

## NURSING CURRICULUM EVALUATION: CROSSING INTO THE EDUCATIONAL PROJECT AVALIAÇÃO DO CURRÍCULO DE ENFERMAGEM: TRAVESSIA EM DIREÇÃO AO PROJETO PEDAGÓGICO EVALUACIÓN DEL PLAN DE ESTUDIOS DE ENFERMERÍA: HACIA EL PROYECTO EDUCATIVO

Maria Flávia Gazzinelli Bethony<sup>1</sup>  
Vania de Souza<sup>2</sup>  
Amanda Nathele Soares<sup>3</sup>  
Elaine Cristina Dias Franco<sup>4</sup>  
Raissa Silva Souza<sup>4</sup>  
Vânia Aparecida da Costa Oliveira<sup>4</sup>

<sup>1</sup> Biologist. PhD in Education. Associate Professor. Federal University of Minas Gerais – UFMG, Nursing School-EE. Belo Horizonte, MG – Brazil.

<sup>2</sup> RN. PhD in Public Health. Associate Professor. UFMG/EE. Belo Horizonte, MG – Brazil.

<sup>3</sup> RN. PhD student. UFMG/EE, Graduate Program. Education and Health Research Analyst. School of Public Health of Minas Gerais. Belo Horizonte, MG – Brazil.

<sup>4</sup> RN. PhD student. UFMG/EE, Graduate Program. Assistant Professor. Federal University of São Joao del Rei – UFSJ. Divinópolis, MG – Brazil.

Corresponding author: Raissa Silva Souza. E-mail: rssouza.ra@gmail.com

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### ABSTRACT

The aim of this study is to describe the curriculum evaluation process implemented in 2009, in the Nursing School of UFMG. For this, researchers adopted the Context, Inputs, Process and Product Evaluation Model. The text consists of four parts: collective construction of the curricular proposal; design of curriculum evaluation; dimensions of the evaluation process; results of one of the strategies employed. The evaluation process has favored the collective analysis of the curriculum dimensions, even with teachers' participation lower than expected, the analysis of the impact of training in the labor market and the inclusion of students in the process. The adopted model, although having a rational character, has enabled reinventions in the assessment, with implications in the ways of educational subjectivity.

**Keywords:** Curriculum; Education, Higher; Nursing; Nursing Evaluation Research.

### RESUMO

O objetivo é descrever o processo de avaliação curricular implementado em 2009, na Escola de Enfermagem da UFMG. Para isso, foi adotado o Modelo de Avaliação Contexto, Insumos, Processo e Produto. O texto consta de quatro partes: construção coletiva da proposta curricular; concepção da avaliação curricular; dimensões do processo de avaliação; resultados obtidos em uma das estratégias empregadas. O processo de avaliação tem favorecido a análise coletiva sobre as dimensões do currículo, mesmo com participação docente aquém do esperado, a análise sobre os impactos da formação no mercado de trabalho e a inserção dos discentes no processo. O modelo adotado, embora de caráter racional, tem possibilitado reinvenções nos processos de avaliação, com implicações nos modos de subjetivação docente.

**Palavras-chave:** Currículo; Educação Superior; Enfermagem; Pesquisa em Avaliação de Enfermagem.

### RESUMEN

El objetivo del presente estudio fue describir el proceso de evaluación del plan de estudios puesto en práctica en 2009 en la Escuela de Enfermería de la UFMG. Para ello, hemos adoptado el modelo de evaluación de contexto, insumos, procesos y productos. El texto consta de cuatro partes: construcción colectiva de la propuesta del plan de estudios; diseño de la evaluación del plan de estudios; dimensiones del proceso de evaluación; resultados obtenidos en una de las estrategias empleadas. El proceso de evaluación ha favorecido el análisis colectivo de las dimensiones del plan de estudios; incluso con participación docente inferior a lo esperado; análisis del impacto de la formación en el mercado laboral e inclusión de los estudiantes en el proceso. A pesar de ser racional, el modelo adoptado ha permitido reinvencciones en los procesos de evaluación, con implicaciones en los modos de subjetivación docente.

**Palabras clave:** Curriculum; Educación Superior; Enfermería; Investigación en Evaluación de Enfermería.

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## INTRODUCTION

This work shows some paths taken, so far, by teachers of the Nursing School of the Federal University of Minas Gerais (NS-UFMG) for the construction, implementation and evaluation of the curriculum established in 2004. This study brings the guidelines, the directions and the creations in an attempt to follow the curriculum and its approach movement with the theoretical and methodological principles of the Course Pedagogical Project (CPP). The tracings made by teachers during this period reveal the potentialities and limitations of a curriculum evaluation process, when designed as a device for producing new ways of educational subjectivity.

The preparation of the NS-UFMG Nursing curriculum is a response to the need for reformulating most higher education courses, in view of the demand for new forms of knowledge construction. This demand is guided by overcoming the fragmented knowledge and by seeking interaction, connection and the contextualization of different knowledge.<sup>1</sup> In higher education in health area, the necessary changes in the training process are guided by the National Curricular Guidelines (NCG), which emphasize the importance of building innovative educational projects that help in the formation of a new professional profile, capable of contributing to the consolidation of the Brazilian Unified Health System (SUS).<sup>2</sup>

The response to the changes needed in the Nursing education was established by NCGs in 2001, which challenged the Higher Education Institutions (HEIs) of undergraduate in Nursing courses form critical and reflective nurses, able to act according to the principles of SUS. Although there have been advances made since the implementation of the Nursing NCGs, difficulties have still been detected in HEIs to implement less teacher-centered CPPs, with more articulation between theory and practice, that favor the integration of content<sup>3</sup> and undergo a systematic evaluation process.<sup>2</sup>

Because of these difficulties, the proposal of curriculum changes and rearrangements to meet NCGs does not necessarily imply change and improvement in the curriculum. So, there is the need for a historical and evaluative curricular research to examine to what direction it is taking place.<sup>4</sup> Although essential, the curriculum evaluation is a major challenge to the institutional actors, who often do not get involved in the evaluation process and do not use specific methods as a guide for evaluation.<sup>5</sup>

Therefore, the academic community of the undergraduate Nursing course of the NS-UFMG took on the challenge of curriculum change, based on the NCGs and in the need for a systematic curriculum evaluation, with more involvement of institutional actors. The process of developing a new CPP in NS-UFMG started in 2004 and was implemented in 2009. The evaluation process began in 2010 with the use of methodologies that are also adopted in another study in the curriculum field.<sup>5</sup>

The objective of this article is to describe the curriculum evaluation process implemented in 2009 in NS-UFMG. The text is divided into four sections related to the approach: the collective construction of the curricular proposal; the adopted design of the curriculum evaluation; the dimensions of the curriculum evaluation process, from diagnosis to the development of coping strategies of needs; and results in one of the strategies employed - the evaluation of disciplines through a self-assessment script.

## THE COLLECTIVE CONSTRUCTION OF THE CURRICULAR PROPOSAL

This is the beginning of a path, a route. In 2004, after identifying that the training offered by NS-UFMG did not comprehend fully the SUS needs and the propositions established by the NCGs, the teachers of this institution took on the challenge of curriculum change, defining as a priority, the development of a new CPP.

Between 2004 and 2006, there was the process of discussion and reflection for the definition of conceptual, pedagogical and methodological aspects of the new CPP. In 2005, three workshops were held, with the participation of teachers and students, which enabled the development of the structural axes of the new project, and also the selection of content and skills for structuring the curriculum matrix. There was also a fourth workshop, held with nurses to discuss the skills needed for the labor market.

Another stage, held in 2006 to provide reflections on the composition of the CPP, was the formation of groups by areas of knowledge and the subsequent presentation of products for deliberations in meetings, recognizing it is not a finished process, but open to a constant re-doing. Curricular policies are in the process of coming-to-be, since the curriculum should be seen as something in motion that influences and is influenced by teachers and students who think, create and put it into practice.<sup>3</sup>

The next step was the legal processing of the new curricular proposal in the appreciation spaces of UFMG, which was held between 2007 and 2008, with the approval of the final version in 2009. According to this version, the course started to have a workload of 4,005 hours distributed in 10 semesters,<sup>6</sup> and no longer 3,585 hours previously divided into nine periods.

This curricular proposal for the nursing course brings rationality in relation to its organization and pedagogical guidelines which, in the everyday of teachers and students, undergoes a re-contextualization process.<sup>7</sup> In this rationality built for the new CPP, comprehensiveness is defined as curricular axis, guiding curricular principles and the pedagogical-methodological and the theoretical-conceptual proposal of the course. Comprehensiveness is considered under the subject's perspective, which as-

sumes a posture based on the comprehensive, subjective and singular vision of human life; and of the knowledge, which provides for the removal of the hegemony of professional knowledge and the overcoming of crystallized knowledge, allowing several interdisciplinary possibilities of care and teaching.<sup>6</sup>

Under the axis of comprehensiveness, the curricular principles adopted in CPP are the curricular flexibility, a proposal for diversification of academic activities achieved through the exercise of creativity and autonomy of the teacher and the student; the interdisciplinarity, which requires the development of a new attitude towards the knowledge, by seeking dialogue between knowledge and unit of thinking for the understanding of phenomena related to the human being and health; and the articulation between theory and practice, which provides the overcoming of a gap between the contents of the basic cycle and the professional cycle, as well as reciprocal reinvention of theoretical and practical knowledge combined with reflection.<sup>6</sup>

These curricular principles can be achieved through a socio-interactionist pedagogical proposal, in which cognitive and social-affective components inherent to socio-cultural experiences of students are valued. In this conception, knowledge results from the action that the subject has on the object and that the object exerts on the subject, considering the subjective-dialogical axis.<sup>6</sup> In the relationship with the students, the teacher creates and offers challenging and inquisitive experiences that encourage dialogue, socialization and a critical-reflective position in face of a reality.

The theoretical and conceptual conformation designed to mainstream the curricular proposal is based on four concepts: the *human being and their process of living*, which considers that the comprehensiveness of the human being and the experiences of people in the health-disease process; the *humanization-care-nursing*, which provides nursing care guided by host and bond, considering the subject in their individual and social dimensions; the *teaching-service relationship*, which implies a training developed for the ability to intervene in the work process and to undertake changes in professional practice; and the *society-training of nurses*, which promotes training founded on the principles of the SUS, enabling that population's health needs are met.<sup>6</sup>

It is believed that the CPP, structured from this rationality and re-contextualized in the scenarios of teacher-student relationship, may favor the training of generalist, critical and reflective nurses, who are capable of meeting the social health needs and ensure comprehensive, quality and humanized care.<sup>6</sup>

## THE DESIGN OF THE CURRICULAR EVALUATION

It is time to evaluate the curriculum, splitting its statements to see the difference. Assuming that the CPP alone does not

make and crystallize a curriculum and that, in practice, the initially designed proposal can be re-contextualized, there is the need to adopt measures to monitor the new curriculum through regular and formal moments for internal curriculum evaluation.

In general, the studies that have the curriculum evaluation as object indicate the need to think of evaluation as a multifaceted and social responsibility phenomenon, with regular meetings between managers and teachers for necessary adjustments, with more participation of teachers and students and to be developed continuously, allowing transformation and curricular reconstruction in the course of its development.<sup>5</sup>

In this scenario, the Curriculum Monitoring Committee (CMC) was established, in 2010, which initiated discussions on the evaluation of the Nursing course curriculum of NS-UFMG, with the proposition of being a participatory and emancipatory trajectory. The participatory and emancipatory evaluation has relevant aspects, such as the positive adherence of teachers, since it makes them part of the evaluation process, and the advantage that the evaluative tasks fall on the same actors that experience the curriculum daily, who must draw up and implement improvement strategies.<sup>8</sup>

The proposal includes the understanding of the evaluation as a way of knowing and learning that produces subjectivity and allows that subjects of different knowledge and power positions decide what and how to do. It considers that those who apply the evaluation address political, social, ethical and existential aspects, and its impact modifies the process of thinking, feeling, developing new directions, meeting and acting. It is a proposal which aims at integrating process and product towards the production of the new, through a horizontal reconstruction of relations between knowledge, culture and knowledge uses.<sup>8</sup>

Besides the participatory and emancipatory evaluation, CMC established in February 2011, based on experiences described in the literature<sup>5</sup>, the adoption of the CIPP Evaluation Model, of Daniel Stufflebeam, to conduct the evaluation process of the new curriculum in NS-UFMG. The CIPP Evaluation Model is a more rational and analytical model, from which one seeks to obtain useful information for decision-making aiming at curriculum improvement.<sup>5</sup> In this model, four simultaneous types of evaluation are postulated – context, input, process and product (CIPP).

The main functions of the context evaluation are to identify needs locus of research locus and diagnose its causes.<sup>5</sup> It leads to the analysis of inputs, which seeks to describe the main qualitative and/or quantitative characteristics of human and material resources available in the evaluated program. The evaluation of the inputs aims at planning strategies to make it happen and the necessary changes in the curricular proposal.<sup>5</sup>

The analysis of process is intended to provide information necessary for the planned decisions, by detecting deficiencies

in planning, making corrections and updating the record of the proceedings. When applied to the curriculum evaluation, it estimates the extent to which the principles and curriculum proposals are being carried out.<sup>5</sup> The product research is the last phase of the evaluation process and includes gathering descriptions and judgments related to the results and to relate them to the objectives, the context, the inputs and the process. This type of evaluation describes and judges the results of strategies designed with the evaluation, seeks to determine the discrepancies between what was intended in the analysis of inputs and what was actually achieved in the curriculum proposal.<sup>5</sup>

### THE DIMENSIONS OF EVALUATION: FROM DIAGNOSIS TO ANALYSIS OF THE PRODUCT

After splitting the curriculum statements, it is time to reveal their means, which moves and picks up speed. In the evaluation process of the nursing course curriculum of NS-UFMG, the context analysis supported decisions regarding the planning of activities, as it allowed identifying potentialities, demands and limitations of the curriculum and determining the goals that allow respond to the identified needs.

For the context evaluation, the CMC provided to teachers workshops that had as product the design of the professional to be formed; the nuances that make up the training of this professional based on the NCGs; and the principles underlying the curricular proposal. These workshops enabled the identification of problems and corresponding needs to the dimensions of teachers, students, curriculum and labor market.

After identifying problems and needs, the evaluation of inputs occurred from curriculum follow-up meetings systematically held with the teachers in the first week of each semester, during which there was not teaching activities. It occurred during the semester in meetings of the Departmental Councils and the Course Collegiate. At meetings of CMC, which from then on was established as Structuring Teaching Center (STC), the actors judged the strategies that would be implemented to respond to the problems and needs identified.

For the evaluation of the process, several activities were proposed in meetings. These activities involved teachers and students, focusing on obtaining information needed to assess the process of implementation of the planned strategies. In the evaluation of the product, the results obtained from the implemented strategies were interpreted. The results allowed the preparation of a final report, supported by activities in the first three stages of the CIPP, allowing the recognition of the challenges and potentialities of the current curricular proposal.

The results obtained in the curriculum evaluation process of the nursing course of NS-UFMG allowed the conclusion that some strategies have not produced the expected results and

others were successful. Among those who have not produced the expected results, there are those that sought to investigate the knowledge of students and teachers on the curricular proposal, due to the low adherence to the evaluation instrument, and those that sought to stimulate the functioning of mini committees, committee where teachers a same semester discuss strategies for the integration of contents of the semester disciplines. The successful strategies were those directed to the review of the disciplines in the curriculum, their hours and location; the disclosure of CPP in the concept map format; the development of educational plans of the disciplines in the conceptual maps format; and the analysis of teaching plans based on CPP and on the self-assessment tool of disciplines, created to guide the collective discussion on the planning of disciplines.

It is noteworthy that the last proposal was approved in a plenary session in a workshop in February 2014, which established that the analysis of the teaching planning would be done through a self-assessment tool to be prepared by the STC and approved by teachers. It was also decided that this analysis would take place in three stages: individually, by teachers of each discipline; in the three departments of the course, to which the disciplines are linked; and in all the departments together, in a dialogue between all teachers.

### THE ANALYSIS OF TEACHING PLANNING BASED ON CPP

The reflection process on the teaching planning by teachers of each discipline enabled highlighting the lines of subjectivity and the individuation processes of teachers from the self-assessment tool. The aim of the creation and use of this instrument was to conduct the analysis of teaching plans based on CPP, through joint reflection by teachers on their own teaching practices.

The instrument covers seven axes of analysis, namely: (1) component of planning – purpose, content, method, strategies and evaluation; (2) component of objective; (3) component of content; (4) component of content and strategies; (5) component of method; (6) component of strategies; (7) component of evaluation.

In the analysis axes 01, 02 and 03, respectively, the analysis of the results on the indicators “contemplating the transversal concepts of the course”, “establishing concepts and skills in line with the overall objective of the discipline” and “seeking emphasis on comprehensiveness” revealed that they were most easily developed by teachers, with a percentage of 94.7, 84.1 and 84.1%, respectively.

On the adoption of transversal concepts, it is clear that almost all teachers reported doing so. On contemplating transversal themes present in CPP, such as those related to life, citi-

zanship, health, ethics and nursing,<sup>6</sup> teachers revealed the contribution to nursing education that transcends to the mere technical training.

As for the emphasis on comprehensiveness, the percentage of teachers who reported developing it (84.1%) was considered less than expected, considering that this principle is the curricular axis of the course.<sup>6</sup> For comprehensiveness to consolidate, there must be a commitment of educational institutions with meeting this principle both in health care and in the teaching and learning process.<sup>9</sup>

Regarding the strategies (analysis axis 04), more than 80% of teachers referred using different and appropriate strategies to develop concepts and skills of the discipline. On the professional to be formed, it was found that 60% of teachers can define the concepts and contents discussed in their disciplines, targeting the profile of the graduates determined in the CPP. This percentage can be thought from studies that address the curriculum evaluation in the opinion of graduates. This result may reflect ambiguities in the relationship between the professional profile defined in the CPP and the performance of graduates in the market, who may highlight the relevance and adequacy of the content covered in the undergraduate course and may consider the content and concepts covered in some disciplines as inappropriate and/or insufficient.<sup>9</sup>

On teaching methodologies (analysis axis 05), 63% of teachers said they use more interactionist and problem-solving approaches, although only 52% of them have explained the search for non-centralized strategies in the teacher, including, for example, search in libraries. These findings are in line with the results of other studies that show that health/nursing teachers recognize the relevance of the use of dialogical methodologies and seek to include them in their practice, although they highlight the lack of teacher training.<sup>10</sup>

In the analysis axis 06, the results revealed that the majority (78%) of teachers find it difficult to develop cultural activities and aesthetic and artistic experiences. This high percentage is consistent with the results observed in a study that addressed the resistance of Medicine teachers in the face of curriculum innovation. In this study, the teachers assume that the content guarantees learning and that students learn only with formal teaching, in structured environment.<sup>10</sup> Aesthetic, cultural and artistic experiences favor the expansion of looking at oneself and the world, in that it enables the production of new modes of subjectivation.

In addition to the results obtained with the self-assessment tool, in the evaluation of the implementation process of

this strategy, it was observed that in the individual analysis, the teachers reflected on the intersections between the CPP, the teaching planning of the discipline and their own practice. In the councils, discussions have become spaces of re-approaching with the conceptual map of the CPP, of sharing of educational plans and conceptual maps, favoring the visualization of positions and relationships between concepts from different disciplines.

The curriculum evaluation developed so far has favored spaces for collective analysis of the dimensions that make up the curriculum created and operated by the different actors, although difficulties in the participation of teachers have still been identified. The adopted evaluation model, although more rational and analytical, has enabled reinventions in the evaluation, with implications in the ways of educational subjectivity. The continuity of curriculum evaluation reveals the need to strengthen the students' participation in the evaluation process and the analysis of the impacts of training in the labor market.

## REFERENCES

1. Morin E. Os sete saberes necessários à educação do futuro. 2ª ed. São Paulo: Cortez; 2011.
2. Fernandes JD, Rebouças LC. Uma década de Diretrizes Curriculares Nacionais para a Graduação em Enfermagem: avanços e desafios. *Rev Bras Enferm*. 2013[cited 2015 Jan 22];66(esp):95-101. Available from: <http://www.scielo.br/pdf/reben/v66nspe/v66nspe13.pdf>
3. Oliveira EG, Costa MA. Proposta de avaliação do currículo de Graduação em Pedagogia: um desafio. *Educ Soc Cult*. 2011[cited 2015 Jan 22];(32):73-89. Available from: [http://www.fpce.up.pt/ciie/revistaesc/ESC32/Artigos\\_32\\_Oliveira.pdf](http://www.fpce.up.pt/ciie/revistaesc/ESC32/Artigos_32_Oliveira.pdf)
4. Meira MDD, Kurciant P. Avaliação de curso de graduação segundo egressos. *Rev Esc Enferm USP*. 2009[cited 2015 Jan 22];43(2):481-5. Available from: <http://www.scielo.br/pdf/reeusp/v43n2/a31v43n2.pdf>
5. Silva TT. Documento de identidade: uma introdução às teorias do currículo. Belo Horizonte: Autêntica; 2011.
6. Lopes AC. Políticas de integração curricular. Rio de Janeiro: EDUERJ; 2008.
7. Universidade Federal de Minas Gerais. Escola de Enfermagem. Projeto Pedagógico do Curso de Graduação em Enfermagem da Escola de Enfermagem da Universidade Federal de Minas Gerais. Belo Horizonte: UFMG; 2006.
8. Santos BS. Pela mão de Alice: o social e o político na pós-modernidade. 14ª ed. São Paulo: Cortez; 2013.
9. Lima MM, Reibnitz KS, Kloh D, Ferraz F. Integralidade na atenção à saúde e na formação do enfermeiro: análise da literatura. *Saúde Transf Soc*. 2011[cited 2015 Jan 22];1(2):155-62. Available from: <http://incubadora.periodicos.ufsc.br/index.php/saudeettransformacao/article/view/610>
10. Vieira JE, Tamousauskas MRG. Avaliação das resistências de docentes a propostas de renovações em currículos de graduação em medicina. *Rev Bras Educ Med*. 2013[cited 2015 Jan 22];37(1):32-8. Available from: <http://www.scielo.br/pdf/rbem/v37n1/05.pdf>