

**DESIGN AND TECHNOLOGY FOR INCLUSIVE HOUSING:
PROFESSIONAL RESIDENCY EXPERIENCE**

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Abstract

Adequate housing has been a chronic issue in major Brazilian cities, either considering quantitative and qualitative dimensions. Main aspects are emphasized such as urban growth accelerated processes in the last century, insufficient income for most of the population, restricted access to urbanized land and ineffective, selective and discontinuous public policies. The result is an extensive and increasing informal urban occupation, usually self-built. Generally, there is no technical assistance to improve the built environment of these settlements. Although important initiatives have been succeeded with the City Statute approval – a new Brazilian legal-urban order to provide land and housing access –, continuous institutional actions is required to provide wide partnerships. In this sense, the paper presents a university extension project that turned possible the Professional Residency in Architecture, Urbanism and Engineering at the Federal University of Bahia, designed by the Architecture School in partnership with Polytechnic School. Similar to what already occurs in Medical Residency as graduate program, its viability becomes effective as a Specialization Course in Technical Assistance for Housing and City Rights, which includes classes, workshops, seminars, field work and design activities. Based on first results, the analysis is focused on methodological aspects for participatory processes in obtaining low-cost technologies and design, geared towards inclusive housing. This recent project finally puts into practice the Brazilian Federal Law 11, 888/2008 – Free and Public Technical Assistance for Social Housing – with the potential to expand as a continuing activity on the national level and to attract international exchanges. This experience of interface among teaching, research and extension aims to empower professionals and citizens to promote innovative projects of urban insertion and social inclusion, learning with the city in a broad and continuous dialogue that sets new commitments for the right to the city.

Keywords: *Technical assistance; university extension; professional residence; inclusive housing; sustainable design and technology.*

Introduction

In the Brazilian contemporary urban context there has been a constant political struggle for governmental interventions for supplying the needs of poor communities, includ-

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ing adequate housing, basic sanitation and energy distribution, mentioning only the main legal rights for decent housing. One of the main advancement of the social movements for urban reform has finally resulted in the approval of the Federal Law 10,257/2001 – known as the City Statute.

Much has been achieved since then: we have innovative laws, inclusive policies, and participatory instruments in addition to our resources. We are the 6th biggest economy in the world, a powerful emerging country in the face of a profound world economic crisis. However, we have not been able to effectively apply these achievements toward the democratic construction of cities, nor have we recognized the win-win situation of promising social investments for the inclusion in and the betterment of cities. Instead of this, we have seen the authoritarian emergence of excessive mega-projects that privatize public spaces, configuring selective cities by the exclusivity of access and urban consumption. These huge investments are defined without the necessary discussion of the city, of its demands and of better alternative options for the investment of public resources for collective improvements. In the absence of more democratic planning, the “invisible planning” of private market interests will occur more vigorously.⁴

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Within this context, architects, city planners and engineers, professions with the function of planning and creating spaces, with the scope of the complex interdisciplinary task of imagining and creating better and more inclusive cities, feel powerless to implement the invention and use of better technologies. At the present moment, strengthened by the collective will that creeps in by the definition of other priorities, these professionals should be able to act together with communities and city managers in better initiatives for necessary changes.

Contributing to this, the Federal University of Bahia, via the School of Architecture, together with the graduate program in Architecture and Urban Planning and the Lab-Habitar- Laboratory for Housing and the City-, in partnership with the Polytechnic School, launched the proposition of the Residency in Architecture, Urbanism, and Engineering (AU+E/UFBA). As a specialization course, similar to that of the medical school, it enables the Technical Assistance for Housing and the Right to the City⁵, with

⁴ For this discussion, see Gordilho-Souza, 2014.

⁵ The proposal was elaborated as a *senso lato* graduate program by Professor Angela Gordilho Souza, as coordinator of LabHabitat/PPGAU-FAUFBA, in March of 2011, soon Student Body of PPGAU and by the Congregation of FAUFBA in July of 2011. Forwarded to the Dean of Extension, it was approved as a specialization course (UFBA, 2011), with the first class of residents effectively installed at the beginning of the 2013 academic year.

the enrollment of its first class in the first academic semester of 2013. This project, directed collectively in the last years, finally puts Federal Law 11,888/2008 into practice, for Public Technical and Free Assistance for Social Interest Housing. This project brings the perspective to become a continued activity, and to amplify in a national network. For this to happen, it is fundamental the support of public interest institutions, university extension, graduate, research programs, municipalities and social movements for housing, as a base of sustenance, enrichment, and replication.

About the complex, urban, Brazilian reality

Habitation, understood in the broad sense of housing in the urban setting, has been a chronic issue in great Brazilian cities since the beginning of the 20th century, in both quantitative and qualitative dimensions. At the heart of the issue: an accelerated process of urban growth, insufficient income for the majority of the population, restricted access to urbanized land and ineffective, inefficient, selective, and discontinued public policies.⁶

The results in big Brazilian cities are expressed by the highly segregated, exclusive, deficient, and increasingly dysfunctional and unfeasible urban spaces, creating great obstacles for adequate urban planning, in favor of less unequal cities. All of these aspects are underneath the extensive process of informal occupation in the production of space, without collective urban parameters, covering to precarious construction, problems with infrastructure, accessibility, and sanitation, land regulation, in addition to other accumulated and growing demands. In this process, undertaken mostly by self-build development, technical assistance plays a fundamental role.

Currently, almost half of the Brazilian population is concentrated in large urban areas, or approximately 87 million inhabitants in the 35 metropolitan regions and half of these in the 10 major metropolises. While the 2010 Census indicates a broad urbanization of Brazilian territory, mainly in the Midwest and Northern regions, metropolises continue to cover a significant portion of the Brazilian population. Concomitantly, there is a tendency towards growth in medium-sized cities, primarily in integrated municipalities of metropolitan regions, while maintaining the same problems that are historically documented in large cities (IBGE, 2011).

Meanwhile, metropolises have the primary concern of housing deficiency, estimated at 5.6 million residences, in contrast to a similar index of housing vacancies. According to recent data from the Urban Development Ministry (Ministério das Cidades), while the housing deficit has presented a tendency towards decline in recent years, with significant increase of new residences, in relative terms it represents 9.7% of the stock of homes in the country, and it is concentrated in the population which makes an income of under U\$984 (R\$2.324)- 96.6% (BRASIL, 2011).

The qualitative deficit, which reflects the absence of city content, is also significant. Above all, it is found in the informal occupation of favelas, shanty towns, and slums in big cities, defined by the absence of adequate infrastructure, highly elevated population density, scarcity of free spaces, among other necessary urban attributes for quality housing. It constitutes an even more grave reality, due to the complexity of necessary interventions, such as in Salvador-Bahia, the third largest major population capital in

⁶ Various Brazilian authors have analyzed these issues, among them: MARICATO, 1997 and 2011; TASCHNER, 1993; BONDUKI, 1999; ROLNIK, 1997 and 2010; VALADARES, 1968; RIBEIRO, 1997; BRANDÃO, 1978, GORDILHO-SOUZA, 1990 and 2000; among others.

the country, where the index of the informality of urban occupancy has reached more than half of the existing residences, according to recent research data incorporated in its Municipal Housing Plan, 2008-2025 (SALVADOR, 2008; GORDILHO-SOUZA, 2008).

As has already been observed, these processes have triggered, since the 1960s, movements for social changes that, among other demands, call for urban reform, putting architects at the fore, culminating in the National Seminar of Housing and Urban Reform - a historic reference for urban and housing topics in Brazil -, executed by the Brazilian Architects Institute (IAB) in 1963 at Hotel Quintandinha in Petrópolis, Rio de Janeiro. These movements were hindered during the long period of military authoritarianism and reborn in the 80s with the social movement for housing. As a result of this process, the introduction of the chapter on urban policies in the Constitution of 1988 expressed in articles 182 and 183 towered social right for housing and the obligation of municipal master plan. These constitutional obligation and rights were regulated by Federal Law 10,257/2001, pushed by a civil social movement initiative, known as the City Statute (BRASIL, 2001; BASSUL, 2002).

Inspired in these urban reform movements and by the principles of the right to the city, advocated by Henri Lefebvre (1968), the City Statute comes to ease the anxieties of civil society in the creation of instruments in the struggle for more inclusive cities and for the broad access to urban rights. In this concept, the right for adequate housing must include not only the housing unit, but also its integration in the urban environment.

In this sense, since 2003, with the creation of the Urban Development Ministry (Ministério das Cidades), new urban policies were put into place - housing, sanitation, mobility, urban programs - (BRASIL, 2003). A new National Social Interest Housing System (SNHIS) was formed, with the creation of the National Fund of Social Housing (FNHIS) and its Managing Fund Council. This new policy gave a great impulse of direct financing for states and municipalities, in addition to credit programs run directly for housing associations and self-management (BRASIL, 2010). There is therefore the occupation of an institutional vacuum bringing back the federal government that was out of the discussion of urban politics and the fate of cities and introduces clear institutional or regulatory new frameworks for urban sector policies, (MARICATO, 2007).

These new possibilities include institutional modernization programs, investments in urban and housing improvements, land regularization and the production of new housing units. As such, master housing plans become necessary for municipalities of more than 50,000 inhabitants, adding to the concept that "to produce housing is to produce cities", (BONDUKI, 2010, apud BRASIL 2010). Central urban area rehabilitation policies were also defined, with the intention of transforming empty or under-utilized buildings and inadequate homes, in housing, as a strategy of urban space expansion for all (ROLNIK, 2007). In this context, new national programs were also launched, such as Brazil's Growth Acceleration Program (PAC), in 2006, and the "My House My Life" Program (PMCMV), in 2009, involving large sums of resources and a strong subsidy for social interest housing.

More recently, there has been a strong induction and the accelerated production of housing units, with a predominance of investments in the real estate market, intensified by the PMCMV investments. While this social program has achieved high quantitative results (in merely three years, a million new houses were produced in Brazil, with the anticipation of two million more by 2014), critiques on this production have been se-

vere, especially about urban insertion and urbanized land (ROLNIK, 2010; MARICATO, 2011; e FERREIRA, 2012). Additionally, interventions in the qualification of the large number of vacant real estate properties existing in urban central areas and informally occupied peripheries are not prioritized, giving privilege to open space distant from urban centers. In this process, there is also a lot of subcontracting of services and administrative discontinuity in relation to the public management implantation of developed housing plans (GORDILHO-SOUZA, 2011a).

These new federal funds, in addition to affecting the metropolitan regions, also reach medium-sized and small cities, that in the past decade have displayed higher indices of population growth, incentivized by various factors such as: decentralization of economic activities, the founding of new universities, the allocation of permanent professional positions, an increase in the cost of living in large cities, the income increase of the “C” class, compensatory policies, such as family aid (*bolsa família*), in addition to cheaper urban land.

Meanwhile, the struggle of many communities living in informal occupations and illegal settlements has not being widely responded by public agencies. This is due to complex issues involving slow institutional management, political interests and lack of technical assistance to the population. Besides, there is lack of formal educational in these communities and in regard to civic education and knowledge of their rights and duties. Added to this, the lack of technical skills, appropriate technologies and methodologies of participatory processes are reflected in the daily issues that community associations and urban social movements have faced.

In addition, with the recent income increase comes a greater consumption of construction materials, contributing to increase real estate dynamics in these areas. These are processes that demand the broad and continued action of public policies and professional capacitation in this field, in relation to the incentives of unauthorized construction and needs of small municipalities that, due to technical deficiencies, cannot enable the elaboration of urban and housing improvement plans and projects. These situations are found in town halls' low institutional demands for access to federal programs, in the slowness in the elaboration and execution of projects and in the significant return of allocated federal public resources. In the town halls of small cities, there are rarely technicians specialized in the field of architecture, urban planning, and engineering involved in the elaboration of participatory projects and plans, in the reception of resources, and in the follow-up and execution of projects. (GORDILHO-SOUZA, 2011).

The issue of insufficient technical training is also perceived in poor availability of educational public policies to address innovative sustainable projects that can contribute to the qualification of young people who might be being able to perform actions and improvements in their own communities, beyond are being prepared for entry into the productive sector.

A promising initiative is the large provision of professional technical assistance for low-income populations, strengthening the role of municipalities and states for co-operative management. It can bring more adequate form of operating, especially in the regulation of Special Social Interest Zones (ZEIS), for the urbanization construction improvement at these informally occupied areas. Specialized technical assistance in this field is also necessary in the support of communities initiatives provided by local housing entities, neighborhood associations and non-governmental public interest organizations that demand the elaboration of self-management social projects to access available pro-

grams, such as Credit Assistance (Crédito Solidário), PMCMV Entities, land regulation, agricultural villages, and so on. (GORDILHO-SOUZA, 2011).

Through university extension programs, several undergraduate experiences have advanced in the issue of learning with participatory projects for communities, concerning self-management housing improvements, low-cost construction technology, and environmental education, among other examples of performance at the undergraduate level. Usually they are short-term projects and intermittent or also limited to pilot experiences, not sufficiently professionally developed, so that the community is able to take on.

Moreover, few pay attention to the issue of appropriate technology, which refers to the choice and definition of sustainable technological solutions to the local problems, considering the materials and disposable workforce. This kind of strategic choice can start working together with the community, innovating in skills and quality, considering external technical assistance. It may ensure projects that address the real local needs. It is highlighted, in this sense, the importance of exchanging knowledge about the appropriate technologies to the community, also for the purpose of awareness and division of responsibility for the maintenance of the process itself. In this way, rights and duties go together.

In a graduate level it can make the difference. A brief review of graduate university initiatives for the implementation of extension projects in this field is more concentrated on specialization courses, some regular specialization courses for improving professional skills in urban and regional planning, others for a certain period such as those supported by SUDENE, in the late 1970s, and especially the results of the housing laboratories of the 1980s. Also important were some anti-poverty and anti-exclusion actions, via the Universidade Solidária Program in the 1990s, among others. Nevertheless, the tradition of professional specialization courses in architecture, urban planning, and engineering has maintained its professional training for the demands of the so called formal city and the real estate market, concerned with the market of higher-income populations, and high-technologies (UFBA, 2011).

Nevertheless, the accumulated social demands and the present moment of strong investments in the production of social interest housing in this country demand a great number of professionals capable in the field of technical assistance projects, as a means of urban improvement and increasing the rights guarantees by the City Statute that can result in strengthening of citizenship.

Finally, it is important to mention the Federal Law 11,888/2008 that provides the legal support for technical assistance activities in Architecture, Urban Planning and Engineering, that brings various possibilities, including professionals enrolled in academic residency and university extension programs by means of universities public offices (BRASIL, 2008). In terms of technical, free public assistance in this field, its content enables initiatives such as the one to be presented in this paper, aiming to contribute to the collective construction of better, fairer, and more democratic cities.

Institutional advances designing the AU+E/UFBA Residency

The Architecture, Urbanism and Engineering Residency project was designed to implement professional skills, via the *sensu lato* graduate program, integrating, improving

capacity, field service urban educational activities, researches and developing projects, inspired at what already occurs in the Medical Residency⁷. It involves the Specialization in Technical Assistance for Housing and the Right to the City, based on a multidisciplinary approach, in addition to join undergraduate and graduate professors and students, public institutions, and the communities involved in the projects.

The proposal was developed in 2011 by the Architecture School in partnership with the Polytechnic School of the Federal University of Bahia (UFBA), originally presented by LabHabitat to the Graduate Program of Architecture and Urban Planning and ultimately approved by the university's Dean of Extension (GORDILHO-SOUZA, 2011 and UFBA, 2011). The first edition was effectively implemented in 2013, operating in the recently funded Architecture Extension Center (Núcleo de Extensão de Arquitetura).

Its primary objective is to systematically enable free and public technical assistance in Architecture, Urban Planning and Engineering for underserved communities and needy municipalities by means of integrated teaching-research-extension graduate-level activities for professional training associated with undergraduate students and the implementation of projects in this field, contributing to better housing quality, social development and citizenship development.

Being designed as a multi-participatory project, it is able to integrate University - Community - Public Management. By putting the referenced Law of Technical Assistance into practice, this initiative represents a new experience in the university environment, getting together education of skilled professionals in the field, based in community relationships. It simultaneously includes training, service delivery and the development of a participatory social interest project, aimed at small municipalities and underserved communities.

In the definition of the syllabus and course methodology, the following conjectures exist: a) housing concept, including not only the housing unit but also integrating it into the housing environment and its urban insertion (infrastructure, sanitation, open, public spaces, in addition to physical security and environmental preservation) b) priority performance in small and medium-sized cities in need of professional action in the indicated fields, in addition to peripheral neighborhoods of large cities and rural settlements that demand this kind of technical assistance c) the specialization in this field assumes participatory action, in permanent communication with the involved communities, in the definitions of participatory projects and citizen formation.

In its first edition, that was started in October 2013, were engaged 23 professional residents and 46 professors, besides communities leaders and visitors. The residents group background is mostly related to the mainly field proposed, being 18 architects, 3 urban planners, 2 engineers, one geographer, and one social assistant professional. Among them, 23 are recent graduated and 4 are urban public officers. Among the 23

⁷ The Medical Residency in Brazil has existed since the 1940s as a way to guarantee the recently-graduated medical student the opportunity to have practical work experience within health institutions, under the guidance of qualified medical professionals. Instituted by Decree nº 80.281, of 9/5/1977, the same decree that created the National Commission of Medical Residency (CNRM), it works as a model of graduate program for doctors in the form of a specialization course. In ministerial order nº 9, from 6/28/2013 (Ministry of Education and Ministry of Health), the value of the scholarship reserved for the doctor-resident, in return for service training of 60 weekly hours, was set at a value of U\$1258,94 (R\$ 2.976,26). Nearly 27,000 spaces are offered in 53 specialties throughout the country (RESIDÊNCIA MÉDICA, 2013).

residents, 17 are from Salvador, one is from other city in Bahia, 3 from others in Brazil and 2 from Italy, states. The group of the 46 professors, have experience in the field, , most of them from the UFBA graduate course, being either masters or recent doctors and reflects the major field formation, but including also multi-disciplinary skills.

This experimental 2013/14 edition, most of the 23 professional residents will be working in areas located in Salvador Metropolitan Region, considering less costs in transportation, since there are no scholarships yet. One will develop a project in João Pessoa-Paraíba, as a partnership between UFBA and UFPB, and one in another city of Bahia. We already got some support from the PRIOEXT-MEC/UFBA, related in our case, with the Urban Development Ministry (Ministério das Cidades), for the 2014 edition. (<http://www.capacidades.gov.br/blog/detalhar/id/73/post/195>)

For the selection of candidates, necessary application include previous acceptance of a résumé and his/her potential for the project to be developed, under the guidance of a tutor professor, attending to the demand of a public institution or an emergent community in the municipality in which the resident will work.

The development and finalization of the course should occur in a minimum of fourteen (14) months and a maximum of 16 (sixteen) months, resulting in 40 academic credits (408 hours - 24 credits, of which 340 are classroom hours and 68 are for the development of the final, guided research project) and 16 fieldwork credits (minimum of 960 residency hours), distributed in three periods:

1st Period - Disciplines, seminars, and the definition of the project to be developed: total of 4 (four) months, dedicated to theoretic-conceptual and technical training with four thematic themes, divided into modules, with the participation of accredited professors, and a discipline in the format of seminars that are open to the public, administered at UFBA with the participation of guests and a total of 340 classroom hours (4 hours/day and 17 weeks - 5 days), 20 credits (1c=17hrs), understanding the following themes:

1. Space production, urban policies and the right to the city (4 credits)
2. Urbanization, infrastructure, and environmental projects (4 credits)
3. Architecture planning and project, urban planning and engineering for technical assistance (4 credits)
4. Methodologies and techniques for participatory projects (4 credits)
5. Seminars (4 credits)

2nd Period - Residency for the development of social and fieldwork: minimum of 8 (eight) and maximum of 10 (ten) months, for discussion with the community, collection of data for the project, preliminary studies, technical assistance, workshops, seminars and other practical extension activities, with the participation of public managers and the involved communities, with a minimum of 960 work hours, minimum of 16 credits (1c=60hrs).

3rd Period - Elaboration and presentation of the final project: 2 months, for the finalization of the developed project, resulting in activities in the field and at the university, comprising a total of 68 hours of guided project/research (8 hrs.-day and 8 weeks), 4 credits (1c=17hrs).

The final project should be presented as a project proposal, developed in a participatory manner, with an analysis of the project subject, including a Terms of Reference with dimensions and specifications for promotion and implementation, with due annota-

tion of the resident-professional's technical responsibility. Depending on the level of complexity and the resident's field of study, the project will be finalized in the form of a preliminary study, design, or executive project, defined in agreement by the initial project's evaluation judges, after the academic semester's end, which will be given to the community.

The operation of the AU+E/UFBA Residency has the perspective of getting institutional partnership for foment and cooperation, able for a large exchanging, with the possibility of project guidance for municipalities of other Brazilian states, of co-mentoring, with the participation of advising professors of the university of the residents' states of origin and the AU+E/UFBA Residency, as already settled with the Federal University of Paraíba. A goal is wide publicity and the possibility of program replication, with the incentive to form similar Professional Residency centers in other universities, consolidating an interactive network of project databases and diverse experiences.

Methodological and technical advances

When talking about methodologies of participatory processes it means that value should be given to human beings in collective decision-making, because it is composed of communities of people who already live and wish to continue at their locations. In other words the technician who proposes must be aware of their own attitude towards people, whereas the improvement proposition will be enjoyed in the daily life of everyone who lives there. From this point of view, the conscious decisions can be through methodologies that consider the value of people's memory of the place, the sense of belonging and collective practice of listening and dialoguing as well as the methodologies to awaken people to be purposeful and think together creative solutions.

As mentioned before, the activities to be developed by this Professional Residency includes different phases. In its first phase, it includes: subjects, seminars and the area definition and a previous plan.. This first period was organized into five disciplines. For this paper, some initial results, taking on focus the subject on planning and design of architecture, urbanism and engineering for technical assistance and the projects related to urbanization, infrastructure and environment, with. It is highlighted the necessary interdisciplinary dimension related to the proposed disciplines, always trying to promote knowledge for a plural inclusive housing.

Insofar as the contents were addressed, workshops approach and several meetings with leaders and visits in previously identified areas were performed. These activities were vital to feed the collective discussions and to promote the approach as needed in participatory processes. It was also during visits or contact with local residents of the selected areas that the Professional Residents identified the demands of communities and their topics of expertise.

At the end of this first stage, the residents began to develop a previous plan with reference to the universe of content provided by the course, focusing on a specific theme, for their performance. In order to provide integrated solutions, the work was defined in multidisciplinary teams in each area, at first, thus creating a broader and effective diagnosis. Then, each resident has chosen to act with a specific problem. This form of approaching demonstrates more effectiveness to develop solutions in promoting a significant improvement in the area, when executed.

As regards, more specifically to the issues of infrastructure, environment and sustainable urbanization, the themes were addressed under the various environmental aspects

and of the infrastructure itself, focusing on oriented technologies with solutions and projects that may be incorporated by communities. About water supply systems and solid and liquid waste, the use of energy sources, urban mobility, questions about the physical environment, support and influence of the physical constraints of the landscape were discussed, among others.

The subjects were initially addressed in the theoretical and conceptual character, enhanced with the most diverse examples of initiatives and projects throughout Brazil and the world, in order to establish a critical insight into the processes of choice-whether for design architecture or urbanization or other related area of work. It is important to understand not only the solution proposed and implemented, but to know its compatibility with the presented realities, with the social and cultural diversity of each studied community, the main methodological aspect that defines the inclusive housing. During classes discussions there were often raised questions not directly related to the theme provided, reinforcing the importance of multidisciplinary processes involved in choosing appropriate technology for each project.

In the discipline of planning and architectural design, urbanism and engineering for technical assistance the built environment was treated, concerning vacancies and occupied areas, project's quality, considering different types of housing, collective equipment, public areas, common areas and landscape. As such, prevailing discourses on urban sustainability. Focusing on the design methodologies, it was analyzed case studies of rehabilitation, improvements and housing production, using computational technologies in design and planning.

In this process of the potentiality of the development for intervention projects, associated with the strengthening of citizenship with a focus on housing and the city, the possibilities of incorporating innovative forms of integrating graduate programs with undergraduate and elementary schools should also be highlighted. At the national graduate level sponsored by, CAPES, since 2007 it was started the working cooperation for the education of elementary school teachers, amplifying the reach of their actions in the education of qualified studies in Brazil and abroad (CAPES, 2013). The implementation of residencies in the so-called applied social sciences graduate courses can facilitate integration activities with the schools in emergent communities, via workshops and other interactive methods regarding the theme of the city and citizenship.

The challenges for professional residency consolidation

Considering the Brazilian context of great housing and urban precarity, the project aligns itself to the demands currently put forth by Architecture, Urban Planning and Engineering I, besides related, areas to promote the broadening and institutionalization of technical assistance in this field via professional specialization, with guided practice in the field.

This project's execution articulates the three spheres of academic life: teaching, research and extension, and proposes a direct relationship between theory and practice, involving real situations in a participatory way.

By promoting the insertion of the university in communities to define projects that involve public management, this action incentivizes the involvement of government bodies - at the federal, state, and municipal level -, non-governmental entities and community associations in the development of these projects through a plural and interactive learning process.

As this is a pioneering initiative in Brazil, one that is inspired by the already consolidated Medical Residency, its experimentation, now occurring in graduate course for other areas, brings forth the great potential for continued upgrading and replication in Brazilian graduate courses. As such, the promotion of exchanges with other teaching institutions and cooperation with public entities aligned with its objectives should be advanced, with the goal of capturing other forms of continued support for its consolidation

One of the great challenges put forth by this amplification and consolidation is the development of scholarships and additional support costs, due to its territorial field, in addition to the metropolitan peripheries, to act in municipalities with smaller cities and more distant communities in need of technical assistance.

Necessary exploratory practices are required, in the continued, collective learning and mutual training exercises, as a means of interacting with multidisciplinary knowledge and that of the habitants. A challenge to the implementations of local projects is to awaken a sense of belonging to the city, of caring for the environment in which one lives and promoting better urban development, as well as discussing and constructing means for urban improvements. This experimental condition also entails the direction of new multidisciplinary studies, research and technical innovation, highly demanding of development, especially of national network projects.

While the promotion of these technical assistance initiatives seeks to incentivize professional internalization, it also demands effective support from its representative institutions, from applicant municipalities and public bodies involved in this area of development.

Overcoming these challenges would mean bringing the possibility of the replication of this project to the national scale, creating better conditions and possibilities for cooperation and the exchange of experiences. It strengthens the social insertion of the public university and the perspective of innovative technology in the areas of social interest.

May these initiatives strengthen the achievement of better and fairer cities!

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