

**PATHS TO CURRICULAR INNOVATION: A COMPREHENSIVE LOOK AT THE ROLE
OF MANAGEMENT AND PROTAGONISTS IN CURRICULAR INNOVATION
PROCESSES IN HIGHER EDUCATION**

**CAMINHOS PARA A INOVAÇÃO CURRICULAR: UM OLHAR ABRANGENTE SOBRE O
PAPEL DA GESTÃO E DOS PROTAGONISTAS NOS PROCESSOS DE INOVAÇÃO
CURRICULAR NO ENSINO SUPERIOR**

**CAMINOS HACIA LA INNOVACIÓN CURRICULAR: UNA MIRADA INTEGRAL AL ROL
DE LA GERENCIA Y LOS PROTAGONISTAS EN LOS PROCESOS DE INNOVACIÓN
CURRICULAR EN LA EDUCACIÓN SUPERIOR**

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ABSTRACT

This article presents a reflection on curricular innovation in higher education, considering the role of administrators and stakeholders involved in the innovation process, such as professors, students, staff, and the external community. The objective was to analyze how public and institutional policies, especially after Law No. 13,243/2016 and Decree No. 10,534/2020, influenced the development of curricula and innovation proposals within universities. Methodologically, this is qualitative research, bibliographical and interpretative in nature, based on an analysis of theses and dissertations defended between 2016 and 2024, located in the CAPES Thesis Database. The results indicate that curricular innovation still faces mismatches between policies and pedagogical practices, highlighting the lack of consistent institutional support and the need for effective management participation in the process. On the other hand, successful experiences were also identified, in which the integration of internal and external stakeholders contributed to living, participatory curricula capable of responding to social transformations. It is concluded that curricular innovation is not limited to active methodologies or the use of technologies, but depends on a broad articulation between management, the academic community, and society.

Keywords: Curricular Innovation. Educational Management. Higher Education.

RESUMO

Este artigo apresenta uma reflexão sobre a inovação curricular no ensino superior, considerando o papel dos gestores e dos protagonistas envolvidos no processo de inovar, como professores, estudantes, técnicos e comunidade externa. O objetivo foi analisar como as políticas públicas e institucionais, especialmente após a Lei nº 13.243/2016 e o Decreto nº 10.534/2020, influenciaram a construção dos currículos e das propostas de inovação dentro das Universidades. Metodologicamente, trata-se de uma pesquisa qualitativa, de caráter bibliográfico e interpretativo, baseada em análise de teses e dissertações defendidas

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entre 2016 e 2024, localizadas no Banco de Teses da CAPES. Os resultados apontam que a inovação curricular ainda enfrenta descompassos entre políticas e práticas pedagógicas, destacando a ausência de apoio institucional consistente e a necessidade de participação efetiva da gestão no processo. Por outro lado, também foram identificadas experiências exitosas, nas quais a integração entre atores internos e externos contribuiu para currículos vivos, participativos e capazes de responder às transformações sociais. Conclui-se que a inovação curricular não se limita a metodologias ativas ou uso de tecnologias, mas depende de uma articulação ampla entre gestão, comunidade acadêmica e sociedade.

Palavras-chave: Inovação Curricular. Gestão Educacional. Ensino Superior.

RESUMEN

Este artículo presenta una reflexión sobre la innovación curricular en la educación superior, considerando el rol de los administradores y actores involucrados en el proceso de innovación, como profesores, estudiantes, personal administrativo y la comunidad externa. El objetivo fue analizar cómo las políticas públicas e institucionales, especialmente después de la Ley n.º 13.243/2016 y el Decreto n.º 10.534/2020, influyeron en el desarrollo de currículos y propuestas de innovación dentro de las universidades. Metodológicamente, se trata de una investigación cualitativa, de naturaleza bibliográfica e interpretativa, basada en un análisis de tesis y disertaciones defendidas entre 2016 y 2024, ubicadas en la Base de Datos de Tesis de CAPES. Los resultados indican que la innovación curricular aún enfrenta desajustes entre políticas y prácticas pedagógicas, destacando la falta de apoyo institucional consistente y la necesidad de una participación efectiva de la gestión en el proceso. Por otro lado, también se identificaron experiencias exitosas, en las que la integración de actores internos y externos contribuyó a currículos vivos y participativos capaces de responder a las transformaciones sociales. Se concluye que la innovación curricular no se limita a metodologías activas ni al uso de tecnologías, sino que depende de una amplia articulación entre la gestión, la comunidad académica y la sociedad.

Palabras clave: Innovación Curricular. Gestión Educativa. Educación Superior.

1 INTRODUCTION

As part of a research that seeks to evaluate the impact of innovation policies on higher education in Brazil, this essay, through the analysis of theses and dissertations on the subject, focuses on the management of HEIs and the systemic management of this process in Higher Education Institutions (HEIs).

From Decree No. 10,534 of October 28, 2020, it is understood how government policies, instituted and related to innovation in the country since 2004, regulate the possible paths on how HEI managers can institutionalize and stimulate innovation in their institutional projects and in the same way, as the academic community, in particular, teachers themselves should or can contextualize their curricula and practices from this context.

Thus, considering the studies carried out between 2016 and 2024 on innovation in higher education, this essay seeks to reflect on two specific aspects: the first related to the role of managers and their view from the instituted policies. From this, who were the entities involved (teachers, technicians, students, civil society) endorsed in the innovative processes described in each research.

It is no coincidence that we will reflect on the research in this period, which already brings precisely the well-established premise about the role of the teacher, as a mediator of knowledge, and of the student as a participant in this process. However, they also situate the management and other partners as active in this process, which leads us to reflect on whether we are talking about a process of curricular innovation or just an innovative action in the classroom?

2 SUPPORTING REFERENCES

The reflection put forward in this study was based on the references on curriculum by Dewey (1979), Goodson (1995), Arroyo (1999), Carbonelli (2002), Saviani (2010), Masseto (2012) and Masseto and Gaeta (2022) adapted, in some cases, to the context of higher education.

In this sense, it is understood that the construction of a curriculum "must take into account the adaptation of studies to the needs of current life in society; the choice must be like the aim of improving the life we lead in common, so that the future is better than the past" (Dewey, p. 211, 1979). This statement, so present when it comes to the processes of curricular innovation, reinforces the characterization of the curriculum as a social and representative construction of a community and its phenomena (Goodson, 1995).

In other words, this representation cannot allow the curriculum to be just an instrument at the mercy of what is said outside the institution (Arroyo, 1999), even though we see in the research put forward in this study that the neoliberal model reflects directly on national and international innovation policies.

Thus, in the same way when we look inside the institutions, studying the curriculum allows us to relate its institutional attributions to the various implications of the educational activity (Saviani, 2010).

Even with historical references of its conception since 1817, there is this constant and current exercise of not looking at the curriculum as a closed structure with a single objective, even if it is marketable. For Masseto and Gaeta (2022), this is still the great challenge for teachers. "This conception of curriculum experienced for so many years by teachers was the first challenge that HEIs faced from the start to a necessary change" (Masseto and Gaeta, 2022, p. 24)

For the authors, this comes at the rebound of numerous other challenges, such as: the curriculum design, which focuses on serial organization, on the fragmentation of content, on interdisciplinarity, to the teaching and learning processes that still reinforce the student's passivity, transmissive teaching, a content-based assessment focused on grading performance.

Cited in most of the works, Carbonell (2002), and consequently, Masseto and Gaeta (2022), are authors who reinforce the systemic and living perception of the curriculum, requiring the integration of knowledge and objectives in its formulation, as well as agents that interact directly or indirectly with its design, management or execution.

For Masseto and Gaeta (2022), an innovative curriculum is due to the convergence of 4 axes. The first, called *Context*, allows the HEI to perceive itself within the innovation process based on its needs to understand what its limitations are in the face of the need to structure a curriculum that allows the training of future professionals.

The second axis, perhaps the most relevant to this construction, is called *Protagonists*. Here, those involved in curricular innovation need to perceive themselves as belonging to and co-responsible for the process and, whenever possible, review their roles and the pedagogical culture in place.

The third axis considered, by Masseto and Gaeta (2022), the heart of an innovative curriculum, turns to the *Curricular Structure*. It is at this point that the necessary elements are built for the curriculum to exist, from its conception to its evaluation and evolution.

Finally, *Management*, as the fourth axis, is responsible for fostering the structure and conditions necessary for the execution of this curriculum. Thus, within the prerogative of a democratic space where managers will contribute to solving problems and the necessary demands, it is up to the team to have adequate space to communicate.

3 ON THE METHODOLOGICAL PATH

This research is characterized as qualitative, of the bibliographic type and of an interpretative nature. The data evaluated are based on Bardin's (2016) perspective, as it sought to capture and understand perceptions and meanings.

A search was carried out on March 17, 2025, on the website of the CAPES Theses and Dissertations Bank, considering 3 distinct descriptors. It was considering the interval from 2016 to 2024, considering the date of publication of Law No. 13,243 of January 11, 2016, which provides for incentives to innovation in the country and amends previously published regulations. In all, according to Table 1, 438 works were originated, 303 dissertations and 135 theses.

Table 1

Bibliographic research of theses and dissertations

Ord.	Descriptors	Number of works generated (theses)	Number of works generated (dissertations)
1	Innovation, curriculum and "higher education"	65	148
2	"Innovation policies" and university	64	140
3	"Innovation policies" and "higher education"	6	15
Total		135	303

Source: author (2025)

In all surveys, the exclusion criteria were studies that did not address innovation (12 studies); those that addressed the theme of innovation, but in companies and other levels or modalities of education (209); those that dealt with pedagogical practices, but in very specific contexts (41 studies); or even those that appeared in duplicate or had corrupted accesses (29 works).

This cut was important to understand more about the works that addressed curricular innovation in different aspects. Thus, 147 studies that are related to the research themes remained.

For the remaining 147 papers, markers were prepared in an Excel™ table. Thus, in

addition to classifying the works, it was possible to identify emerging categories on how the authors relate innovation in higher education: Associated with the use or development of technologies; Production of knowledge based on social and economic demands; The impact of legislation related to innovation; The transfer of patents and intellectual property in HEIs; The challenges of innovation management; the use of the Triple Helix methodology; and curricular, academic and pedagogical processes.

Table 2

Works classified by theme

Themes	Quant. of Jobs
Associated with the use or development of technologies	21
Production of knowledge based on social and economic demands	18
The impact of innovation-related legislation	25
The transfer of patents and intellectual property in HEIs; The challenges of innovation management	23
The challenges of innovation management	48
The use of the Triple Helix methodology	5
Curriculum, academic and pedagogical processes	54

Source: author (2025)

This relationship demonstrates that some works move between two or more themes. Of this amount, effectively for this essay, the studies that are grouped under the theme "Curriculum, academic and pedagogical processes" (54 works, 36 dissertations and 21 theses) presented references that address the mismatches between curricular proposals and the role of management in curricular innovation and pedagogical practices.

Thus, in order to develop a state of the art that focuses on the understanding of the curricular innovation process, two guiding questions were inferred from the premises set out by Carbonelli (2002) and Masseto and Gaeta (2022): "**Regarding the role of management**, does the text reflect on the role of managers and the institution in the innovation process? Has the management instituted democratic spaces for discussion and reflection, or even in the guarantee of physical and technological spaces, administrative and managerial support for the implementation of the curricular proposal, aiming at the need for flexibility, evaluation and evolution of the curricular proposal?" and "**As for the protagonists**, the text reflects on the importance of the participation of more interested parties, in addition to the professors and students themselves in the process, such as: technicians and partner institutions?"

This analysis was made considering the summary, the abstract and the conclusions of the works. Thus, of the 54 studies, Table 3 summarizes the 28 studies that effectively contributed to the issues raised above.

Table 3

Systematized works considering the theme "Curriculum, academic and pedagogical processes"

Ord.	Title	Author (year)	Type of work
1	The place of interdisciplinarity in higher education: an analysis of the pedagogical projects of the Interdisciplinary Bachelor's Degree Courses at UFBA	Ramos (2016)	Thesis
2	Teaching in Engineering courses and the use of ICT: in focus the professional development of teachers	Andrade (2016)	Dissertation
3	Relationships between socio-emotional skills and innovation for some biological sciences graduates	Paranhos (2017)	Thesis
4	Innovation device in Higher Education: the production of docentis innovatus and discipulus iacto	Godinho (2017)	Dissertation
5	The training of graduate students for technological development and innovation in health in Brazil: a study based on the pedagogical projects and curricula of the academic programs of the Large Area Health Sciences - Medicine III	Bernardes (2017)	Thesis
6	Curricular environmentalization: the case study of the logistics technology course in an HEI in Curitiba	Michalowski (2018)	Dissertation
7	Academic Innovations: their acts and challenges at UFRB (2008-2017)	Silva (2019)	Dissertation
8	Design thinking: an innovative strategy for education in health	Jesus (2019)	Thesis
9	Analysis of the teaching of entrepreneurship and the generation of innovation at unicentro.	Campos (2019)	Thesis
10	Profile of nursing students and their perceptions about the use of active methodologies in their educational process	Necklaces (2019)	Dissertation
11	Active methodologies: implications for the training of bachelor teachers	Belizario (2020)	Dissertation
12	Academic projects of technological competition, innovation policy and the theory of Andrew Feenberg	White (2020)	Dissertation
13	The use of active teaching and learning methodologies in higher education: a comparison between UTFPR and UMINHO	Pereira (2021)	Dissertation
14	Digital technologies and the development of decision-making in accounting: the importance of active methodologies in the learning of Financial Management	Siqueira (2021)	Dissertation
15	Information and communication technologies in the teaching and learning process through a system of capture and presentation of climatological data from the IFES Campus Santa Teres...	Volpi (2021)	Dissertation
16	The knowledge of the mathematics teacher who works in undergraduate engineering courses with curricular innovations	Cotrim (2022)	Dissertation
17	Sociotechnical networks of a medical course in the interior of Brazil: a cartography of the controversies of	Magalhães (2022)	Thesis

	the movement of interiorization and curricular innovation.		
18	Active methodologies in the initial training of Science and Biology teachers: a look at supervised curricular internships	Machado (2022)	Dissertation
19	Active learning: STEAM education and the use of digital technologies	Silva (2022)	Dissertation
20	Innovative pedagogical practices in the Graduate Program in Tourism in Brazil: an analysis of the use of technologies for teaching	Lima (2022)	Thesis
21	Pedagogical and curricular innovation in the context of the Degree in Biology: an integrative literature review	Santana (2023)	Dissertation
22	The Interdisciplinary Bachelor's Degree in Humanities at UFBA: innovation, intercultural training and cognitive justice	Lima (2023)	Dissertation
23	Social representations of professors and students about innovative practices in the degree course in Biological Sciences at UEFS	Rosary (2023)	Dissertation
24	HackSaúde: awakening entrepreneurial skills in undergraduate students in the health area	Moreno (2023)	Dissertation
25	Perspectives of innovation in pedagogical political projects and curricula aimed at the teaching of Science in Pedagogy courses: a study involving federal universities in the state of Minas Gerais.	Oak (2023)	Thesis
26	Freirean principles in the educational practice of open technology communities: inspirations to reorient the curricular praxis of Higher Computing Courses	Ferauche (2024)	Thesis
27	Maker practices in English teaching: a methodological proposal in the light of the BNCC	Silva (2024)	Dissertation
28	Estágio GO! A board game proposal for pedagogy	Costa (2024)	Dissertation

Source: author (2025)

Such a context leads us to an analysis of the participation of managers and other actors in the process of institutional and curricular innovation in higher education. Thus, it will be possible to identify the impact of this lack of management on innovation proposals and what is its strategic role at the moment when the academic community, especially the professor, decides to innovate in the classroom.

4 RESULTS AND ANALYSIS

As a result, the analyses were separated into two chapters highlighting the fragility of institutional documents, the need for managers' action, the misconceptions about the role of teachers in the classroom and methodological practices, as well as the challenge of structuring environments and creating an innovative culture within the institution.

4.1 MISMATCHES BETWEEN CURRICULAR PROPOSALS AND THE STRATEGIC ROLE OF MANAGERS

Some studies deal with the influence and understanding of policies on teaching practice and the methodologies adopted. Godinho (2017), for example, states that policies related to innovation tend to be competency-based academic training and learning with active principles, but the ultimate goal is only to focus on neoliberal demand.

"They (the policies) act in the governance of the conducts of innovative university teaching, meeting the demands of the innovation society, which needs active, participative, autonomous, competent and creative students who will produce innovation, and thus feed the competition that neoliberal rationality needs." (Godinho, 2017, p. 148),

Branco (2020), on the other hand, when analyzing innovation policies in academic projects of technological competition, considers it relevant that there are interventions by civil society so that the institutional actors involved are included in social demands far beyond the demands posed only by the market. The author states that, with the proper guidance and possibilities at hand, students in training can turn to the demands of non-hegemonic groups.

In a very similar way, Santana (2023) states that the process of curricular innovation is polysemic and suffers from conceptual disputes and dominant values of the stakeholders. However, the author draws her attention to the elitist values of knowledge that can exclude other social perceptions from this space. From this perspective, the curriculum, as a political representation of the objectives of an HEI, can lose its function in contributing to emancipation, rupture and social change.

When we enter into internal policies, the studies by Silva (2022), Magalhães (2022) and Lima (2023), for example, point out conflicts of interest that exist within institutional management itself when designing an innovative curricular proposal.

Silva (2022), when analyzing the possibility of pedagogical innovation in higher education, attests to the distance between what is recorded in the curricula and what students experience in the classroom. The author concludes that "it was not possible to identify in the documentary analysis how the connections between theory and practice, learning to learn, interdisciplinarity, the development of student autonomy and/or reflective practice are effectively established" (p.224). He also highlights, based on the documentary analysis, that "themes such as teacher training, appropriation of the use of technologies and construction

of network curricula appear in the background suggesting that they are little emphasized." (p.224-225).

For Magalhães (2022), when assessing the contradiction in the processes of curricular innovation in higher education, he points out the fragility of PPCs oriented to practices of active methodologies and the use of digital technologies, and which do not present interdisciplinarity, structured laboratories, and effective contact between teacher and student in their execution. Although the premise has the merit of providing quality teaching, it is necessary to consider the effectiveness of the teaching and learning process.

Lima (2023), when evaluating the innovation and intercultural formation of an interdisciplinary bachelor's degree in humanities, points out the contradictions that exist in the curriculum itself and in the institutional and political context of the researched institution. The author reports that both internally there is a lack of understanding about the pedagogical proposal, which makes it difficult to adapt the model; as well as other external factors that prevent the act of innovating.

"the rigidity of UFBA's management models, along with external factors of financial contingency and political turbulence, all in the face of successive attacks that the "turmoil" production space has suffered in recent years by politicians and part of public opinion. These are, and were, stones in the middle of the road that hinder the full realization of the course and its formulations and objectives. Therefore, it is urgent to think about the training of the teaching staff, in our case, of the BIH, as it may reveal a direction towards a technical, disciplinary and little innovative training". (Lima, 2023, p.87),

Rosário (2023), when seeking the social representations of professors and students about innovative practices in higher education, perceives within the researched institution a clear interest in the theme, but in classroom practice, it is not seen in the same way. The author highlights that the movement of the HEI itself is important to foster actions aimed at teacher training, aiming mainly at breaking the conversational profile in the classroom.

A new curriculum, in the author's perspective, would be focused on the indissociation between theory and practice; the construction of new knowledge; the use of creative methodologies; the interaction between the subjects; the motivation and encouragement of research; the development of student protagonism; and human emancipation.

Thus, the author reinforces that innovation goes beyond teachers, students and the curriculum. It is necessary to rethink the organizational model itself.

"Innovating the university is rethinking the organization, management and administration system with more dedication and collaboration in research, extension and management activities. It is to reorganize the articulation between the disciplines of the courses; it is to organize teaching activities in training and research teams, mobilizing teachers and students, in a true common and shared action; it is to organize the disciplines in blocks, in a deep, gradual and sequenced way, starting from the most basic to the most specific knowledge, considering the objectives of the courses". (Rosário, 2023, p. 155),

4.2 THE IMPACT OF LACK OF MANAGEMENT ON CURRICULAR INNOVATION PROPOSALS

In this session, evidence is presented about various contexts in which the proposals for curricular innovation could have been better adapted or directed, if the managers had participated in the design, support or support processes.

Studies such as those by Ramos (2016) who, when analyzing the curricula of interdisciplinary bachelor's degrees, for example, points out that the absence of time to democratically discuss the main axes of the model, especially at the management level, compromised fundamental actions, such as teacher training and the definition of rules for the proper functioning of the proposal.

Complementing this perspective, Andrade (2016), in his research, highlights that informal dialogue between peers, although important, does not replace a structured institutional policy that contemplates, for example, teacher training and professional development based on real curricular needs.

Following the same critical line, Mangarelli (2017) recognizes the existing socio-conjunctural commitment of the HEI in the attempt to transpose curricular paradigms, but reinforces that it is up to the institution to guarantee effective spaces for training and academic experience, ensuring the involvement of the actors in the educational process.

The author, in this sense, reinforces the need to train those interested in the process of constitution and political-pedagogical innovation. Thus, even though the institutional documents lead us to a significant movement to understand more about the university's approach to its social context, it is complex to demand the involvement of the interested academic community if the institution does not offer conditions for it. Curricular practices, in this context, which need to be seen and discussed by everyone, barely receive attention from those who will benefit the most.

Following the same line, Paranhos (2017), when seeking to understand the relationships between the process of curricular innovation and the socio-emotional skills of

teachers and students, states that innovation can happen in all scenarios (methodology, curriculum and management, for example) as long as those interested are aware of the challenges they will face.

The author also states that "in innovative management, we highlight the role of the unit (school/university) as a protagonist of changes in the educational sphere. The school and/or university is responsible for promoting innovation and management should be thought of as something innovative." Paranhos (2017) "In this sense, the school/university reflects the thinking of its administrators and staff, and it is these modes of thinking that are responsible for the possibilities of promoting or impeding innovations." Paranhos (2017).

Campos (2019), when evaluating the relationship between the teaching of entrepreneurship as an innovative proposal within HEIs, considers that the institution should promote teacher qualification, as well as encourage research and development after responses to market competitiveness and in the promotion of individual, region, and country development so that there is meaning in the offer of the theme.

Finally, as an example of how management can contribute to the process of curricular innovation, Cotrim (2022), in line with valuing the teaching work environment, observes that the academic activities offered in undergraduate courses can stimulate innovative pedagogical practices, reinforcing the importance of management ensuring institutional environments favorable to change.

4.3 THE INFLUENCE THAT THE INSTITUTION'S PERFORMANCE HAS ON PEDAGOGICAL PRACTICES IN THE CLASSROOM, ESPECIALLY IN THE PRACTICE OF ACTIVE METHODOLOGIES AND THE USE OF ICTS

This session, in particular, highlights the influence that managers and the institution have on practices of active methodologies and the use of digital teaching technologies that emerged in research, from 2019 onwards, as proposals for curricular innovation.

The research by Jesus (2019), Silva (2022) and Lima (2022) reinforces the need for administrative and operational support. Jesus (2019), when considering Design Thinking as an innovative strategy within the curricula, stated that, even with the institutional interest in innovating, it is not possible to propose differentiated methodologies if there is no administrative and operational support for teachers.

Silva (2022) pointed out the infrastructural barriers, such as the internet connection for the practice of active methodologies. In addition, the lack of interest shown by the vast

majority of the community shows that instituting practices with active ingredients goes beyond the good will of the teacher.

"However, the insertion of Technologies in the day-to-day life of the classroom goes beyond the will of the teacher or the simple elaboration of projects involving digital tools, as practice has revealed to us that the infrastructure of public educational institutions still lacks investment in this area so that quality work can be carried out. Likewise, to blame only the teacher for not incorporating them into their practice is not to have real knowledge of the problems that public schools face, such as the aforementioned lack of investments or the lack of adequate training in this area". (Silva, 2022, p. 106)

Finally, Lima (2022), when evaluating the so-called innovative pedagogical practices in graduate programs, states that "there is a huge gap between public policies, teacher training, physical structure of educational institutions, access to the internet network, among other bottlenecks".

For other authors, such as Campos (2019), Belizario (2020), Pereira (2021), Machado (2022) and Moreno (2023), there is a challenge in the institution's understanding of how to apply active methodologies in the classroom. Belizario (2020), for example, when evaluating the impact of active methodologies on teacher training, states that it is necessary to change the entire structure of beliefs that exist in an HEI. For this, it is necessary that the spaces be rethought, the teacher's time, as well as the concepts and the curriculum.

Going further, Pereira (2021), when also evaluating the practice of active methodologies in higher education curricula, the author points out that there should be a greater effort on the part of institutions to effectively institutionalize active practices in their pedagogical proposals.

Machado (2022) points out a distortion between what is described in the documents and what students perceive about teaching based on active learning. For them, there is a lack of interest from the class or from the teacher himself, in addition to the lack of material and infrastructure.

And even if they are arranged in documents, Moreno (2023) reflects on the fact that it is necessary to guarantee training and evaluation. "Factors such as learning assessment and the lack of teacher training to use active methodologies as learning strategies are challenging in the insertion of the pedagogical process". (p. 89)

Finally, the studies by Gonçalves (2020), Siqueira (2021) and Volpi (2021) address the issue of Digital Teaching Technologies and the need for support and institutionalization of

their use. Siqueira (2021), reinforces, in his study, the need for teacher training aligned with these new practices and about the fragility of these elements not being included in the PPC of the courses.

Gonçalves (2020) and Volpi (2021) consider that, even if there is good will from the teacher, it is necessary that "there are minimum resources for the operationalization of this media, both by teachers and students, such as a computer, voice recorder or smartphone, headset and Internet".

4.4 THE STRATEGIC ROLE OF MANAGEMENT IN CURRICULAR INNOVATION

In this last essay, it is highlighted what is expected from innovative curricular processes when the institution takes ownership of its responsibility to cooperate in an integral way. The research points out ways of how the interested actors take their responsibilities for themselves and contribute not only to an innovative curriculum, but to a more innovative HEI.

To better understand this relationship, we will first evaluate the studies that effectively seek, through the involvement of internal actors, especially managers. Michalowski (2018), for example, when evaluating a proposal for curricular environmentalization, highlighted the role of the coordinator in contributing, through his or her statements, to each subject on the agenda and to the new curricular matrix. The team's involvement resulted in an institutional planning built through weekly meetings. The team responsible for the new academic proposal, composed of the coordinator, campus director, assistants to the academic board, discussed the profile of the graduate and the economic and social demands, so that they could, later, put the test in the Superior Councils of Research and Extension.

Likewise, Tatsuo (2021), when evaluating the hybrid format as an innovative proposal after the context of COVID-19, reinforces the institutional experience in registering, in institutional documents, the curricular proposal for fostering active methodologies. The author reinforces that "On the horizon, there must be a project to build open curricular matrices that encompass the differences from class to class, from course to course, from discipline to discipline, from student to student". (Tatsuo, 2021, p. 188),

These precepts are reinforced by Silva (2019) who, when evaluating the process of institutional innovation within an HEI, considered the participation of managers pertinent by endorsing that the process of implementing the new grids took place with the academic community. Thus, it was up to academic managers to monitor, evaluate and review the planning, in addition to proposing a more organized evaluation policy.

Silva (2019), when assessing the challenges of innovation in a HEI, states that "notably, the central administration played a strong role in this process of initiatives for innovation, strengthening training in cycles, diversification of teaching-learning methodologies and university studies" (p.58). Even though there is no full adherence over 9 years of research surveyed, the author emphasizes the protagonism of the teachers involved, who, supported by the management, contribute to innovation.

In his research, the author also points out that the culture of innovation contributes to the maintenance of the curriculum in evidence and the constant process of updating.

"It was also evident that the establishment of innovative curriculum policies is not enough to influence the curricular restructuring of existing courses, but keeps the curriculum on the institution's agenda permanent. The innovation policy proved to be pertinent, contextualized, broad and expandable, bold and democratic and, even more, committed to ensuring students' access to the University and their permanence". (Silva, 2019, p.59).

Magalhães (2022) reinforces this importance, who, when reporting the experience of interiorization and curricular innovation in higher education, considers it important to involve interested actors to better understand the complexity of university management around such a demand.

For Silva (2022), in addition to the involvement of peers, it is important that the institution pays attention to the fact that PPPs must reflect the needs of the community. Thus, in order to effectively think about a proposal for curricular innovation, "these documents must be frequently reviewed and updated, according to the advances and decisions of those who make up the HEI. More than well written, the curriculum needs to be alive and active" (p.227).

Like Silva (2022), Carvalho (2023) and Carvaloho (2023) evaluate the prospects for innovation in PPPs, stating that there is a direct relationship between the fact that there is promotion in PPPs of active methodologies, use of technologies and institutional physical spaces for the elaboration of proposals and didactic artifacts, etc., with the change in the teacher's practice.

Therefore, Carvaloho (2023), when turning to the perspectives of emancipatory innovation, regulatory innovation, and PPPs, states that a curriculum that is conceived through the collective perception of professors, coordinators, together with their collegiate bodies, and that is focused on the development of citizenship and respect for diversity and in favor of inclusion, can already be considered innovative.

Thus, Santana (2023), in his bibliographic study on pedagogical and curricular innovation in the context of the Teaching Degree, reflects that pedagogical innovation arranged in an institutional way, positively influences the courses considering the promotion of the qualification of professionals, the improvement of teaching and active learning processes, as well as participatory management.

As for external actors, that is, associations, public authorities and private initiatives that can establish partnerships with HEIs, the authors also reinforce the importance of strengthening these ties considering a better understanding of social and economic demands and the profile of the graduate. Bernardes (2017), in his study, reflects on the interaction between the curriculum and the business world. For the author, it is important that the programs maintain technology transfer procedures, in addition to defining areas of concentration, lines of research and specific disciplines on the subject.

The author also reinforces that it is necessary to have a good systematized relationship with NITS, Incubators and Technology Parks. Looking at the graduates who will be able to develop research, the author states that it is necessary to have training that is intended for this profile of future researchers.

In the experience presented by Michalowski (2018), after the curricular plan had the contribution of coordinators, campus director, assistants to the academic board, among others, the new curricular proposal, based on Bloom's taxonomy, was presented to a focus group formed by companies from different segments and former students of the course in question. For the author, the participation of this group was extremely important for the elaboration of this new proposal.

Meanwhile, Calliari (2020) presents a proposal, at the end of his study, for the coordination of an undergraduate course to partner with the Municipal Department of Education and jointly promote the training of teachers who will work in schools. For the author, this is a way to "provide more opportunities for integration of students and employees with the external community and internally. This can contribute to these transformations." (Calliari, 2020, p. 68)

In the same line of partnerships, Suêda (2020), when evaluating the social and economic insertion of a teaching degree course in a community, suggests that, for better acceptance by the community and meeting the profile of graduates, the HEI should establish a series of actions to value graduates and the curriculum.

"a) A dialogue between the Itapina Campus, together with the bodies responsible for the preparation of notices for the contemplation of professionals in the area of education; b) Forwarding, via request, to the State Council of Education, of the obligation of the State and Municipal Departments of Education to meet as a prerequisite the certification of the LICA course in public examinations, with the possibility of being hired as qualified for their area of activity; c) The development of Research and Extension Projects could be part of the mandatory subjects in the course curriculum; d) During the period of the mandatory internship, it was necessarily developed in rural schools, cooperatives, associations and other sectors directly linked to the demands of the Countryside, and not in urban schools, as mentioned by the students; e) A review of the organization of the curricular matrix, so that practical classes are not compromised, as was mentioned by students and teachers". (Suêda, 2020, p. 67).

With the objective of institutionalizing such relationships with the external community, Silva, A. (2022) presents in his study that the proposal of curricularization of extension so that there is a connection between academia and the environment. This proposal opens up a series of possibilities for discussing knowledge within the institution.

"This construction requires a strong relationship between theory and practice, active methodologies, intense articulation between knowledge and disciplines, teacher training, infrastructure and broad dialogue between all the actors involved – or stakeholders using management jargon. It is a space of possibilities for a culture of innovation". (Silva, A. 2022, p. 229)

5 CONCLUSIONS AND NEXT DIRECTIONS

This research reinforces some important precepts so that we can build new paths for future research. It is clear, from the perception of the authors, that teachers, when they want to innovate without proper institutional support, are mere isolated pairs in a dance that needs to be orchestrated together.

Masseto and Gaeta (2022) reinforce this premise when they understand that there is a need to integrate the agents who interact directly or indirectly with the design, management, or execution of the curriculum.

Still in 2012, Masseto already referred to innovation in higher education as a process that arises linked to a larger context, as all "new ideas" are responses to some social context, to a certain conception of education or to the need to overcome an existing paradigm.

In other words, even if we have so-called innovative proposals that involve concepts of interdisciplinarity, active methodologies, curricula guided by competencies, by projects, by cooperation, integrated curricula, among others, it requires the manager to make an effort to

maintain it, both in terms of its structure, but in terms of its applicability (Masseto and Gaeta, 2022, p. 24)

Castelli (2017) corroborates this statement, who, when reflecting on the trajectory of innovation policy between 1995 and 2012, states that "innovation is the result of collectivity, from the interactions between different economic agents – companies, the State, the academic and scientific community, consumers, etc. These interactions, in turn, are shaped by the institutional environment." (Castelli, 2017, p. 277)

In one of the referenced works, Ferauche (2024) matures this reflection by pointing out a path in which the curriculum, in a critical-liberating perspective, needs to be a collective act, elevating historical, economic, and sociocultural references.

Thus, based on these two most recent reflections, this integration movement perceived by the researchers is close to the concept of democratic curriculum presented by Carbonell (2002), which seeks to guarantee and combine the basic rights to a good education, without forgetting the flexibility of the content and the diversity of the students, considering, mainly, creativity and their potential for innovation.

It is now necessary to understand, at other times, how the practices were put into effect in the classroom based on the structure provided, or not, by the researched HEI. By aligning the actors, the institution, the intentionality and the curricular structure, it is possible to effectively perceive if there has been innovation in the curriculum.

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