto. PROBLEMATIZAÇÃO COM O ARCO DE MAGUERES PARA O ENSINO DA SAÚDE: UMA REVISÃO INTEGRATIVA. HOLOS, 7(41).
<https://doi.org/10.15628/holos.2025.16978>

ABOUT THE AUTHORS

R. O. COSTA

Unifametro.

E-mail: Roberta.costa@professor.unifametro.edu.br

L. T. RAPOSO NETO



Instituto de Educação do Ceará

ORCID:<https://orcid.org/0000-0003-1885-607X>

E-mail:torresraposo@gmail.com

Responsible Editor: Francinaide de Lima Silva Nascimento



Received on March 4, 2025 Accepted: June 22, 2025 Published: December 3, 2025