

Dialogues between university and community: an interdisciplinary third mission program proposal guided by strategic design towards social transformation

Diálogos entre universidade e comunidade: proposta de programa interdisciplinar de extensão guiado pelo design estratégico para a transformação social

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Abstract

The complexity of the world requires from Design and Designers new capabilities to better respond to societal needs. Beyond the ability to identify and solve problems, thinking strategically becomes central to support transformative social innovations. These systemic environments demand from universities new education paths for designers by creating opportunities to collaborate with wide communities, in a meaningful fashion. Based on systematic and non-systematic reviews, this research aims to present an Interdisciplinary Third Mission University Program Proposal, guided by the Strategic design approach as a Boundary Object. The program combines the idea of four levels of actions (within the four missions of the university) to achieve a socially responsible model that works as an open system towards social transformation.

Keywords: Interdisciplinary Third Mission Program, Public Universities, Strategic Design, Social Transformation

Resumo

A complexidade do mundo requer do Design e dos Designers novas competências para melhor responder às demandas da sociedade. Além da habilidade de identificar e solucionar problemas, pensar estrategicamente torna-se central para apoiar inovações sociais transformadoras. Esses ambientes sistêmicos demandam das universidades novos percursos educacionais para designers a partir da criação de oportunidades para colaborar com comunidades ampliadas, de maneira significativa. Baseado em revisões sistemática e assistemática, essa pesquisa visa apresentar uma Proposta de Programa Interdisciplinar de Extensão Universitária, guiado pela abordagem do design estratégico como um boundary object. O programa combina a ideia de quatro níveis de ações (dentro das quatro missões da universidade) para alcançar um modelo de universidade socialmente responsável que funcione com um sistema aberto em direção à transformação social.

Keywords: Programa Interdisciplinar de Extensão Universitária, Universidades Públicas, Design Estratégico, Transformação Social



Introduction

The increasing complexity of the world requires from Design new strategic capabilities to better respond to societal needs and, from Designers, a more structured and interconnected knowledge, and a highly conscious performance. Among promising cases around the world, we notice experiences with small communities in different countries in which designers have the chance to collaborate, share knowledge and learn by exploring and co-designing viable solutions. Many of these are social initiatives regarded as a fertile field for the development of a knowledge economy, which favors the sharing of solutions and the co-creation of recognized values that allow the experimentation of possible futures (Nunes, 2023).

Beyond the designers' ability to organize, identify and solve problems, and the creative capacity to build more effective future scenarios, thinking strategically in situated contexts becomes central to nurture social transformation. However, these challenging systemic environments also require from universities new education paths for designers by creating opportunities to collaborate with communities, in a meaningful fashion.

This study proposes a university policy that supports [transformative] social innovation initiatives via collaborative processes, through an Interdisciplinary Third Mission Program guided by Strategic Design approach. The program, to be coordinated by the Faculty of Architecture, Urbanism and Design of the Federal University of Uberlandia/Brazil, combines the idea of four levels of actions to achieve the status of a socially engaged university that operates as an open system. To do so, we discuss elements that can encourage socially conscientious practices within academia and how they can be strategically incorporated to their missions to reach greater impact.

The work is organized in five sections: Introduction; Methodological notes; Connecting social innovation to public universities; The Interdisciplinary Third Mission Program Proposal; Final considerations; and References.

Methodological Notes

As an exploratory and qualitative research, a postdoctoral research combined systematic and non-systematic literature review to articulate themes and structure the proposal. All the reviews used predefined keywords/terms which covered, mainly: Social Innovation, Strategic Design, Boundary Objects, Design Tools, Participatory Design/Co-design, the Missions of University.

Starting from the thought that Social Innovation (SI) projects are meant to respond to societal needs and demand time to consolidate and last, the theoretical literature review confirmed our hypotheses that Strategic Design (SD) can operate as a boundary object. However, due to higher systemic complexity and variable externalities, SD alone is not capable of guaranteeing the perpetuity of the projects, which can jeopardize the results (Nunes, 2023).

Hence, transformative impacts require a long-term plan which allows for a feedback loop, reorientation e adjustments, which can occur through a third mission program, as proposed. Within the research, participatory practices are combined with the strategic design thinking approach to favor dialogue and aid the collective building of scenarios with the support of design tools and techniques.



The outcomes of the entire research comprised: 1. the statement of the strategic design's capability to work as a boundary object since it operates in a dialogical space of identifying and solving problems, with multiple actors; 2. the importance of research to [Strategic] Design and its relation to Social Innovation; 3. the university as an open system that favors social impact, and 4. a Conceptual Interdisciplinary Third Mission Program Proposal oriented towards Social Innovation Projects (Nunes, 2023). This paper focuses on this fourth result to allow for a more in-depth reflection.

In short, the first cited outcome was built on authors from different fields¹. Constituted by diverse disciplinary perspectives and interpretive models which allow to define and visualize future scenarios, Strategic Design is part of the organization's training in innovation, as a potential resource which is not only fit for product-service innovation, but mainly for the reconfiguration of organizational models (Zurlo, 2010; Cautela *et al.*, 2012). It combines characteristics that helps generate better answers to questions (Carlopio, 2010; Stone, 2010) such as:

- ability to collaborate with others with different and complementary skills;
- abductive reasoning to better solve complex problems;
- ability to experiment, through hypotheses or tangible objects;
- sensitive awareness to perceive, visualize and interpret contexts and to frame an issue.

For us, the role of Strategic Design Thinking is to build awareness of the radical interdependence in communities by giving a voice to everyone, while including the attention to nature and the environment, with a post-anthropocentric approach. Thus, due to its way of devising, communicating, and exploring multidimensional scenarios, this dialogue established on the boundaries of the participants' knowledge enables the collective building of new knowledge, through a pragmatic learning process (Nunes, 2023).

Besides, SD's capacity to integrate and interpret contexts (when well-informed with consistent data) and to communicate with a broad audience also enables a shared space with a common language. This contributes to sharing understandings and creating consensus among the group. All these conditions together are decisive to rouse the sense of *care* within the group and to carry out the actions in a participatory manner that leads to transformative social innovation.

Connecting Social Innovations to Public Universities

Along the years, Social Innovation (SI) has been studied by different fields (e.g., economy, business, management, sociology, psychology, planning and development studies, and design) by several authors², but it is still an open concept. It appears in formats and places which differ from what is thought as usual: in peripheral situations more than in the center; from the bottom up,

¹ Star (1990); Wenger (2000); Carlile (2002; 2004); Spee and Jarzabkowski (2009); Zurlo (2010; 2012); Nunes (2013); Zurlo and Nunes (2016).

² Ogburn (1964); Zapt (1994); Gillwald (2000); Mumford (2002); Moulaert and Nussbaumer (2005); Pot and Vaas (2008); Schaltegger and Wagner (2008); Pol and Ville (2009); Adams and Hess (2010); Hockerts and Wüstenhagen (2010); Howaldt and Schwarz (2010); Neumeier (2012); Boons and Lüdeke-Freund (2013); Manzini (2007; 2014; 2015); Graúdo and Trez (2013); Freire (2015); van der Have and Rubalcaba (2016); Tracey and Stott (2017); Moulaert *et al.* (2017); Foroudi *et al.* (2020).



arising from society and its networks rather than from large decision-making spaces. For this reason, promising cases of SI are not easy to recognize (Manzini, 2018, p. 29). The explanations also vary between formal definitions and general reflections to frame a possible understanding of the concept.

Morawska-Jancelewicz (2021, p. 9) approaches social innovation in two ways, both oriented to a specific social problem: 1. as a process, “a sum of intentional, responsible interactions of various interested parties, who share the common objective”; and 2. as an output, “new and more effective solutions (...), created within interdisciplinary and cross-sectoral cooperation, which are environmentally friendly and support social development”.

For Cajaiba-Santana (2014) and Murray *et al.* (2010), a solution for a social problem is not necessarily social innovation when it does not address major social challenges. Thus, a “tangible product” does not match the intangibility of the phenomenon which results in new social practices since SI is strictly related to social change. As SI is based on collective actions within a historical and cultural context, it is influenced by both agents and social structures. The relevance of knowledge in SI is, therefore, marked by the creation of social well-being and quality of life, and by the co-creation of knowledge. This directly impacts the dimension of change and the [re]creation of the social system in which SI occurs (Morawska-Jancelewicz, 2021, p. 1).

Despite all possible paths to disseminate social innovations (Howaldt; Schwarz, 2010), the complexity of societal challenges is still underestimated, and the optimistic assumptions of tackling them require further analysis (Avelino *et al.*, 2019). Indeed, Haxeltine *et al.* (2016, p.21) define transformative social innovations (TSI) as those processes in which social relations “challenge, alter and/or replace established (and/or dominant) institutions in a specific social-material context”. As societal challenges are context-dependent and systemic, they demand a long-term plan and combined solutions of achievement and impact; otherwise, interventions may produce unexpected side-effects, strengthen persistent challenges, and even give rise to new complexities (Avelino *et al.*, 2019; Cunha; Benneworth, 2019).

The role of the university in social innovation

For Anderson *et al.* (2018, p. 51), universities play a key role of easing barriers to social innovation and could: 1. Operate as an intermediary, to assist in the recognition of SI processes; 2. Develop research on the effectiveness and scaling up processes; 3. Work as an expert actor and support communities; and 4. Help with infrastructure, incubation and logistics. They also have the potential to aid civil society, enhance human and social capital, improve capacity building and contribute to the development of active citizenship (Cunha; Benneworth, 2019).

Morawska-Jancelewicz (2021, p. 33) states that social innovation is “rarely mentioned in the strategy of a university”, which reveals necessary changes at all levels of the universities’ missions. The main challenges of SI initiatives are: suitable comprehension of its principles; introduction of SI into the university's strategy, research agendas and curricula, and into its third mission activities; replacement of ad hoc activities in favor of systemic support; shift from top-down action planning to bottom-up design jointly with social organizations as equal partners.

The engagement of universities in social innovations entails, then, a shift, which means to instill the idea in their teaching and research missions. To flourish, the research processes of SI must be aligned with the broader strategic university interests. Otherwise, they are doomed to fail (Bayuno *et al.*, 2020; Morawska-Jancelewicz, 2021).

To identify the impact of universities' immersion in practices, Cunha and Benneworth (2019) defined three levels of analysis:

- Micro (citizens): small practices carried out by researchers with social innovators.
- Meso (community and organizations): activities that facilitate and encourage SI upscaling and diffusion.
- Macro (society): social change of communities through implementing SI projects aptly.

These are associated with the spatial scope (local community, regional space, and national level) and the time horizon (short [project results], medium [behavioral change] and long-term [systemic change]). As the impact of SI can be conceived as a set of outcomes occurring in time and space, they must be considered along with the value experienced by all parties. Moreover, the authors identified Four Levels of SI initiatives, which partially orient the Program proposal:

- First - Institutional: fund students to explore new research topics that produce value;
- Second - Faculty: develop activities to respond to 'principles' in teaching and research;
- Third - Courses or field-study: offer elective courses and field-study in different continents;
- Fourth - Individual activities: perform micro-acts (by students) for SI support.

The perspectives offered by Morawska-Jancelewicz (2021) and Cunha and Benneworth (2019) reinforce the role of [social] innovation ecosystems in achieving more sustainable regional scenarios. In turn, the connection of knowledge and practices from academia, business/industry and civil society, recognizing and respecting the social and cultural context, strengthens actions to face contemporary complexity. In this scenario, also the joint action of HEIs with public policies is central for the expansion of social responsibility.

The four missions of the university oriented to social transformation

The notion of Third Mission of Universities concerns the different forms of engagement in societal problems and includes activities that do not directly constitute their first or second mission. For Morawska-Jancelewicz (2021), as lifelong or open courses relate to education and technology transfer relates to scientific research, it is not easy to define this mission type.

The Federal University of Uberlandia defines third mission as

the activity that integrates the curricular and research arrangements, constituting an interdisciplinary process - political, social, educational, cultural, scientific, technological - that promotes the transformative interaction between the University and other sectors of society through the production, application and sharing of knowledge (Universidade [...], 2019, p. 1).

Organized in five modalities - Program, Project, Course/Workshop, Event and Service Delivery, these are guided by the dialogical interaction amid the academic community with society shaped by dialogue, knowledge exchange, student training, participation and contact with contemporary complex social issues, in a two-way street.

In the concept of a ‘Fourth Mission’ proposed by Riviezzo *et al.* (2020), the university should contribute to the quality of life perceived by the host community when promoting actions of its social, cultural and economic development. Through this, the institution assumes the role of an “anchor”, which works *with* and *in* its community to create shared value. This view emphasizes the role of the universities in sustainable development (Morawska-Jancelewicz, 2021). However, we consider that expanding the university's scope within its already established third mission can enhance social transformation, obviously aware of all challenges inherent to it.

In this sense, the Fourth Mission of the University (figure 1) proposed by us comprises aspects of its management and administration. This intends to provide the necessary infrastructure, resources, and institutional policies to fully implement actions aimed at engagement and social transformation, and to reach the status of a Socially Referenced University.

Figure 1: Four Missions of the University

MISSIONS / LEVELS	SPATIAL SCOPE	METHODOLOGIES & TOOLS	OUTCOMES
TEACHING FIRST Mission School	Local/Regional/ National gradually scaling up to Global South and North	Transdisciplinary Pedagogy and Education in SI Strategic Design Thinking ¹ Participatory methods (CBPR ² /PAR ³) MOOC ⁴	Students' training through PBP ⁵ SI integrated into curricula STD diffusion New digital tools for education Living Labs as methodology
RESEARCH SECOND Mission Department / Institute	Local/ Regional/ National: Inter-local collaborations (gradually abroad)	Research on new SI (implementation and evaluation processes, limits)	New PBP integrated to SDT New theories/methodologies in SI Novel SI Frameworks to track P&R ⁶ on SI Indicators of SI research impact
INTEGRATED PRAXIS THIRD Mission Society / Community	Local/ Regional Inter-local collaborative networks University Beneficiary Intermediary/ NGO	Community engagement ⁷ Community service Service learning CBPR / PAR, Citizen science, Science Shops, Living Labs Social entrepreneurship programs OFF Campus	Novel SI Local and/or broad CE projects and agenda Science Shop as university units Living Labs (CBPR) Centers for Social Innovation
UNIVERSITY Administration FOURTH Mission RECTORATE / Institutional	Local/ Regional/ [Inter]National: stakeholders spread across municipality & region (gradually abroad)	University as a connecting space to support SI Co-design, co-creation, and co- delivery for sustainability SI as tool for social transformation	Sustainability research, participatory education programs, curricula + Third Mission Outcomes Accountability + self-reporting to track P&R on SI. University funding for SI projects

Source: Nunes (2023)

Legend: ¹ CBPR: Community-based participatory action-research; ² PAR: Participatory Action-Research; ³ MOOC: Massive Online Open Courses; ⁴ SDT: Strategic Design Thinking; ⁵ PBP: participatory-based practices; ⁶ P&R: practices and research; ⁷ CE: Community Engagement

In tune with Cunha and Benneworth (2019), Compagnucci and Spigarelli (2020), Petersen and Kruss (2021) and Morawska-Jancelewicz (2021), we agree that a socially engaged university must act as a change agent in its local settings. For providing a deeper awareness of the value of interconnections, cooperation and collaboration, results, and response cycles in SI, it is necessary to involve as many actors as possible to face the problems (Nunes, 2013; Rao-Nicholson *et al.*,

2017). To favor this, we adopted the 12 premises proposed by Morawska-Jancelewicz (2021), with few adaptations, that should be reached by academia (see figure 2). These were then articulated with the four missions (Nunes, 2023) and with the actions envisioned to put the third mission program in motion.

The power and challenges of participatory processes

The relationship between university and external communities is commonly associated with participatory concepts and methodologies. Farnell (2020, p.31) uses “community engagement” to define collaborative partnerships as those established to address societal needs, through joint activities and in a mutually beneficial way. Such a framework places community engagement into three categories: a method (multiple partnerships and collaboration); a principle (mutual benefits as its core); and a goal (aid to societal advance).

In line with Sanoff (2011), Chick (2012), Bas and Guillo (2015), Aiken (2017), Wittmayer *et al.* (2017), Morawska-Jancelewicz (2021), Bellandi *et al.* (2021), and Petersen and Kruss (2021), we consider participatory methods, namely the Participatory Action Research (PAR), one of the most suitable paths to understand the key community component of social innovation.

For Kindon *et al.* (2010, p. 2), PAR emphasizes the “dialogic engagement with co-researchers, and the development and implementation of context appropriate strategies oriented towards empowerment and transformation at a variety of scales”. According to Cameron and Gibson (2005), it comprises three factors: 1. Documentation (description); 2. Contextualization (reflection); and 3. Action for change (transformation). Spinuzzi (2005, p. 164) and Aiken (2017) also discuss action research and PAR as methods that support change and share power, giving voice and space to community members express ideas, needs and intended results.

Similarly, in Participatory Design (PD), the co-interpretation by the participants is an essential part of the process. For PD developers, the tacit [participants] knowledge and the analytical [researchers] knowledge must be intertwined and valued by all. Thus, knowledge is present in a complex set of artifacts, practices, and interactions and cannot be broken into small tasks, nor can it be totally described and optimized. This reinforces the political and ethical component of the participatory approach, which is expected to be built on mutual respect and commitment (Spinuzzi, 2005). For Sanoff (2000; 2011), the greater the involvement of citizens in creating and managing their environment, the greater its quality will be, as citizens collaborate with different actors in search of reciprocally acceptable solutions.

In addition, Aiken (2017) highlights three characteristics of PAR: power (a fair exchanging of values, reinforced by self-reflexivity); ethics (social responsibility to dedicate time and energy, generating richer data), and praxis (a set of ideas and practices operating simultaneously, with direct immersion of all). This way, praxis promotes both individual and collective change, as it is drawn from life-experiences of participants within a multi-voiced dialogue with different nuances and intentions (Mauri, 1996).

The Interdisciplinary Third Mission Program Proposal

In Brazil, the formative dimensions of the HEI are divided in: 1. theoretical-conceptual, 2. instrumental and technical, 3. political and ethical, 4. practical, 5. aesthetic and cultural, 6. investigative, 7. normative and legal, and 8. socio-referential. This last dimension expands the dialogue between students and society, promotes citizenship training, and highlights more complex articulations when creating solutions collectively for social dilemmas. Although such skills are necessary, they are not always part of the formal curriculum of undergraduate courses (Universidade [...], w/p, 2021).

That said, for us, the public university, mainly in emerging contexts, plays a vital role to consolidate innovation initiatives. Given its institutional arrangement, physical infrastructure and social capital, it can act as a facilitator of social innovation processes, collaborating to educate citizens committed to equity and social well-being and to co-create contextualized solutions.

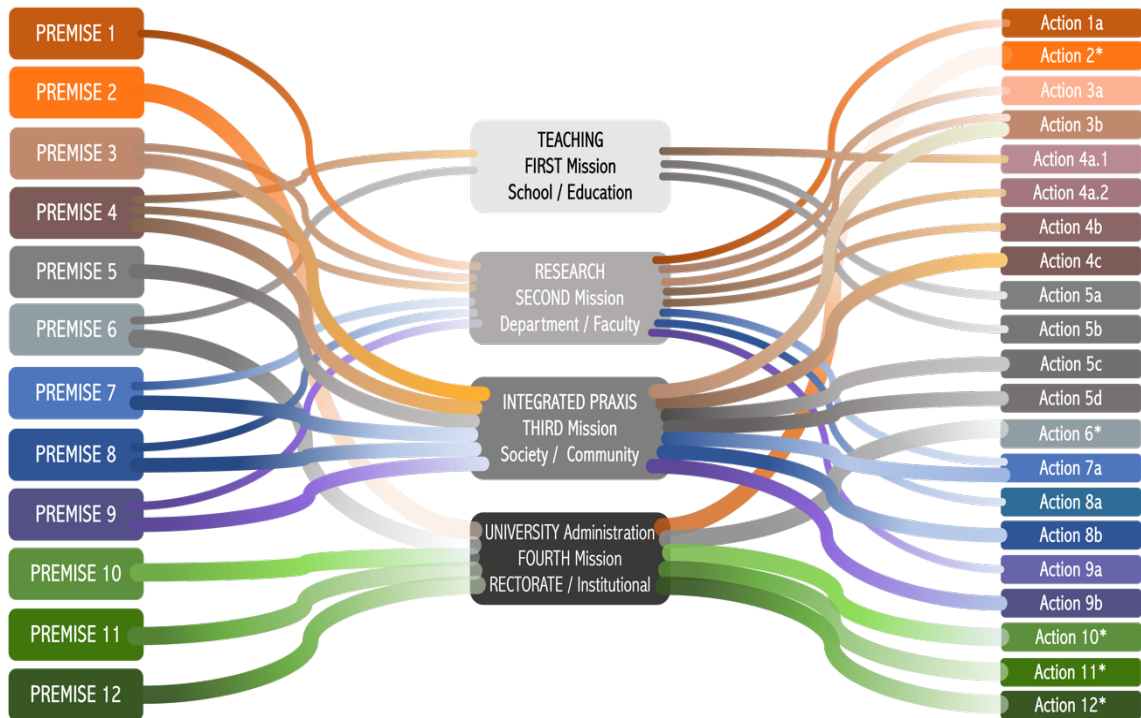
In view of the recent inclusion of third mission activities in undergraduate curricula in the country, and the government stimulus for engaging masters' and PhD courses on such actions, the chances for establishing a qualified and continued dialogue are expanded. With this, the university's connection with the broad society evolves from technology transfer or service provision to a potential relationship marked by 1. the exchange of knowledge, understood in all its nuances - from tacit to scientific; 2. a strategic [design] thinking approach; and 3. an interdisciplinary and participatory fashion, based on praxis and oriented by real demands.

The basis of the Conceptual Program proposed: Premises and Actions

Based on the previous arguments, the Program combines the Four Missions of the University: **1. School level** (*education as the first mission*) and **2. Department/ Faculty level** (*research, the second*) within the university to build personal competences. Such competences enable individuals (students, professors, practitioners, community members) to participate at a **3. Society level** through the integration of teaching and research into 'hands-on' projects (*integrated praxis, the third*). All these levels combined will support social innovation initiatives. At the same time, activities of education, research and integrated praxis must be sustained by the institutional structure at the **4. Rectorate/Institutional level** (*university administration as the fourth mission*) so that the university functions as an *open system* and is recognized as socially referenced.

Diagram 1 is a visual representation of the basis of the Program by connecting its missions, premises and actions. Its implementation relies on a combination of actions that occur in different levels, which integrates education and research with praxis and should be developed within a well defined action plan. Only through this, and the fair conditions to support active participation of the community, the Program can yield favorable results, as planned.

Diagram 1: Connection of Premises and Missions of the university, with correlated actions



Source: Based on Nunes (2023)

The overview of the Four Missions of the University (figure 1), together with the 12 premises (summarized in figure 2) contributes to understanding the basis of the program.

Figure 2: 12 Premises of the Third Mission Program

PREMISE 1	<i>create a Social Innovation Center as a University Unit responsible for managing SI initiatives</i>
PREMISE 2	<i>integrate Social Innovation in the strategy and mission of the university.</i>
PREMISE 3	<i>give priority to high social impact research, recognizing it through an evaluation system.</i>
PREMISE 4	<i>define an action plan to integrate Teaching, Research and Praxis with the Institutional level.</i>
PREMISE 5	<i>involve undergraduate and graduate students to develop the university's social responsibility.</i>
PREMISE 6	<i>implement and support equity and anti-discrimination policy.</i>
PREMISE 7	<i>support the internationalization of SI initiatives within all missions and spatial levels.</i>
PREMISE 8	<i>support social entrepreneurship and socially innovative start-ups.</i>
PREMISE 9	<i>provide the infrastructure for a digital platform to facilitate new partnerships.</i>
PREMISE 10	<i>develop a social program for university staff that support employees.</i>
PREMISE 11	<i>share the university infrastructure with external organizations (e.g., nonprofit).</i>
PREMISE 12	<i>promote outreach and science communication about SI.</i>

Source: Nunes (2023), adapted from Morawska-Jancelewicz (2021)

To enable a broad view, the actions proposed within this study and related to the first, second and third missions of the university are summarized in figure 3. Those actions specifically related to the fourth mission must derive from the premises directly connected to them and require an institutional engagement to be further detailed in the future.

Figure 3: Actions related to Premises 1 to 9

Action 1a	prepare relevant reports and to co-create the university's strategy (by research groups).			
Action 3a	create conditions for researchers and students to develop research in SI and related themes			
Action 3b	support groups for participating in calls, awards, contests that recognize prosocial activities			
Action 4a.1	create interdisciplinary (internal) research initiation groups of undergraduate students			
Action 4a.2	create interdisciplinary (internal and external) research groups with innovative tools/techniques			
Action 4b	define collaborative tasks to be develop jointly within the mixed research groups			
Action 4c	create a community of interest and/or of practice to study innovative tools/techniques to SI			
Action 5a	offer courses (strategic design/participatory) to students and citizens to build capabilities			
Action 5b	support from professors for participation of undergraduate students in MOOC			
Action 5c	offer extracurricular courses to students, practitioners and citizens in general			
Action 5d	carry out small participatory projects to enable and promote engagement			
Action 7a	integrate interdisciplinary international research groups, in different spatial scopes			
Action 8a	support social entrepreneurship initiatives and start-ups with proper knowledge and data			
Action 8b	supervise students when integrating social entrepreneurship initiatives and start-ups			
Action 9a	collaborate to develop a virtual communication channel			
Action 9b	supervise students to update new data in the virtual platform			
Action 2*	Action 6*	Action 10*	Action 11*	Action 12*
* Actions linked with the Fourth Mission of the University – Rectorate / Institutional. These must follow the corresponding premise to guide the actions' planning.				

Source: Nunes (2023)

The proposal emphasizes participatory processes and aims at gradually including issues of political representation to increase the quality of community engagement.

Explaining the Third Mission Program's correlated actions

The Interdisciplinary Third Mission Program Proposal encompasses six of the 12 premises defined for the university. The actions hereby foreseen need to converse with the actions foreseen for the other missions (namely education, research, and university administration). However, the alignment of all actions with the Program's general proposal in view of its objectives is a crucial element.

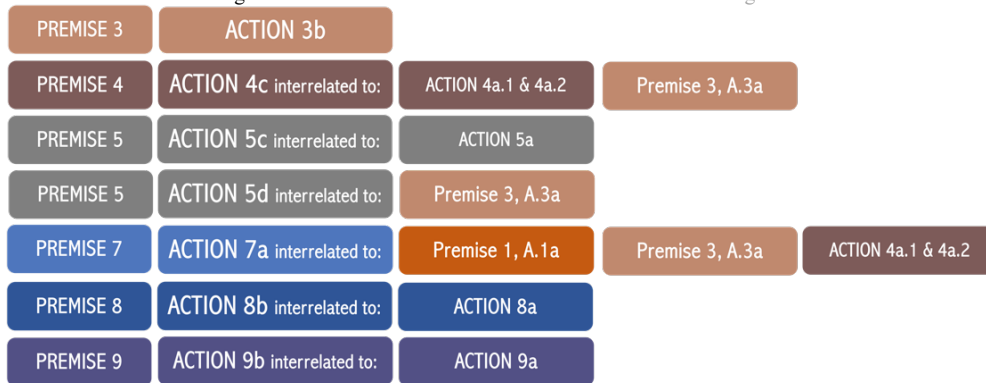
In conceptual terms, the actions planned to occur within the Third Mission Program relate to Premise 3, Premise 4, Premise 5, Premise 7, Premise 8 and Premise 9. The interrelation of Premises and Actions are illustrated in figure 4.

- Action 3b:

This should be articulated with other actions that enable the engagement of people in projects related to SI initiatives. Once interested groups develop thought-provoking projects with community engagement, they can be even more motivated to continue and expand their participation.

The participation may occur through carrying out a project, a training, an event, or a combination of them. The most important aspect is to consider the impact generated by the action and its contribution to social transformation.

Figure 4: Interrelation of Premises and Actions within the Program



Source: Based on Nunes (2023)

- Action 4c:

It focuses on the free engagement of individuals with common interests, to share experiences aimed at obtaining knowledge in this specific field. Here, integrating a community of interest (non expert individuals) in the strategic design thinking approach, can help participants recognize opportunities for developing solution-oriented projects.

On the other hand, the communities of practice bring together professionals who are experts in strategic design and can contribute to improve the methodology and tools, associating theory and practical experiences in a reflexive way through a rich body of knowledge.

- Action 5c:

This comprises the offering of extracurricular courses to students, professors, researchers, practitioners, and citizens (already engaged or interested in SI) aimed at building new skills and knowledge to act on Social Innovation projects.

The courses are oriented towards: 1. the understanding of the strategic design approach and its role as a boundary object, and in the design thinking tools and methods oriented to participatory projects and 2. to Community-Based Participatory (CBPR) Action-Research/Participatory Action-Research (PAR) and all the issues involved.

To favor the engagement of participants, the courses should create space for the participatory exchange of knowledge among all parties. It is also interesting that participants propose topics for discussion which can function as a basis for reflection and exploration of potential scenarios.

- Action 5d:

This action focuses on the development of participatory projects at different scales (starting small), through service-learning practices or the creation of experimental living labs, aimed at co-designing, co-creating and co-delivering social innovation solutions and sustainability, as a whole. The collaboration in projects aimed at solving real problems will enable participants to apply the contents and knowledge shared in practice, to promote engagement and contribute to their continuity.



It also favors the continuity of the extracurricular courses mentioned, feeding back into the process of training, consolidation, and expansion of knowledge. Moreover, such projects represent an opportunity for students from design and other fields and levels of maturity to engage in practices with a high social impact.

- Action 7a:

This action refers to the participation in interdisciplinary international research groups, in different spatial scopes. All the interrelated actions operating in synergy favor the mutual learning and opening of new channels of knowledge flow enabling new SI. The exchange of knowledge and experiences from different contexts also contributes to the creation of a broader view of scenarios and opportunities, and to the improvement of methods and tools to support social innovation in practice.

- Action 8b:

It aims to give support to undergraduate students along specific projects thus contributing to develop their management and production skills. In respect to the Junior Companies, they constitute a suitable environment to promote collective work through democratic and horizontal management, preparing the students to further assist social initiatives to return value to the community. Their operations can occur through the offering of lectures, short courses, or the provision of services to NGOs and other nonprofit institutions.

Regarding social entrepreneurship and socially innovative start-ups, the supervision of students that engage in projects oriented to the popular solidarity economy constitutes a strong opportunity of learning through practice. Both spaces are recognized as environments to third mission activities.

- Action 9b:

This action focuses on the supervision of students (from design and other fields) to feed the virtual communication platform with updated data related to the projects in motion, which should work as an open and transparent channel for establishing new and broad partnerships.

Encouraging students to collaborate in a data update team, also giving room for improvements, contributes to at least two issues: first, student engagement in participatory projects through in-depth knowledge of their scope, development and other aspects; secondly, the accountability and self-reporting framework, as it aims to bring together all practices as possible and research on social innovation developed inside and outside the university.

The proposed roadmap toward the implementation of actions

Due to the complexity of the implementation of the strategies, the definition of a time horizon is a crucial part of the process. However, the clarity of an execution plan throughout a given time firstly requires the creation of a working group dedicated to the topic and involving, preferably, members of the university administration.



In short, the preliminary roadmap to execute the program considers a time horizon of six years, organized in three phases, to be developed in an expanding spatial scope (local, regional, national, and international):

The **First Phase** concerns the building of knowledge and the capacities of groups of individuals and institutions to collaborate in social innovation projects, from the perspective of strategic design thinking and the beginning of research partnerships within interdisciplinary teams, with a focus on social innovation, at the local sphere.

The **Second Phase** relates to the strengthening of collaborative research partnerships within interdisciplinary teams (regional and national sphere) to investigate, among others, issues of implementation, limitations, and forms of evaluating social innovation. Besides, it includes the solidification of capacities through a permanent offering of courses to the internal and external community alike and other practices such as service-learning and living labs.

The **Third Phase** concerns the consolidation of capacities, partnerships, and institutional support (human resources, funding resources and infrastructure). This includes the implementation of new digital education tools, fostering the participation of students and practitioners (from design and other fields) in massive online open courses. At this point, the Social Innovation Center should work as a formal unit responsible for planning and coordinating all the activities related to social innovation at the regional level, comprising the insertion of public policy strategies in the regional system of innovation. All these joint actions will support the consolidation of the university as an open system in relation to its environment, which means the sustainability research and education programs and curricula + Third Mission Outcomes.

Final considerations

This study aimed to explore the role of the public university as a dialogical space, which can occur by opening its borders and by configuring their structure as open systems. As we argued, such a configuration grounded on the articulation of the four missions of the university (i.e., education, research, integrated praxis, and university administration) represents a promising path for its recognition as a socially referenced institution. Thus, this Conceptual Interdisciplinary Third Mission Program Proposal was structured based on the definition of 12 key premises and a set of actions related to them towards this status.

The work relies on authors and themes presented along the paper and on other authors that support the entire postdoctoral research. Among them, Strategic Design is taken as a key element to support the connections, to guide design practices in different levels and with multiple actors, since its approach is oriented to collective solutions and supported by operational methods and value production. However, the increase of the potential role of strategic thinking of designers when acting in/with/for transformative social innovations within universities requires they rethink their practices.

Considering the need to build expanded knowledge, associating theory with practice in real intervention contexts, the research sought to investigate opportunities for bringing strategic design closer to the university, through this interdisciplinary third mission program. In this context, strategic design is considered a boundary object given its ability to establish a permanent dialogue

with the individuals involved in the project, through their way of thinking and the design resources to be adopted.

The conceptual program initially establishes a six-year implementation horizon. During this time, projects, events, courses and other proposed actions must be monitored and evaluated to allow the achievement of results as planned. It is essential, however, to bear in mind that the program is based on participatory action research and, as such, depends on a series of issues related to the situated context, the degree of interest and engagement of individuals, the infrastructure, and other available resources.

Through its articulating nature, the program seeks to become effective as a two-way street, enabling a contextualized pedagogical practice for the University and the access to the knowledge produced in the academy for society, with permanent exchange of experiences. Aware of the challenges involved, we believe that such a proposal represents an opportunity to bring the university closer to society, collectively facing problems, and with the effective participation of expanded groups of individuals and entities. In our view, it constitutes mainly an opportunity for Design as a field of knowledge and designers as professionals to embrace their role through ethical praxis to build a more equal and sustainable world.

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