University contributions to the 21st Century Challenges through social innovation

A case study from Brazil

CHEPS WORKING PAPER 05/2016

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Abstract

Social innovation has emerged as an important concept dealing with social issues related to social change and community development. The aim of this paper is to understand universities' involvement in the process of social innovation, for the particular case of a Brazilian higher education institution. This is an attempt to shed some light on how can universities contribute to the different stages of the social innovation process and what are the various universities' inputs that can become involved in the social innovation process, thus contributing for social change and development. The results obtained show that a higher education institution might be a key player promoting social innovation initiatives. On the one hand, it can contribute with its own resources and inputs to foster new social innovation ideas or practices. On the other hand, it can act as catalyst of other partners' actions and contributions. The main policy implication of this study is that higher education institutions possess the necessary resources to support social innovation initiatives acting as agents of social change and thus contributing to community development processes and societal development.

Keywords: Social innovation, Universities' mission, social change, community development, case study.

1. Introduction

There has recently been increasing interest in social innovation in several academic disciplinary fields, most notably in innovation studies, territorial development, social economics, and public governance (Benneworth & Cunha, 2015). One justification for this growing interest is the fact that social innovation has been seen as a way to address are sometimes referred to as the Grand Challenges of the 21st century, namely the problems which humanity must address in this century to survive into the next: these include climate change, uneven income distribution; high rates of unemployment; ageing of population; and mass urbanisation and social exclusion problems, among others (BEPA, 2010; Engelke et al., 2015, Westley & Laban, 2011). According to Nicholls and Dees (2015), these problems are characterised by divergent analyses and diagnoses highlighting the failure of conventional solutions and established paradigms across private, public and societal sectors. Therefore, given these important societal challenges and reflecting political and social systems in different countries, scholars, entrepreneurs and civil society agents have called for new approaches with a particular emphasis on the role of social innovation (Evers & Ewert, 2015). These grand challenges represent a new class of contemporary problem not solvable exclusively via more economic growth. We instead contend that solving those Grand Challenges demands new forms of social organisation facilitating human welfare whilst respecting the earth's ecological limits, creating collective action and co-ordination providing resilience against these new challenges (Damme, 2009; Urry, 2011). As emphasised by Nicholls et al. (2015), the growing interest in social innovation as a field of study at least partly reflects the failure of established systems (e.g. technology, markets, policy, governance) to deliver well-being and economic prosperity.

In this context, a new kind of innovation must create new social networks and capacities that evolve into new social structures and systems that therefore change existing social paradigms (Mieg & Töpfer, 2013; Garud & Karnoe, 2013). The idea of social innovation has emerged as an attempt to capture and describe "bottom-up phenomena where new ideas, approaches, techniques and organisational forms grew from humble roots into substantive new social capacities" (Benneworth & Cunha, 2015, p. 510). Social innovation is at the centre of attempts to resolve the paradoxes emerging between sustainable aspirations, production and consumption models

associated with discourses on economic growth, efficiency and competitiveness. Cajaiba-Santana (2014) argues that the "research on innovation has widened to accept the process of innovation itself as a social action" (p. 43). Similarly Nicholls and Dees (2015) state that "social innovation has been recognized as a new wave of innovation that gives primacy to systems and processes of change in social relations" (p. 355). These authors also claim that social innovation "may represent a step change compared with previous waves of innovation in that it often attempts to disrupt and reconfigure systems themselves rather than simply providing disruption within existing systems" (p. 355).

This paper aims to Benneworth and Cunha's (2015) process model for universities' involvement in the process of social innovation, in the particular case of a Brazilian higher education institution. More specifically, this is an attempt to shed some light on how universities may contribute to different stages of social innovation processes and what precisely are the various universities' inputs that may become involved in social innovation process, and thereby contribute to wider processes of social change and development.

The case study HEI is the Instituto Federal de Santa Catarina (IFSC), which hosts , very interesting project dealing with women in vulnerable situations (social risk) called Mulheres Mil (Thousand Women) Program. The idea was first developed in Canada but was latterly implemented in Brazil; its main purpose was to teach vocational/professional training programs (or courses) to vulnerable women allowing them to overcome their vulnerable situations. This approach intends to stimulate their empowerment, improve their income security, reduce their exclusion and, therefore, to give sustainability to their future lives. The case study highlights how socially innovative projects can contribute to the social sustainability of communities maintaining social cohesion by increasing social capital and providing resources for empowerment of disenfranchised citizens (Garcia et al., 2015) therefore contributing to overcome social exclusion and promoting more sustainable forms of development at the community level (Baker & Mehmood, 2015). This is particularly relevant in the

field of education directed to those individuals feeling the daily pressures of poverty since most of the results correspond to intangible benefits whose impact is only felt in the long-run (Nicholls & Dees, 2015). Finally, the analysis suggests how universities support social innovation, providing skilled workers, creating new knowledge, and through involvement in regional social and cultural activities (Cunha et al., 2015) thus increasing social capital and contributing for social development and societal change.

2. Social innovation: concept and process

Although, a broader review of definitions of social innovation is beyond the scope of this paper it is worth briefly reflecting on what social innovation involves.[1] Sundbo (2015) argues the concept of innovation has recently been, brought out of the market-economic scope, with an increased emphasis on understanding innovation processes that occur outside the technological-economic sphere. Evers and Ewert (2015) define social innovation in terms of "both products and processes, namely new ideas translated into practical approaches that were also new in the context where they appeared" (p. 108). Cajaiba-Santana (2014) defines social innovation as "new social practices created from collective, intentional, and goal-oriented actions aimed at prompting social change through the reconfiguration of how social goals are accomplished" (p. 44). Conversely, Garcia et al. (2015) define social innovation as the processes that "generate: a) the provision, in response to social needs, of resources and services; b) the development of trust and empowerment within marginalised populations; c) the transformation of the very power relations that produce social exclusion through a change in governance mechanisms" (p. 96).

For the purpose of the current paper, the definition proposed by Benneworth and Cunha (2015) will be used:

"A social innovation is a socially innovative practice that delivers socially just outcomes by developing novel solutions in border spanning learning communities thereby creating social value by promoting community development, hence forming wider

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[1] interested readers can found a discussion of those definitions in the papers of, for example, Benneworth and Cunha (2015), Nicholls and Dees (2015), and Edwards-Schachter et al. (2012).

collaborative networks, and challenging existing social institutions through this collaborative action" (p. 512).

This definition the "immaterial structure" of social innovation leading to new social practices manifested by changes of attitudes, behaviour, or perceptions, and not necessarily by a new technological output. This requires the institutionalisation of those social practices which in turn demands social engagement and cooperation among different social groups (Cajaiba-Santana, 2014). Benneworth and Cunha (2015) point to s the fact that social innovation cuts across all sectors of society – private, public and the third sector, which has in turn to Nicholls and Dees (2015) led to new hybrid organizations and forms of action. Social innovation involves a "creative collaboration between public actors or market agents and civil society organisations contributing for the empowerment of citizens" (Garcia et al., 2015, p. 96) and capacity building. Moreover, as underlined by Garcia et al. (2015), socially innovative actions may be institutionally embedded as well as territorially reproduced as transferable experiences.

Benneworth and Cunha (2015) proposed a framework based on nonlinear innovation processes (following Garud et al., 2013) since, although acknowledging that there are contingencies and tensions during the social innovation process (Rip and Schot, 2002), it is possible to identify some patterns that arise from linkages, alignments and networks. Their most important of these is that it is likely that feedbacks and loops might emerge throughout the social innovation process. In their model, they propose a stx (stylised) stage step running from idea generation; the creation of an experimental space; realising a demonstrator; the decision to expand; mobilising the support coalition; and the final codification of new social practices.

Idea generation corresponds to the need to come up with a solution that can solve a previously identified social problem, and that might potentially involve co-creation involving a range of different actors (Voorberg et al., 2013). Once a possible solution has been identified, it is necessary to plan its implementation, which can be conceptualised as the creation of an experimental space, as there is no guarantee that

the social innovation solution proposed will be successful. Additionally, it is necessary to persuade immediate stakeholders that the solution proposed can effectively overcome the initially identified social problem. The third stage of the social innovation process corresponds to the demonstrator: during their development, social innovations are affected by a high degree of risk and uncertainty Evers and Ewert (2014). Thus, there is the need for the new solution's proponents to demonstrate their viability in order to mobilise the resources necessary to up-scale that solution (Rip and Schot, 2002). If this viability is demonstrated, the following stage is the expansion of the solution, which implies a significant commitment of resources and this is an important aspect given that although the solution might create important benefits for society, they are not always automatically rewarded in the marketplace (Phills et al., 2008). Subsequently, there is the need to mobilise efforts and to create a supportive structure to effectively up-scale the innovative solution (mobilising a support coalition). To accomplish this goal, the existence of an "enabling environment" (Baker & Mehmood, 2015) can greatly assist, related to the role of networks and institutions (e.g. government departments, foundations, corporations, non-profit organisation or social capital investors) in the successful up-take of the new social innovation solution. In the final process stage (transforming and codifying), it is necessary to identify how that solution can be repeated in different contexts. This in turn means that more individuals or organisations are involved in implementing that solution in new settings, places or circumstances. Therefore, it is important the transformation (from a small scale) and the codification (of the solution) to allow its scalability. The process of social innovation involves creating new ideas manifested in social actions leading to social change and proposing new alternatives and new social practices for social groups (Cajaiba-Santana, 2014).

3. Case study

This section describes the case study analysed and presents the major findings obtained viewed through the lens of Benneworth and Cunha (2015)'s social innovation process model. Following Herrera (2015), we argue that case study analysis is a valuable approach to understand the social innovation process since it provides a more

detailed and nuanced understanding of how universities can contribute to foster social innovation and, thus, contributing to building systemic theory about social innovation. The social innovation described in this paper can be regarded as innovation in educational services and how it can address users' needs by investing in capacity-building, avoiding stigmatisation, improving peoples skills, and bridging the gap between professional services and people's lives (Evers & Ewert, 2015).

The Instituto Federal de Santa Catarina (IFSC) is a Brazilian federal public higher education institution under the Ministry of Education (MEC) via the Secretary of Vocational and Technological Education. It is headquartered in Florianópolis, Santa Catarina state, and has administrative, cultural, financial, educational and pedagogical autonomy. The IFSC was established in 1909 and after several restructuring processes, most notably following 2008, expanded from 6 to 22 campuses in all regions of the territory of the state of Santa Catarina, southern Brazil. IFSC is specialized in offering vocational and technological education but, simultaneously, has a strong presence in research and extension activities. IFSC's aims are to promote inclusion and to educate citizens through the professional, scientific and technological education, generating, disseminating and applying knowledge and innovation, contributing to the socio-economic and cultural development (IFSC, 2016).

The data used on this case study was obtained from two different sources. Firstly, documentary analysis was used to examine the documents and archives of the Dean of Extension and External Relations of the IFSC, which contained information about the Mulheres Mil Program. Secondly, through participant observation (Silverman, 2006) characterised by direct involvement of two researchers (co-authors of the paper) as general coordinators of the program in the IFSC, who participated actively during all process, from conception to evaluation of the activities of the program. Data collection occurred from visits to campuses that offered the courses, class participation as listeners and as speakers, interviews with local coordinators, follow-up meetings and sharing practices among campuses, documentary analysis of reports and other materials related to the Mulheres Mil Program.

3.1 Description of the process

The social problem that the university (IFSC) sought to address related to women with low education levels and social vulnerability simultaneously lacking income and professional skills. The National Programme Mulheres Mil (Thousand Women) – Education, Citizenship and Sustainable Development, included a set of actions consolidating public policies and government guidelines for educational, social and productive inclusion of women in vulnerable situations. The program provided (and continues to provide) educational, vocational and technological training, allowing to improve women's educational levels, empowerment and access to the labour market, by encouraging entrepreneurship, employability and forms of associative solidarity. The goal of the program was to promote women's empowerment, access to social rights and citizenship, aiming to achieve equality, emancipation and a sense of belonging (Brasil, 2011). Mulheres Mil is strategically thought and linked to education, an activity critical in shaping on peoples' living conditions (UNESCO, 2013). It is one of the main attributes to measure inequality among people and is considered a strategic element of change in social reality of a country. In recent years, Brazil has seen important improvements in education levels, falling illiteracy rates and increased school attendance (Ferraro & Kreidlow, 2009), but this has still been a slow process marked by significant social, and particularly, regional differences. In urban areas, the average schooling of women is 7.4 years for total population and 8.9 years for employed. In rural Brazil, these averages are low and distance themselves considerably from urban areas: 4.5 and 4.7 years, respectively (IBGE, 2014).

Mulheres Mil was deliberately aligned with a set of Brazilian public policy priorities related reducing social and economic inequality amongst marginalised populations, and the country's commitment with gender equality.   In Brazil proposals for public policies with a gender approach have been seen as a key instrument in the struggle to overcome inequality between women and men (Farah, 2004). This trend derives from the process of democratization and recognition of social rights that the opening to democracy has brought for the development of more inclusive policies, and was also

influenced by feminist awareness, which, in recent years, have been fighting for incorporating a gender perspective on public policy. Some Brazilian women are more affected by exclusion than others (EC, 2014, Masika et al., 2011), for example, black women and single mothers, due to a higher degree of vulnerability. When programs aimed specifically at addressing women's rights (or vulnerabilities) are proposed, there is a need for inclusion in the space of citizenship of a hitherto invisible segment. Therefore, programs emphasising civil rights, the constitution of women as individuals, ensuring the expansion of the space of citizenship, the extension of social rights to new segments of the population and the inclusion of these new segments in the sphere of state social service support are needed (Martinelli, 2012). We now turn to analyse the programme through the lens of the six stages of Benneworth and Cunha's (2015) model.

Idea generation

The idea underlying the Mulheres Mil programme had not originated in the Federal Institute of Santa Catarina (IFSC), but was created and initially applied in Canada. In importing the idea to Brazil, ISFC found it necessary to seek partnerships to create courses according to the needs of each community in the state of Santa Catarina, through dialogue and collective construction, involving the entire. Thus, the main task IFSC in this context was how to create and structure the courses (or educational programs) to fulfil and achieve the Brazilian public goals regarding poverty reduction and social exclusion of less favoured social groups. In this process, several criteria were taken into account, including infrastructure, teaching staff, technical support, educational materials, and availability of laboratories, as well as market demand for those qualifications and community identification with submitted course proposals. The new courses involved non-traditional students: given that Mulheres Mil Program was a gender-related proposal with cross-cutting policies and issues, besides IFSC faculty and staff members, it was necessary to create a basic support network with other specialised professionals, such as social and health workers, and legal/ law experts in each municipality where those courses were offered.

The main problems that emerged related to the operationalization of a network action across the IFSC that was capable of simultaneously considering the specificity of each place or region in the active campuses. One relevant issue initially raised was teachers' potential lack of interest in working with these new non-traditional students. All positive and negative factors associated with the new idea were considered, and the availability and preliminary consent among professionals who could be involved in the venture was sought. In addition, IFSC's top management support was crucial to sustain the proposal. A pilot course was initially held in a single IFSC campus, and its success signalled the feasibility of extending across other IFSC campuses. However, after the various campuses initially agreed to join, one subsequently then abandoned the plan (given poor support since some faculty members and professionals did not adhered the idea) which raised uncertainty regarding this project and indeed the possibility that it would not further proceed.

Mobilising a solution

In the second social innovation process model stage, the creation of an experimental space, it was necessary to mobilise resources and to persuade immediate stakeholders that the solution proposed could be effective. A pilot course initially held only on three IFSC's campuses was tested and later extended following careful analysis of success and failure factors. This initial experience demonstrated that the course could not be too long (feedback suggested that the optimal length would be at most six months) and could not have more than three lessons per week, to avoid overload the women's domestic activities. The university's resources involved in the implementation of the courses were primarily around classrooms, staff and faculty members, materials, laboratories and inputs necessary for pedagogical activities. Some campuses organised classes in prisons or voluntary associations, with IFSC offered the faculty and staff members, educational material and financial aid for students (for transportation and food). In each participating campus, hourly charges were allocated to the multidisciplinary team working in the program. Moreover, two task members were committed as local managers of the program with the responsibility for implementing, managing and monitoring courses, monitoring and tutoring students, monitoring teaching staff and the multidisciplinary team, as well as providing the infrastructure (classrooms and laboratories) and materials needed for classes. For state management,

and course tracking, monitoring and evaluation an institutional coordinator for the Mulheres Mil Program was created, within the Deanery of Extension and External Relations, at the IFSC Rectory.

Successful program implementation required persuading other stakeholders of the feasibility of the proposed solutions. For that purpose, IFSC organised several awareness meetings on the various campuses with potential program partners. In those meetings, the promoters of the new solution tried to demonstrate to stakeholders the potential demand for the new courses as well as the IFSC's ability to meet that demand. ISFC also undertook technical visits to other interested groups related to the scope of the project, and created products derived from the activities carried out by students/ trainees from the pilot phase , depending both on the course attended and on its regional context. Typical examples of those products used to sensitize stakeholders were crafts, cookbooks, and dishes of regional and local cuisine. Despite adopting these initiatives, some external stakeholders resistance emerged in their willingness to support the idea and work with the university. That resistance was largely due both to the perception that the Mulheres Mil Program was a very new idea, but also because, the role of each actor in the process was initially rather unclearly defined. An additional difficulty was the lack of financial resources to fund courses' activities and the lack of a financial contribution (in the form, for example, of a grant to the professionals involved in this program). Therefore, during the initial stages, some discussions arose regarding abandoning implementation , although IFSC chose not to abandon the idea and rather chose to continue its expansion. Stakeholders' negative arguments related to the low level of financial resources available for the purchase of consumables (and other inputs) and the lack of teachers. However, the arguments favouring the implementation of the new solution outweighed the opposing ones, particularly institutional gains: external visibility of the institution, increased number of students, and diversification of courses offered. However, the dominant arguments were the programme's potential to promote social inclusion and develop sense of community, alongside the welfare gains in the lives of women students.

Successful demonstrator

The third stage of the process is the demonstrator: a primary issue here was understanding how the new solution was implemented in practice. The courses were adapted according to the context of each campus and consistent with local community interests and business needs, also taking into account staff and faculty members and university infrastructure availability. For specific issues, partnerships with the Department of Social Services, Health Centres and female Police Officers. The pilot project operationalized the programme via the Rectory, in response to a specific public call from the Ministry of Education. The IFSC progressed internally in three campuses (providing about three hundred vacancies) which provided a more favourable context for developing the *Mulheres Mil* Program courses. The program contained a methodological guide which was used as a reference for the implementation of activities.

The training (or educational) offer within *Mulheres Mil* Program was created according to the identification of women's non-formal experience (or education) obtained throughout their lives and also taking into account their personal and professional ambitions tailored to each student's prior educational path. The students were continuously monitored throughout the programme from the intake and identified benefited community to their exit into the labour market. The programme involved vocational training courses of at least 160 hrs lasting around 5 months with classes twice a week. Participating required minimum education level thereby allowing illiterate women to participate. Selection was based on a socioeconomic questionnaire, facilitating the grouping of participants according to their degree of social vulnerability. Prior to registrations, IFSC was supported extensively from municipal social service and healthcare network of the municipalities involved in this project (e.g. Department of Social Services, Department of Education, Department of Health, neighbourhood associations, mothers' clubs, parishes, forming a large network of cooperation, increasing the active search for women).

Mulheres Mil Program used a distinctive unique methodology in implementing the courses and activities planned. Even prior to a student starting IFSC employees were active in trying to identify professionals with the appropriate profiles for working with

the education of adults and vulnerable groups. Afterwards, multidisciplinary teams were formed to prepare the Work Plan and the division of tasks in regular meetings. The formalization of partnerships is here important given the desire of Mulheres Mil Program to operate transversally with other public policies, seeking to enhance the actions with the education, social assistance, health and legal sectors, among others. Following registration and enrolment, activities would be focused on planning the inaugural class, a crucial time for motivating students, to create a warm and pleasant atmosphere, involving the students through playful activities involving group tasks, lectures, and the availability of suitable snacks. The program sought to create appropriate conditions offering the students a form of school (rather than university) environment as a (re-)introduction to higher learning.

Demonstrating the viability of the solution was greatly facilitated by the fact the *Mulheres Mil* Program was backed by the Brazilian Federal Government through the Ministry of Education and was being headed by a higher education institution (in this particular case IFSC). Finding internal and external supporters in the state of Santa Catarina was also facilitated because of the existence of the pilot programme and the initial implementation structure. Meetings with potential partners took place and a growing number confirmed their wider interest in the pilot. However, it was at this stage that the first resistance occurred within IFSC, related to the interest of teachers already working in courses with objectives and profiles very different to those of *Mulheres Mil*. Affinity with social issues, preferably gender, was crucial for encouraging staff to engage with the programme. However, IFSC's historical faculty profile was primary in the kinds of professional, technical and vocational education far removed from the relevant aspects demanded by Mulheres Mil. Over time the experience showed that it was necessary to provide additional incentives and support to those faculty who were interested in participating to ensure that it did not become unnecessarily cumbersome. The bureaucracy associated with establishing partnerships was a major problem when trying to finalise and launch the demonstrator (pilot project), and in some cases these delays led to the withdrawal of some partners thereby hampering the pilot's development.

In terms of stakeholders' perceptions of the pilot's success, senior IFSC managers reported feeling that the proposal brought both the direct benefits to the target audience as well as more indirectly, substantial institutional visibility. The initiative drew significant media attention and was the subject of various media reports, positively contributing to dissemination as well as strengthening IFSC's image. The program co-ordinators' vision related to awareness of the great potential for improving the situation of vulnerable students, who had themselves showed the motivation to change their lives. Conversely, the program coordinators reported difficulties related to lack of interest from other campuses teachers in contributing to the program, and for those teachers that did participate, the need to adapt teaching strategies to deal with these non-traditional students. External partners were strongly supportive of the course, as an effective means of addressing a hitherto ignored target audience. Previously no educational institutions had had strategies to encourage, empower and raise the educational level of this vulnerable group. Moreover, external partners were important supporters in realising courses, being important providers of resources to support the program, including space for classes when campuses were unable to provide adequate space, transportation for students, professionals to assist in training, among others. Finally, students showed great enthusiasm and appreciation for the welcoming environment provided and the value held for each student's personal history, a factor greatly favouring a return to study. Feelings of belonging to IFSC and improvements in family relationships were also noted, but these feelings were mainly associated with the empowerment in overcoming each student's difficulties. A number of teachers were initially reluctant to participate in the programme because they were more keen on contributing to the formation of high-income professionals and high-level research. Hence, those teachers had lack of enthusiasm in working with a female, uneducated and low-income audience, although that did evolve for those involved as they became aware of the students' individual learning progressions and the benefits for the individuals, IFSC and indeed for their own professional development

Expansion of solution

After the initial pilot project was perceived as a successful demonstrator, the next stage corresponds to the expansion of the solution proposed. IFSC managers decided to expand the Mulheres Mil program due to increased community demand and this Program's media recognition as part of a widely positive stakeholder and public reception. The decision to expand the Program to all IFSC campuses was also influenced by the Ministry of Education's policy goal to encourage its expansion and dissemination within HE. The number of participating campuses initially doubled from three to six, then rising to 11 the following year (with 1100 student places), finally expanding to almost all campuses and serving 3,000 students . Some difficulties and problems arose in this stage, most importantly the need to enlarge the program management structure and stakeholder coordination. Several approaches were implemented to address these problems. Firstly, available resources were increased, including increasing the number of local program coordinators at each campus, scholarships for students, teaching materials, and allocation of new teachers to the Program. Secondly, procedures to formalize partnerships with stakeholder networks were streamlined. Finally, regular meetings were held to share experiences and collaborative monitoring among participating campuses and promote program expansion to other campuses.

Extending the program across all IFSC campuses implied increasing costs since the number of students increased with each student receiving, via student assistance, financial help (an average value of one hundred reais). With increasing numbers of campuses involved in the Program, each local coordinator received a financial incentive (an average value of six hundred reais) to compensate for management tasks. Additionally, there was an extension of scholarships (average value of four hundred reais) for student assistants (from other courses) to assist the coordinator. As other campuses joined the program, so the associated costs increased proportionally. This budget increase was supported by Brazil's Ministry of Education of Brazil, who had been an important supporter and funder of IFSC's programme from its inception. From the moment the Program progressed from a pilot project to a more permanent activity,

IFSC realised that additional technical and administrative staff and teachers were urgently to implement the necessary activities, including classes, workshops, fairs, as well as processing scholarship payments. Following consultations with the campuses, it was found that on average four technical and administrative staff members and six teachers were needed per campus, setting a minimum participant level of ten IFSC employees per campus. Alongside this is the need to guarantee other partners' support within a wider network of support and protection, involving such as the Department of Social Services, Health Department, Department of Education, the Women's Police unit, Guardianship Council, Caritas, Churches, and Parishes.

Support Coalition

For the IFSC's Mulheres Mil Program implemented, mobilising a wider support coalition made extensive use of the main partner that ahd emerged since the pilot programme namely CRAS – the Social Assistance Reference Centre, a municipal government agency. In all campuses where the Program was implemented and partner networks mobilised, CRAS had the role of main mediator of relations between partners. In particular, CRAS helped linking up the target group of less socially favoured groups to the IFSC and other partners (e.g. social movements, NGOs, businesses, volunteers) to identify and adopt forms of joint action in expanding the program. CRAS, which already had a database of social needs and partners, helped IFSC develop linkages within a number of other associated organizations who were able to join this wider support network for Mulheres Mil.

The pressures (or incentives) felt in promoting the change of doing things were an important issue in this process stage. As the Program gained scale and became known across Santa Catarina State, the community placed IFSC under pressure to increase the supply of courses. Simultaneously, the Ministry of Education also pushed IFSC to expand the number of student places in return for additional financial support. From IFSC's own internal perspective, the great demand for human resources for the program became a great challenge, as few professionals/teachers had a primary interest in teaching in this type of course and preferred to remain teaching in regular courses (e.g. engineering, management, computer science). Therefore, although pressures for the implementation and expansion of the programme came through

additional financial support available and external partners' interest, what resistance there was came from the IFSC's own employees in dealing with the target audience of the Program.

Transforming / Codifying

A first issue in the upscaling of a social innovation is identifying how the new solution could be repeated in other contexts. Mulheres Mil's replication was based on both an underpinning legal instrument and the program's methodological guide. Both of these contained all the guidelines and requirements on how to adhere to the Program and its development. Detailed information regarding the activities, timetable and the initial structure content of the courses were made available to allow each campus to prepare its work plan and to fit its course's pedagogical project to the regional and local socio-economic context. The legal instrument also provided for orientation and preparation meetings to help campuses joining the Program. The meetings served to share the difficulties and best practices experienced, which offered valuable tips to help new participants in the planning and execution of courses.

One innovation made possible within this legal instrument were "Solidarity economy fairs" with the justification of fostering entrepreneurship, civil society associations and networking, and to promote the growth and dissemination of this social innovation. These solidarity economy fairs provided students with the opportunity to sell the products they made from the knowledge acquired in the courses as well as to exchange knowledge with students from other cities/campuses. This allowed the students to broaden their contact networks, and to identify other social organizations linked to the social economy such as social incubators. Partnerships were important in this process, with many partners were already engaged in social initiatives in other areas, ad involving these partners helped enabled a stronger and with greater social impact solution.

However, as this new solution was scaled-up beyond its original context some novel kinds of problems and resistance were felt. Some of the challenges and difficulties

identified and reported by course campus coordinators were related to the availability of teachers and technical support staff for implementation of activities, the absence of fixed dates for scholarships and financial aid payments, the lack of teachers for specific courses contents (e.g. income generation), as well as prejudice directed to the students within the campus, difficulties in reconciling municipal transportation schedules with classes, the value of scholarship being insufficient to cover the costs of participating in the social economy fair and persistent infrastructure issues (such as lack of laboratories and classrooms). However, even given some difficulties and challenges with the expansion of the program, the overall impression was of continuity and search for improvements in order to further consolidate the program, with the support of internal staff as well as external collaborators.

4. Discussion

As a public institution of vocational and technological education, IFSC recognised recently the importance of promoting social innovation through teaching, research and extension activities. Previously to the implementation of Mulheres Mil, however, most initiatives had an isolated and sporadic character without being recognised properly as social innovations. With Mulheres Mil, promoting social innovation become an institutionalized process with systematic actions and national representation. Mulheres Mil demonstrates and reinforces the importance of implementing educational policies with a gender approach. According to students oral narratives, access to education and training contributed to changing these women's lives in many ways, namely increasing the likelihood of entering in the job market, improvements in family relationships, improvement of the performance of their children at school, as they have come to help them and encourage them in their studies. In addition, they gained increased respect from their spouses, partners and family members, reducing domestic violence, and they assumed the role of multipliers of knowledge in their communities, encouraging and mobilising other women to follow the same trajectory.

Given the positive impacts presented and the need to meet the demand of non-traditional students, continuing this action requires consolidating educational plans

that integrate aspects of preparatory education, professional training and the field of technology, envisaging the improvement of education levels of less-favoured groups of the community and contributing to raise self-esteem. Within this context, in course contents, projects, workshops and thematic practices related to citizenship, women's rights, health, environmental issues, interpersonal relations, digital inclusion, among others, should be included.

The methodology used in Mulheres Mil seeks to make the process of expressing value for the woman student as the primary concern. One of the specific issues for the program to violence against women in its various expressions, with coordinators reporting that violence remained a part of life for many students. Thus, reinforcing actions and initiatives on this topic in order to clarify their rights, safety nets, and institutional support are still needed in order to strengthening and empowering women. Increased schooling for many of those women may be the best alternative since there are several accounts of women interested in continuing studying with demands in computer skills, food, health and beauty, production and income. Also, the interest on the completion of basic education has been obtained in the research undertaken. Some testimonies of campuses' coordinators make this clear:

> Jaqueline, Araranguá campus: *"... The* Mulheres Mil *Program helps to improve the quality of life of many women, but also changes positively those who work with them: teachers, administrative staff and other employees, who make this program to have such importance!"*
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> William, Chapecó campus: *"... I say that this experience is humanizing our campus, since in the middle of technological courses, there is a course aimed at women in vulnerable conditions with their distinct peculiarities, in which all yearn for a better life."*
>
> Tatiane, Criciuma campus: *"... Positives features were many: being part of the course coordination with a contact list of interested students; rely on people who know the local solidarity economy movement; meet the schedule of*

classes settled at the beginning of the course; find already established partnerships, such as with the CRAS; have a proactive scholarship; in short, are aspects that make a difference."

Actions such as those reported in this paper contribute directly to the achievement of the IFSC's mission to go beyond the traditional teaching and dissemination of scientific and technological knowledge, but also its involvement with the community, especially educating individuals able to exercise citizenship at large. This strong relationship with the institutional mission, together with the method used and the results obtained, expanded Mulheres Mil and positioned it as a priority action within the IFSC. More importantly, the analysis of the current case study regarding the process of social innovation allows learning from this experience and the background of aspirations and convictions of students that motivated their participation (Evers & Ewert, 2014). As found by Baker and Mehmood (2015), this analysis allows understanding social innovation in the context of the association between social processes and community development, providing a better understanding of how social innovation can contribute to promoting sustainable development. In that sense we see here a resonance with Nicholls et al. (2015) argument that social innovation can be regarded as a response to "patterns of modernity that have marginalised certain populations and that see the individual citizen as essentially an economic/consuming actor, not as an active participant in collective decision-making" (p. 6).

Finally, in the context of Benneworth and Cunha's (2015) social innovation process model, the current case study makes clear some important characteristics of that process. Firstly, successful social innovation processes require the involvement of a complex network of formal and/or informal partnerships between various stakeholders (as found by Sharra & Nyssens, 2010). In this particular case study, there was a strong involvement of IFSC with local authorities, local social and health services providers, and civil society organizations, among others. Indeed, Huggins and Williams (2011) argue that this kind of networks could potentially be regarded as "ecosystems", due to their systemic, complex and evolving nature.

Secondly, deep collaboration between the various stakeholders and agents is absolutely vital for successful social innovation. In that regard, our findings match those of Moor (2013) who emphasised that collaboration patterns amongst agents should be seen as bridges since they span general lessons learnt and situations of specific communities. Thus, individuals and organizations engaged in social innovation practices should learn how to work collaboratively and, simultaneously, understand the complexity inherent to social systems. This characteristic is very important in the context of the Mulhares Mil social innovation due to the nature of the social problem identified – women in vulnerable social contexts.

Thirdly, the non-linear nature of the social innovation process proposed is evident in the context of the current case study. The implementation of the Mulheres Mil Program has implied feedbacks not only from the campuses coordinators but also from partner organisations as well as the target public. This kind of feedbacks and interactions are in line with the reasoning of Russel and Williams (2002, p. 55): "complex influences, unpredictable courses of development, multiple sites of innovative activity, and […] extensive innovation during configuration and appropriation, has led to the overarching narrative frame of an innovation journey".

Finally, the involvement of beneficiaries (in this particular case, women in vulnerable conditions) in different stages of the process was important in order to achieve a successful implementation of the Program. As emphasised by Sharra and Nyssens (2010, p. 8) and Voorberg et al. (2013, p. 3) respectively, social innovation is a "learning process supposed to give to the end users the tools to take care of themselves" and that "deliberately seeks the active participation of citizens and grass roots organizations in order to produce social outcomes that really matter".

5. Conclusion

Social exclusion problems, namely women from disadvantaged backgrounds and away from the labour market, call for new approaches to overcome these problems and to advance social justice, where each individual can fully realise his or her potential. In this context, social innovation can be seen as a way to address this issue and enhance the effectiveness of public policies with the aim of maximising positive social impact. This paper used the Benneworth and Cunha (2015) social innovation process model to understand the adoption and implementation of a social innovation by a Brazilian higher education institution – the Mulheres Mil Program. This program aimed to provide educational and training services for a vulnerable, socially excluded, disadvantaged and underprivileged group of society – socially excluded women. In the context of the model, it is clear that IFSC has been involved throughout the process. Although IFSC was not the generator of the new idea, it was responsible for the implementation of the solution and helped to mobilise a coalition of interested stakeholders, which was very important to input ideas for the project. As te social innovation moved to upscaling, IFSC was important in expanding Mulheres Mil following its general good acceptance in the community, certainly aided by its close correspondence with a policy priority of the Ministry of Education.

Our results offer evidence that a higher education institution (HEI) could potentially function as a key player in promoting social innovation initiatives. This provides a more systematic understanding of university-community engagement based on a social innovation perspective bringing back some balance and perspective to literatures around university social contributions more generally. An HEI can contribute with different kinds of resources and inputs (from staff and teachers to spaces for lectures or conferences facilities to stimulus of innovation exchanges, and social innovation workshops and meetings) to foster new social innovation ideas or practices. In our study, innovation was directed to active learning and continuous professional development of women in vulnerable conditions. HEIs can also act to catalyse other partners' actions and contributions, working with civil society organisations (or not for-profit organisations) who identify community needs, thereby contributing to local communities', encourage civic engagement, and mobilise social capital (Otto & Laino, 2012). Our main policy implication is that HEIs possess the necessary resources to

support social innovation initiatives thus contributing to community development processes and societal development.

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