Methodological and Analytical Dimensions of University Extension

Evandro Coggo Cristofoletti¹
Milena Pavan Serafim¹

¹Universidade Estadual de Campinas (UNICAMP), Campinas/SP – Brazil

ABSTRACT – Methodological and Analytical Dimensions of University Extension. The aim of this article is to present and discuss a methodological proposal to research university extension. This proposal was withdrawn from a historical and conceptual study about the conceptions and practices of extension. A series of methodological dimensions were removed: one who extends; to whom it is intended; what activities materialize it; what kind of knowledge is extended and what are the objectives of this process; because the extension is made; impacts of extension activity; how activities are legitimized; contextual and historical insertion; and the debate about the university’s social function and commitment.

Keywords: University Extension. Methodology. University. University and Society.

RESUMO – Dimensões Metodológicas e Analíticas da Extensão Universitária. O objetivo do artigo é apresentar e debater uma proposta metodológica para se pesquisar a extensão universitária nas universidades. Retirou-se esta proposição de um estudo histórico e conceitual acerca das concepções e práticas de extensão. A partir daí, desenvolveu-se uma série de dimensões metodológicas: quem faz extensão; a quem se destina; quais atividades a materializam; que tipo de conhecimento é estendido e quais os objetivos deste processo; porque se faz a extensão; impactos da atividade extensiona; como as atividades são legitimadas; inserção contextual e histórica; e o debate acerca do compromisso social da universidade.

Methodological and Analytical Dimensions of University Extension

Introduction

The purpose of the article is to present and debate a methodological proposal to apprehend and research the university extension. In other words, it aims to offer methodological and conceptual support that will structure research paths to the object of study in question, offering some methodological and analytical dimensions that may be useful to the different practices and conceptions of existing extensionists. Secondarily, we intend to contribute to the theoretical debate about university function, as well as to the debate about the relationship between university and society. The following general questions guide the study: How to research and produce knowledge about university extension? What analytical, methodological dimensions and categories can be used?

To reach such a proposal, the research started from a review of the extension literature, seeking to identify the various extension practices and conceptions implemented in and by Brazilian universities. In this review, it was recognized that many of these actions did not contain conceptions or explicit concepts, which constitutes an important methodological problem (and challenge) for those who are dedicated to research and action in the area. Indeed, from the review, we sought to extract some analytical categories present in most of these practices and conceptions studied and, from there, elaborate a set of methodological dimensions.

In other words, a historical review of the extensionist conceptions and practices debated in the literature was undertaken to identify some elements and aspects that could explain them—thus, the proposal derives from a literature review, whether directed to conceptual debate, history or extensionist case studies. From this review, it was realized that are taken into account (implicitly or explicitly) a number of factors that seek to characterize and theorize extension practices; these factors, more specifically, concern the common elements observed to a large extent in these practices and conceptions. Thus, this review was crossed with some methodological questions: to characterize and describe an extensionist action, which practical and theoretical aspects are important and should be considered? What analytical elements (categories and procedures) can explain a particular set of extension actions? What should be considered when researching, describing or analyzing extension? In the process of interaction between university and social segments, from the point of view of extension, how can we grasp the main aspects of this relationship? What aspects do extension studies and theorists consider when discussing extension? How do you explain extension theoretically? How is it possible to understand extension action? How is it possible to search for an extension action?

From these ideas some research categories (such as exposed in the article) were built that generally cover these common methodological elements identified. It is good to clarify that the article seeks, above all, to offer subsidies to researchers who have university extension as
their research object. Thus, by extension research, we consider the various studies (at various levels) that aim to discuss, understand and analyze a given extension practice. Moreover, it should be added that the debate held here also seeks to contribute to the discussion on indicators (qualitative and quantitative) of extension, although we will not focus the exposure under the bias of the discussion of their construction.

The presentation of a methodological proposal that is intended to be useful for the study of most university and community extension practices does not seek an attempt at neutrality - impossible in social and political theory. On the contrary, the study assumes that extension actions are inserted in training, research and extension institutions that have certain social functions conditioned - but not limited - by the economic, social and political context and conjuncture, as well as historical and social conditions which they belong to (Melo Neto, 2002).

From another perspective, Bernheim and Chauí (2008) highlight the importance of considering the university as a social institution, which expresses in certain ways the structure and way of functioning of society: “[...] From the university as an institution, we find conflicting opinions, projects and attitudes that reflect the divisions and contradictions of society as a whole” (Bernheim; Chauí, 2008, p. 18, authors’ translation). University autonomy would be, in this line of thought, a filter by which the institution would assume or reject certain social commitments.

For example, one can point to the conflict between two conceptions – stylized here – about the function of the university and its social commitment: that of education as a public right focused on citizenship, democracy and critical thinking versus privatized and segmented education, focused on profit and strongly oriented by market needs (Martins, 2008; Leher, 2004; Marques, 2013; Minto, 2014). This conflict is expressed in the tensions over the extent to which education and the production of knowledge should focus on the market demands guided by a more unstable and flexible working world, directed mainly to the competitiveness and economic growth of companies (Dias Sobrinho, 2014; Dagnino, 2015); or if teaching, science and extension should prepare individuals and produce knowledge, even if able to perform their productive functions, to act critically and reflexively in the face of social problems (Dias Sobrinho, 2014; Dagnino, 2015).

It is not our intention to hold this debate here. Through these first paragraphs, only the importance of thinking about the extension in view of the university’s social functions and commitments was emphasized, since they are not free from ideologies and disputes within the institution, as well as having important conditions and influences derived from the historical development. external and internal to universities. In the following topic, we will present the theoretical debate, addressing some of the conceptions and practices of extension that supported the mentioned methodological proposal. From this exposition, the following item will be presented and explained the nine methodological and analytical dimensions considered. In conclusion, the ideas
Methodological and Analytical Dimensions of University Extension

will be summarized along with some comments on the shortcomings of the proposal submitted.

An Overview of Extension Practices and Conceptions

It was found from the literature review we conducted that many of the extension practices are performed without the foundation of a consolidated concept - or consolidated concepts. In this sense, it can be said that they were structured on certain extensionist conceptions. This fact culminates in Brazil in the existence of some of these conceptions and practices, argued by several different authors such as Fagundes (1985), Gurgel (1986), Fraga (2012), Serrano (2013), Oliveira & Goulart (2015): i. the assistance conception, where academics seek to offer assistance to the population through knowledge transfer or technical performance in specific problems; ii. providing services to companies and governments to solve scientific and technical problems under specific demands; iii. community extension and its various methodologies and ideological perspectives, which seek to interact, in general terms, with dialogically marginalized communities and populations; iv. the conception of extension as scientific dissemination and technical training to an audience that does not have access to traditional undergraduate and postgraduate education, such as courses, lectures and events; v. extension as a link between university and business, especially as regards the transfer and development of technological innovations; among others.

At this point, it must be in mind that these can be more or less institutionalized in universities – in the sense of rules governing them, adequate administrative structure, resources, among others. They may also be more or less connected with research and teaching. It is worth mentioning that the various experiences and conceptions mix, coexist or conflict in universities, depending on historical, institutional, contextual and conjunctural factors (Fraga, 2012; Paula, 2013).

It must be considered that these conceptions have historical roots derived from the very development of Brazilian universities. Even though it is not our intention to hold the historical debate, one can cite American and European extension influences, such as the very idea of service delivery, the realization of popular courses and universities (largely guided by the positivist ideal of science), and assistance to the population (practiced in the late 19th and early 20th centuries); these largely influenced items about extension in Brazilian educational legislations, such as the 1931 Brazilian University Statute and the 1968 University Reform, as well as the military government extension projects themselves (Batista, Kerbauy, 2018; Fraga, 2017; Serrano, 2013; Oliveira; Goulart, 2015; Gurgel, 1986; Fagundes, 1985; Cunha, 1980; 1983).

Another historical moment dear to the Latin American extension is the 1918 Cordoba Movement in Argentina, recognized by the literature as an attempt to try to modernize and bring these institutions closer to the population, based on a critique of traditional university models
in Latin America, and the working classes in order to overcome the continent’s dependence and underdevelopment frameworks (Freitas Neto, 2012). This would be one of the seeds of dialogic extension and aimed at the subordinate segments of society. It is also important to highlight, historically, the weight and influence of extension experiences carried out by Brazilian students, especially by the National Students Union, especially in the period 1955-1964 (Souza, 2010; Fraga, 2017; Batista; Kerbauy, 2018). At the same time, practices based on the so-called Paulo Freire method are of historical importance, especially in the matter of literacy and popular education (Fraga, 2012; 2017).

Returning to the most current conceptions, González and Larrea (2006 apud Pimentel, 2015) point out three extension models experienced by Latin American universities: traditional, economist and integral development. The first, originated and developed under the ideals of the Enlightenment, is characterized by the idea of unilateral transfer and transfer of knowledge, techniques and academic culture to communities without access to scientific knowledge. The second – the economic model - refers to the university connection with the interests of the productive sector and the market, developing creative knowledge potential focused on market demands. The third, of integral development, is inspired by Cordoba 1918 and takes up the idea of strengthening the social function of the university, in the sense of the democratization of critical and reflective knowledge. To this end, the university contributes directly to improving the population's quality of life by adopting a dialogic and community-integrated model.

Serna (2004), in turn, pointed out that universities, even at the beginning of the 21st century, still do not have much clarity about the extension, particularly as regards their natures and objectives. In this sense, according to the author, the consequences of this fact would be: i. marginalization or disappearance of true extension work; ii. Attention to social problems are now considered as individual attitudes by academics; iii. decrease in the influence of universities in decision making to solve social problems; iv. Too much focus on formal education activities; v. poor training and awareness of students to participate in the transformation of society.

In view of this, it argues that there are four models (Serna, 2004): selfless, publicizing, aware and business-related. The altruistic model is characterized by the disinterested and humanitarian action of university students in favor of marginalized populations. Under the historical influence of positivism, the objective is to lead scientific knowledge to contribute to problems that affect the poorest population (for example, legal advice, health care activities, among others). The dissemination model is based on scientific dissemination actions, perpetuated by the university in order to reach the non-academic public in general, such as science museums, lectures, scientific dissemination publications, among others. In this, the university sees the need to transmit knowledge to the population.
The third, awareness-raising model explicitly emanates from a leftist political conception and is based on the attempt to apply Freire's ideas with a view to sharing symbolic goods – knowledge and culture – in a dialogic way with marginalized communities and populations. In this sense, we seek to create, in the face of interaction, awareness about the causes of the problems that communities go through in order to assist in the processes of transformation and liberation of the conditions in which they are. The latter, the business bond, resembles the economic model already identified, and is explained by extension actions that identify in the market and in the company the locus of society's demands, offering consultancies, courses, technology transfer, among others.

Silva (2000) presented three extension conceptions that would mark the contemporary Brazilian universities. The traditional or functionalist conception, the procedural conception, and the critical conception. The first refers to the visualization of the extension while executing public policies, where the university is considered a complement of the State and an instrument for implementation and execution of its actions (university hospital, population assistance services, among others). In this type, the extension would be largely unlinked to the other two functions and would function relatively autonomously. The procedural conception, in turn, would be characterized by the politicization of actions and the fight against welfare, taking extension as the third function and articulator between teaching and research. The objective of this model would be to promote the so-called social commitment of the university, introducing the question of the inseparability between teaching, research and extension – an idea that is present, for example, in the 1988 Brazilian Federal Constitution itself.

Finally, the critical conception refers to the view that extension should not be institutionalized as a function, as it should be intrinsically linked to teaching and research in order to guide and transform them towards reality – the idea of extension, therefore, would be diluted in the other two functions, resizing the performance of both. Botomé (1996) and Melo Neto (2002), for example, argue that efforts should be oriented towards concrete changes in traditional research and teaching – called by Botomé (1996) alienated research and alienating teaching – where extension would be a dimension, and not a separate function, solely responsible for making contact between university and society.

It is pointed out that these prominent extensionist conceptions are not pure, as they blend in concrete practices. These conclusions are supported by the analysis by Reis (1996), Melo Neto (2002) and Souza (2010), who identify a fragmented, non-procedural or continuous Brazilian extensionist academic pattern, not institutionally integrated with research and teaching, and conceptually deficient in understanding the academic community about the nature and characteristics of extension. In other words, extension constitutes a relatively academically undervalued function, especially the so-called community extension.
It is important to highlight that the intention of this article is not to offer a methodological proposal that fits the extension practices in these models; on the contrary, the debate about these contributed to the elaboration of the proposal by highlighting some analytical dimensions, such as: the purpose of the extensionist action and the reasons for its implementation; external and internal actors and their characteristics; the methodology and pedagogy of extension practices, especially regarding the transmission of knowledge; and how a certain extensionist practice fits into the political-administrative, scientific and formative processes of universities.

More recently, it is necessary to highlight the extensionist construction of the Forum of Extension Dean of the Brazilian Public Universities (Forproex). From the Brazilian redemocratization in 1988, and with the strengthening of the discussion about the social commitment of the public university in the face of this new democratic period, the debates about the extension gain momentum, especially with the creation of the entity in 1987. Diniz (2012) and Souza (2010), the Forum has been proving to be the main national extensionist actor, both conceptually and in the design of national extension policies, such as the National Extension Plan (Forproex, 1999) and the Policy. National Extension (Forproex, 2012). Based on this notion, at its first meeting in 1987, Forproex defined extension as:

[...] the educational, cultural and scientific process that articulates teaching and research inseparably and enables the transformative relationship between the university and society. Extension is a two-way street, with transit assured to the academic community, which will find in society the opportunity to elaborate the praxis of academic knowledge. On return to the university, teachers and students will bring a learning that, subjected to theoretical reflection, will be added to that knowledge. This flow, which establishes the exchange of systematized / academic and popular knowledge, will have as a consequence: the production of knowledge resulting from the confrontation with the Brazilian and regional reality; and the democratization of academic knowledge and the effective participation of the community in the university’s performance. In addition to instrumentalizing this dialectical process of theory / practice, extension is an interdisciplinary work that favors the integrated view of the social (Forproex, 1987, p. 11, authors’ translation).

In general terms, this concept has some principles: the idea of extension as a process; the idea of dialogue and exchange between academic knowledge and social groups; the inseparability and integration between teaching, research and extension; extension as a producer of knowledge and transformative of teaching and research; the idea of interdisciplinarity; and the notion of integrated vision of the social. In the words of Serrano (2013, p. 11): "[...] this conceptualization is expressively Freirean, in it we find the dialectical relationship, the systematicity, the
recognition of the other and his culture, the appropriation by the other of knowledge with freedom, to transform it”. Moreover, this conception would fit what Reis (1996) calls the Organic-Procedural extension, characterized by the processuality and systematicity (continuous practices) of extensionist actions, institutionally connected to research and teaching and seeking to build knowledge through of dialogical interaction with the community.

As the purpose of the article is not to discuss the trajectory of Forproex nor the totality of its production, it is necessary to emphasize that, taking Diniz (2012), the entity would base its activities mainly on three axes: institutionalization of extension – how extension could be materialized and implemented at university level; in extension assessment – how extension can be assessed in universities; and the issue of financing, especially the need to expand resources for this function. Some documents built by the Forum over time have sought to deepen these issues.

For example, the National Extension Assessment (2001) presented what Forproex means by evaluation and which dimensions and categories should be considered by HEIs regarding University Extension: (1) the institutional commitment to structuring and execution of extension activities; (2) impacts of extension actions on the target social segments or partners of the practices; (3) extension assessment processes, methods and tools in universities. Based on this ideas, the document elaborated some dimensions to evaluate the extension, such as (Forproex, 2001): management policy, infrastructure, university-society relationship, academic plan and academic production. We believe that the entity’s evaluation proposal may serve as a useful methodological tool for studies and research aimed at university extension, as they account for various institutional aspects about the incidence of extension in universities.

Another example refers to University Extension: organization and systematization Forproex (2007). The objective of this paper was to continue the debate on the construction of the national extension assessment, especially the improvement of the extension information system, as well as to provide useful institutional definitions for university leaders, faculty and students. The first point that we would like to draw your attention to is the modification of the original concept (coined in 1987, at the first meeting of the forum, reproduced in full before), such as: “University Extension is the educational, cultural and scientific process that articulates Teaching and Research inseparably and enables the transformative relationship between the University and Society” (Forproex, 2007, p. 17). Despite conceptual simplification, the document incorporated the other conceptual aspects that were once in the definition of extension as extensionist dimensions: Impact and transformation; Dialogic interaction; Interdisciplinarity; and Inseparability teaching – research – extension. This debate drew some conclusions about the institutionalization of extension in universities:
It is essential that an extension policy – including concept, guidelines, purposes or functions – be defined in institutional instances of higher deliberation of IPES (University Council, Teaching Council, Research and Extension, or equivalent) and standardized legal instruments (Bylaws, General Rules, Institutional Development Plan, Resolutions, Ordinances, Announcements, among others). Aspects to be standardized may include the process of approving extension actions, student scholarship programs, forms of funding for University Extension, forms of student participation in extension actions, student achievement by participation in projects, the appreciation of the teacher’s participation in extension actions, the forms of participation of the external community in the extension decision-making process, the forms of participation of teaching staff in the extension actions, the forms of participation of technical-administrative staff in the extension actions, extension actions, among others (Forproex, 2007, p. 19, authors’ translation).

Thus, the main recommendation to universities was that an extension policy should be based on clear concepts and guidelines, debated by the academic and non-academic community, embodied in the various statutes and bylaws of the institutions, with provision for guaranteed resources and institutionalized (scholarships, funding notices, adequate administrative body, incentive measures, among others).

Given this, extension actions could be classified into programs, projects, courses, events and services (Forproex, 2007). The programs should receive special attention, since they would be an articulated set of projects and extension actions (courses, events, projects, among others), preferably integrated with research and teaching. The program would have to be clear in its democratically defined objective and target it in the medium and long term. The project, on the other hand, would be characterized by a procedural and continuous action, with educational, social, cultural, scientific or technological character. Its goal should be more specific than the program and it should be developed within a set time frame. In addition to classifying extension in the types of activities, extension actions should be framed in priority thematic areas such as communication, environment, culture, health, human rights and justice, technology and production, education and work. Each of these thematic axes would preferably contain several areas of knowledge in order to pursue interdisciplinarity.

In 2012, the National Extension Policy (2012) was published, the direct result of the previously mentioned debates. In our analysis, the document follows the same tone as previous Forproex discussions: institutionalization, evaluation, financing, and now universalization of extension. The concept of extension did not change, but more emphasis was placed on explaining its main dimensions. Moreover, the need to strengthen university extension in public institutions was reaffirmed in the face of growing questions about their social commitment to social problems. The document makes a strong case for greater appreciation.
Methodological and Analytical Dimensions of University Extension

of extension, electing the government and education policies as central to stimulating and promoting the strengthening of extension in higher education institutions. Specifically, we can mention the elaborated strategic agenda, which had guidelines such as: incorporation of extension curriculum into undergraduate programs (such as the requirement of 10% of the workload of undergraduate courses in extension programs and projects); proper insertion of the extension in the National Education Plan; regulation of extension at the governmental and institutional level; greater recognition of extension in various dimensions; creation of state and institutional legal funding mechanisms; among others.

Panoramically, some conceptions and practices of extension were reviewed in this topic, in order to find, in them, methodological dimensions useful for extension research.

The Nine Methodological and Analytical Dimensions of University Extension

In this topic, the nine methodological and analytical dimensions taken from the literature review will be presented and debated. These dimensions are comprehensive - on purpose - as they seek to be useful for diverse studies in terms of objects and methods. It is worth noting, moreover, that the conceptual debate allowed us to identify the common elements used in the theoretical and historical debate seen in the literature. Thus, the dimensions do not necessarily have a direct link to a certain extensionist conception, but represent a general synthesis of aspects present in most of them. Throughout the dimensions debate, we will bring examples from some conceptions listed in the previous topic. In addition, throughout the exhibition, we will try to bring, in an addendum form, the possibility of visualizing the dimensions, beyond the methodological proposal directed to academic research, as guides to the debate about evaluation and planning of university extension.

We will present the dimensions through summary tables, starting with the first two, which refer to the participating actors.

Table 1 – Methodological and Analytical Dimensions of Extension (1-2)

<table>
<thead>
<tr>
<th>Methodological Dimension</th>
<th>Dimension Description</th>
<th>Operating Dimension</th>
</tr>
</thead>
</table>
| 1. Who does extension | Actor(s) performing extension | - This dimension is identified by: actors who execute, plan, propose, and are directly responsible for the extension activity;  
- Actors can be: individuals (teachers, students); university body and bodies; institutions in general;  
- Attention should be paid to how they interact with external social groups; |
2. Who is the extension activity intended for?

<table>
<thead>
<tr>
<th>Actors and targets of social segments or participants of the activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Identified by: social segments and actors outside the university involved;</td>
</tr>
<tr>
<td>- These may be: dispersed individuals and external community in general; companies; state and government agencies; social movements or non-profit civil society organizations; diverse communities (identity, neighborhoods, indigenous, rural).</td>
</tr>
<tr>
<td>- General attention should be given to how these actors participate in the extension activity in question, i.e. how they are included and excluded from the process.</td>
</tr>
</tbody>
</table>

Source: Authors’ Elaboration.

These first two dimensions refer to the actors involved in the practice or extension actions, considering those within the university and the target groups and social segments. In the previous topic, we saw that extensionist conceptions are characterized to some extent by the actors or social segments they target. At this point, attention should be paid to a more detailed description of these, i.e. their main characteristics (nature of the actor, history of the actor, contextual elements, among other aspects depending on the practice considered).

For example, the extension of university-enterprise linkage will obviously target market institutions; community outreach will involve members of diverse communities, often linked to marginalized classes; The extension of services may target governments, companies, non-governmental organizations, among others. It is also important to consider the academics themselves in this process: to which areas of knowledge do they belong? How many are and how are they organized? Are they mostly teachers, students or staff? Are they members of cooperative incubators, members of extension projects in general or research groups? Do you have experience with extension? Among other relevant questions.

At this point, we should add that both dimensions can be tensioned into a series of useful indicators for university extension activity planning processes. Indeed, in evaluation and planning processes, the identification of the internal (academic institutions) and external (community, social segments) actors involved - or intended to be involved - is fundamental to the definition of the following dimensions, since they condition various aspects of extension practice (each actor has its own specificity in a process of interaction between university and society). The description of these actors thus becomes an important aspect to be considered.

The next dimensions refer to the practical and institutional implications that derive from the interaction of the actors:
<table>
<thead>
<tr>
<th>Analytical Dimension</th>
<th>Dimension Description</th>
<th>Operational / Methodological Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. What activities materialize the extent practiced and how does it become institutionalized within the university?</td>
<td>How it operates in material terms and activities/actions, as well as their institutional insertion in the university; what weight and relationship do they have in relation to other extension practices, as well as in relation to teaching and research; what is the systematic and procedural approach to extension</td>
<td>- This dimension is identified by: way of allocation and organization of material, human, institutional, and financial resources; methodology and design of the activity (programs, projects, courses, incubators, provision of services, events, among others); relationship between teaching, research and extension of activities; institutional insertion of the activity in the face of other extension practices; general institutional insertion of the activity in the university context considered; systematicity, procedurality and eventualty of the activity;</td>
</tr>
</tbody>
</table>

- Supply and demand process: degree of offer of practices, in the sense of the adequacy between supply and demand; ways of identifying the needs and demands of the targeted social segments; adjustment processes between demand and supply of the activity. |

| 4. What objectives of extension and why is extension | Motivations and general objectives of the actors who practice it (which do not necessarily relate to extended knowledge); the problems and themes in which extension practice is concerned; | - Identified by the more generic intentions of the actors and institutions that practice it, such as: contributing to economic and social development, satisfying personal needs to help social segments, altruism, among others. There are different political conceptions here, as well as different views on the university’s social commitment. |

Source: Authors’ Elaboration.

Dimension number three refers to the processes of institutionalization of the extension studied. At this point, it is suggested that the researcher pay attention to the activities that materialize the action (courses, service delivery, incubators, miscellaneous projects, among others), if they are inserted in broader programs or projects, as well as material resources, human and organizational issues involved. At this point, it should be noted that these practices may mix with each other or more than one of them may occur in a given extension program or project. Here we are not yet considering extension methodologies and pedagogies, as the same action may contain different approach dynamics (e.g., an extension course may be offered in different ways, with different pedagogies, actors and approaches). In addition to describing and analyzing these aspects, dimension number three concerns their institutionalization at the university.

For example, if one considers the extension courses again, one could understand how they are administered, what regulations and standards reach them, how the funding is given, how the life process of these courses takes place, what is the history of this modality, among other aspects. In addition, it is important that the researcher be aware of possible direct and indirect relationships with research and teach-
ing. This dimension can be better understood through a more careful reading of Forproex’s production on the institutionalization, evaluation and financing of extension.

Dimension number four refers to the study of the objectives and motivations of the extension studied. At this point, it is important to pay attention to the problems and themes that a particular extensionist action is interested in attacking and how this reflects in the design of the studied projects and in the internal and external actors involved. These objectives and motivations can be immediate and measurable, affecting the goals and expected and previously stipulated results, as well as qualitative and quantitative indicators; and can also be broader goals and motivations, such as contributing to improving the population’s quality of life, awareness and political action, among others. As we saw in the previous topic, historical extension practices were conditioned by general motivations that directly influenced the extensionist conception.

Thus, from the consideration of the actors (dimensions 1 and 2), if we take into account a debate on extension assessment and planning processes, it becomes important to identify how extension activities are institutionally allocated, as well as viewed in the operational dimensions 3 and 4. In this particular aspect, the production of Forproex presented in the previous topic can be considered, as it emphasizes, among other things, the need for extension institutionalization, and evaluation and planning are important aspects for this purpose.

Directly linked to these are the next two dimensions, contained in Table 03:

<table>
<thead>
<tr>
<th>Analytical Dimension</th>
<th>Dimension Description</th>
<th>Operational / Methodological Dimension</th>
</tr>
</thead>
</table>
| 5. What kind of knowledge is extended / transferred / built and how is it realized (methodologies and pedagogies used); | Characteristics of extended knowledge – or constructed – through the extension activity considered and the objectives of extending knowledge / constructed; scientific, technical, artistic knowledge; and how the university benefits from the scientific point of view; which methodology and pedagogies are used. | - Characterization of the type of knowledge extended or created: utilitarian technicians (technical intervention in various work processes); comprehensive scientific understanding (phenomena understanding without immediate applicability); cultural (knowledge in the artistic field, for example); any combination of the knowledge raised; 
- In addition to the type of knowledge, we identify the methodologies used to have this type of transfer or construction together with the community: participatory and dialogical methodologies, action research, participatory research, among others. |
Methodological and Analytical Dimensions of University Extension

6. What are the impacts, "products" and benefits of outreach activities for the external community and the university?

-This dimension can be identified qualitatively (through questionnaires, interviews, ethnography, among others) or quantitatively, depending on the practice studied. Impacts will be closely linked to the objectives, actors and types of knowledge and methodologies involved in the process. The results of the activity may also be indirect in relation to its objectives, such as the improvement in interpersonal relationships of individuals in the community, among others.

Source: Authors’ Elaboration.

Dimension number five concerns the dynamics of knowledge transfer or construction (depending on the activity, there are different degrees of offerings or dialogic construction). At this point, attention should be paid to the characteristics of extended knowledge: whether it is academic, technical, cultural, artistic, among others - and each type of knowledge may have a different purpose. In addition, it is recommended to understand the extension methodologies and pedagogies used in the experiment to be studied. We will not be able to cover this in detail as there is a considerable range of extension practices and methodologies. The ideas we explored based on Paulo Freire (1983), in the mentioned Forproex documents, Botomé (1996) and Melo Neto (2002; 2001) are useful in the reflection on the interaction between academic and non-academic knowledge. It is crucial to consider that no extension practice or conception is neutral, and all of them have ideologies and values.

Dimension number six addresses the impacts, outputs, and benefits of extension activity on the communities, groups, or institutions that participated in extension projects and actions. These impacts can be of the most diverse, assessed quantitatively and qualitatively, self-reported by the groups or not. At this point, there is no way to further specify the proposal, as these will be determined by the very nature of the extension activity studied. However, basically, it is necessary to pay attention to the fulfillment of the stipulated goals and objectives, as well as to the more qualitative indirect factors, such as: certain extension activity, even without having a direct objective, contributed to the development of the socialization of the participating individuals, among others. The other point related to the impacts of the extension activity studied refers to how it has modified the university itself in an institutional context: did the activity support any research or training process? Has knowledge from the outside community been incorporated in any formal and informal way? Are there impacts on the issue of university social commitment? Are there impacts on the organizational structure? Were research groups created or other extension projects derived from there? Among other questions.

Again, an addendum can be made regarding the importance of these dimensions to an institutional extension planning process - even though this is not the focus of the article, as these dimensions refer to a
methodological proposal to do research that takes university extension as an object: in particular, dimension 6 stands out (extension impacts and products), since in institutional terms it is necessary to know what difference (positive and negative, quantitative and qualitative) extension activities actually produce and in the communities involved.

Finally, below we present the last dimensions that encompass our proposed analytical framework:

**Table 4 – Methodological and analytical dimensions of extension (7-9)**

<table>
<thead>
<tr>
<th>Analytical Dimension</th>
<th>Dimension Description</th>
<th>Operational / Methodological Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. How are activities legitimized socially and within the university?</td>
<td>Appreciation that a certain extensionist modality has outside and within the university walls; Moreover, it allows us to understand how the participating actors seek to legitimize what they do;</td>
<td>- Identified the discourse of actors and social segments participating in extension activities regarding the justification of the importance of the practice; - Identification of the ways in which this discourse circulates through the university and social environment (institutional website, publications, events, among others).</td>
</tr>
<tr>
<td>8. Social function and social commitment of the university</td>
<td>Consider how the university in which the extension practice studied seeks to meet social demands and problems, ie, decide institutionally (or within departments and colleges) which problems and actors to relate to.</td>
<td>- Identified by the themes, problems and actors by which the university – or any of its departments and faculties that relate to the extension practice studied - identifies itself institutionally and seeks to allocate human and material efforts towards them. One must pay attention to the history of the university.</td>
</tr>
<tr>
<td>9. What is the contextual and historical insertion of the extensionist experience?</td>
<td>Historical contexts that cover the analyzed practices, and their relationships. It is proposed that extensionist experiences be observed within a broader economic, political and social context and structure (but directly related to the practice studied).</td>
<td>- Identified by: historical trajectory of the extension activity considered; historical insertion of the university that houses the extension practice; direct and indirect relations between practice and contextual and conjunctural aspects (economy, culture, politics, among others). These include public policies, laws, events and social facts, among others.</td>
</tr>
</tbody>
</table>

Source: Authors’ Elaboration.

Dimension number seven refers to how a given extension activity is legitimized in the academic or social sphere, that is, how it supports and reaffirms the political, academic, social and economic importance, among others of its activity. This dimension is directly linked to the motivations of extension activity, yet it should not be confused with it. This
is because, in number seven, the researcher must pay attention to the strategies of dissemination, awareness, speeches, political articulations in the academy and beyond, which legitimize and sustain a particular activity. The motivations of dimension number 4, in turn, refer more to the internal and procedural scope of the activities studied. For example, the provision of services to the company may be justified by the actors who perform it or by the institution itself because of the university's need to contribute to the market but may also be the subject of criticism and dispute within and outside the university.

Dimensions eight and nine refer to the need to consider, in any extension research, debates about the social commitment of the public university, as well as the historical and structural context in which the universities are inserted. Here, it is not fitting to give further guidance on how to make such considerations, as one can use various theoretical approaches, as we cited in the introduction to this article. This implies considering issues related to their own conjuncture and historical structure in the relevant economic, political, social and cultural context. In addition, one should be aware of the history of the extension modality itself studied: its origins, influences, main actors that historically carried them out, how it was accomplished over time, etc. Equally, attention should be paid to laws and public policies that may influence extension practice.

At this point, the last three dimensions listed seek to assist in the process of historical contextualization of the extension experience studied (or in the extension evaluation process itself, to follow the addenda regarding the extension planning debate). It often focuses on the internal aspects of institutions and communities, neglecting the economic, social, and cultural processes and determinants that relate to extension.

Closing remarks

Based on an overview of some extensionist conceptions and models, methodological dimensions were removed to investigate extension. This extraction process started from an examination of the elements used in the bibliography consulted to describe and debate historically and conceptually the university extension, from the question: how can we research the university extension? Thus, the article sought to establish some dimensions that could assist studies that have as their object extension (especially extension practices) – without forgetting, however, that these dimensions can assist extension actions, as they can be adapted to indicators (not dealt with in the text).

More specifically, we think these dimensions may be useful for specific practice studies (case studies, for example); the study and evaluation of the extension of an institution; as well as investigation of extension laws and policies. Thus, they cannot be viewed as separate from each other – the separation of nine has only didactic and expository purposes, since one dimension could be broken down into two or
more sub-dimensions, given the breadth of the categories. How the researcher will handle them will depend on the specifics of the object in question.

Basically, these dimensions refer to the actors involved, the practices that concretize and materialize the extension, the institutional relations with the university and with teaching and research, the knowledge building processes, the objectives, motivations and impacts, the elements related to the historical context and the debate about the social commitment of the university.

It should be noted that the researcher should know how to filter the degree of intensity and amplitude will consider all the elements highlighted by the dimensions created, and how they will link these to the concreteness and empirical research. The order of exposure of the dimensions does not indicate degree of importance, nor that one should be researched before or after another. We just chose to move from a more micro and institutional level to a more holistic, contextual and historical plan. Therefore, the methodological proposal considered, ideally, would only be correctly applied if combined with other research techniques and approaches that could complement them, as they represent one more methodological guide. Thus, we should pay attention to the centrality of considering the historically constituted conceptions and practices of extension (the central element by which we remove the nine methodological dimensions). It is important to emphasize again: despite the generality of the proposal, it is not advocated by the neutrality of the approach, as can be seen in dimensions eight and nine, which try to move away from studies that focus solely on the organizational aspect, or supply and demand, trying to bring elements of wholeness in the research process.

Notes

1 The methodological proposal originated from a master’s research that sought to debate the relationship between the University of Campinas and the various social segments external to it from the so-called extension courses. For this, it was undertaken an overview of own extension activity of Unicamp as a whole, connecting to the extension of historical conceptions the richly developed. The proposal presented in the article, therefore, emerged from this research, where we seek to apply it in our study. The proposal is justified because, from this, the opportunity to share the methodological proposal was visualized, contributing to extension studies and practices.

2 Of course, secondarily, the article also aims to contribute to extensionist practices - extension actions - in that it offers a contribution to extensionists of methodological elements for the reflection and operationalization of their actions.

3 In our analysis, many discussions about conception of extension have inspiration and influence from Freire’s theoretical and practical production, especially
the one exposed in the work *Extension or Communication* (1983). What is interesting to note with Freire in the article is the centrality of the discussion about the conflict or interaction of different kinds of knowledge and the implications that emerge from it.

4 The National Education Plans (prepared for the years 2001-2011 and 2014-2024) incorporate this goal. However, Forproex has been expressing the need for compliance by placing such a goal in its documents. In addition, one can cite Resolution No. 7 of December 2018 (Resolution CNE / CES 7/2018), which establishes the Guidelines for Extension in Brazilian Higher Education, and sets out the provisions of PNE goal 12.7 (2014-2014) - it is expected to meet at least 10% of the curricular workload of undergraduate extension courses.

5 It is worth mentioning the existence of another extensionist conception, more aligned with the critical conception. With different approaches, we can mention the works of Melo Neto (2001; 2002) and Botomé (1996). Roughly speaking, they argue for the centrality of primarily discussing research and teaching to integrate these extensionist *dimensions* in an integrative way, modifying the very pattern of knowledge production. Extension could not, on its own, transform the university institution.

6 One could even compose quantitative indicators from some listed operational dimensions (especially in the allocation of resources, the extension offer, among others). We will not do so as it is beyond the scope of the article. However, with these dimensions, the study also intends to stimulate such debate.

References


Cristofoletti; Serafim


Methodological and Analytical Dimensions of University Extension


Evandro Coggo Cristofoletti is a PhD student in Science and Technology Policy from the University of Campinas (Unicamp). Master in Scientific and Technological Policy and bachelor in Public Policy Management from the same University. Researcher at the Public Sector Studies Laboratory (LESP / Unicamp) and the Innovation Policy Analysis Group (GAPI / Unicamp).

ORCID: http://orcid.org/0000-0001-5178-6451
E-mail: evandro.coggo@gmail.com

Milena Pavan Serafim holds a PhD in Scientific and Technological Policy from the University of Campinas (Unicamp) - Brazil. PhD Professor of Public Administration at Unicamp. Researcher at the Public Sector Studies Laboratory (LESP / Unicamp) and the Innovation Policy Analysis Group (GAPI / Unicamp).

ORCID: http://orcid.org/0000-0002-7541-4182
E-mail: milenaps@unicamp.br

This is an open-access article distributed under the terms of the Creative Commons Attribution License 4.0 International. Available at: <http://creativecommons.org/licenses/by/4.0>.