

## An Engaged Curriculum to Train Community Social Workers: Main Challenges and Lessons Learned

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### An Engaged Curriculum to Train Community Social Workers: Main Challenges and Lessons Learned

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Abstract: The paper presents and discusses an ongoing process of curriculum design for the MA Course in Social Work and Social Policies at the University of Sassari. The first part of the paper briefly outlines the overall Higher Education (HE) policy context within which the need for an engaged curriculum arises. It also briefly introduces some key concepts and guiding principles that innervate the process of curriculum design described in the second part of the paper. Notably, we will shortly outline the two pillars upon which our curriculum design is based: Community Social Work (CSW) and Community Based Participatory Research (CBPR). The central part of the paper describes the process through which the curriculum design progressively evolved till its present shape. This is done by referring to the progressive concatenation of three different projects, respectively named PERARES - Public Engagement with Research and Research Engagement with Society, EnRRICH - Enhancing Responsible Research and Innovation through Curricula in Higher education, and K4C - Knowledge for Change. In the third part of the paper, drawing on evaluation exercises that were implemented at different stages of the process, we present and discuss some of the lessons learned and main challenges that we have being facing.

Keywords: Community social work, Engaged curriculum, Community Based Research, Third mission, Higher Education

### 1. Aims and contents of this paper

This paper presents and discusses an experience developed within the last ten years at the University of Sassari (Italy) within the EU policy principles that will be briefly recalled in paragraph 2. Notably, we will hereafter present the process that led to the present curriculum design of the MA Course in Social Work and Social Policies. As we shall see, this was made possible building on effective EU support thanks to two EC funded projects: PEARES - Public Engagement with Research and Research Engagement with Society, which ran from 2010 to 2014 under grant agreement SiS-CT-2010-244264; and EnRRICH - Embedding Responsible Research and Innovation through Curricula in Higher education, which ran from 2015 to 2018 under grant agreement no 665759. Results achieved through those two projects have now been taken over and developed further thanks to the K4C - Knowledge for Change programme, which is coordinated by the UNESCO Chair in Community Based Research and Social Responsibility of Higher Education and involves many organizations beyond the European area, notably in the so called Global South and Excluded North.<sup>1</sup>

Although this was not fully foreseeable ten years ago, today we can say that along the sequence drawn through those three streams of activities a coherent path progressively evolved which led to relevant innovation in the MA Course curriculum design. This was not a linear process, as it faced ups and downs, notably related to some of the challenges that will be shortly pointed out further down in this paper. In this respect, we can reflexively state that the very backbone of this coherent path rests upon the principles and practices of the FOIST Laboratory for Social Work and Formative Processes. The Lab was funded 45 years ago by Alberto Merler at the University of Sassari with a vision to aligning learning, research, and engagement through factual involvement of students, practitioners, and researchers (Chessa et al., 2016).

Nowadays, the FOIST Lab is active within the Department of Humanities and Social Sciences which hosts both the BA and MA courses in Social Work. In the Italian higher education context, the University of Sassari is considered a small-medium sized institution which presently counts some 590 faculty members and some 13.000 students.<sup>2</sup>

The early vision of engaged teaching and research which animated the FOIST Lab since 1977 is still nowadays a primary source of inspiration

<sup>&</sup>lt;sup>1</sup> For more details on these projects see below. For further information see the respective web links. PERARES: *https://www.livingknowledge.org/projects/perares/*; EnRRICH: *https://www.livingknowledge.org/projects/enrrich/*; K4C: *https://www.unescochair-cbrsr.org/k4c-2/*.

<sup>&</sup>lt;sup>2</sup> Sources: Cineca (*https://cercauniversita.cineca.it/*) and MIUR – Italian Ministry for Education, University and Research (*http://ustat.miur.it/*).

for the innovations that are progressively introduced in our teaching and research practices, including those presented hereafter. Within such a vision, we came to design the present curriculum of the MA Course in Social Work and Social Policies with the aim to connecting two such streams of social changemaking approaches as Community Social Work (CSW) and Community Based Participatory Research (CBPR). In paragraphs 3 and 4, we shall briefly recall some of the main features of those two approaches. We shall thereafter retrace the sequence drawn by the three aforementioned projects, meanwhile recalling some of the guiding principles that have guided our work.

In the last part of the paper, we shall briefly present and discuss some of the main challenges that we have being facing. Drawing on evaluation exercises that were implemented at different stages of the process, we will outline the main lessons learned, and we will finally try to sketch out some of the possible ways forward.

#### 2. The European policy context

The success of the European project depends on the EU's ability to envision, define, and build a better future for all European citizens, as clearly highlighted in the Commission's White Paper on the Future of Europe (COM, 2017d). In full coherence with the development lines of the White Paper, both the "Investing in Europe's Youth" initiative (COM 2016b) and the New Skills Agenda for Europe (COM, 2016a) have been developed by the EU. These have made clear that effective education and training are the indispensable basis for the development of fairer, more open, and democratic societies as well as of sustained growth and full employment. The EU's "pillar of social rights" (COM, 2017c) and the recent reflection paper on harnessing globalization (COM, 2017a) identify education and skills as a priority in strengthening European cooperation.

Higher education and its close connections with research and innovation play a crucial role both in the individual development of people and in social development, creating highly skilled human capital but also, and above all, the engaged citizens that Europe needs for the success of the European project itself.

The European Commission, in close contact with policy makers, has worked and still works to support the development of higher education policies in EU countries in line with the Education and Training 2020 strategy (ET2020).<sup>3</sup> The strategic framework for European cooperation in ed-

<sup>&</sup>lt;sup>3</sup> https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework\_en. To trace the development of the European policy objectives in education and training and the transformation of governance 'instrumentation' that has been increasingly used to

ucation and training is a forum that enables Member States to share best practices by learning from each other as well as to collect and disseminate knowledge and advance policy educational reforms both at national and regional level. The framework is grounded on the lifelong learning approach: it therefore addresses outcomes from early childhood to adult vocational and higher education and is designed to cover learning in all contexts, formal, non-formal and informal.

ET 2020 pursues the following four common EU objectives:

- 1. Make lifelong learning and mobility a reality
- 2. Improve the quality and efficiency of education and training
- 3. Promote equity, social cohesion, and active citizenship
- 4. Enhance creativity and innovation, including entrepreneurship, at all levels of education and training.

Consistently with ET2020, the renewed EU Agenda for Higher Education (COM, 2017b), adopted by the Commission in May 2017, identified four key objectives for European cooperation in the field of higher education: tackling future skills mismatches and promoting excellence in skills development; building inclusive and connected higher education systems; ensuring higher education institutions contribute to innovation; supporting effective and efficient higher education systems. The Commission has proposed specific actions at EU level connected to such objectives, supported mainly by different strands of the Erasmus+ and Horizon Europe programmes as well as, more recently, by further initiatives, still in the context of the European Education Area: in particular, the focus on the creation of networks of European universities is considered an important tool for a significant change to higher education practices, through integrated and composite curricula and mobility, thus fostering quality, excellence and innovation as well as developing civic engagement within higher education.<sup>4</sup>

The civic engagement component in education has its counterpart in EU research policies which are aimed at promoting and enforcing Responsible Research and Innovation and, more recently, open science. These, as we shall illustrate further down in this paper, constitute relevant points of reference for curriculum design at the MA Course in Social Work and So-

achieve policy coordination and domestic adaptation in the member states, see Klatt & Milana (2020).

<sup>&</sup>lt;sup>4</sup> Even if this interest in developing civic engagement within higher education is quite widespread, there are many different concepts of community service, outreach, and engagement. The wide range of activity encompassed by community engagement suggests that a precise definition of the "community mission" is difficult and organizing and coordinating such activities is a complex task (Jacob et al., 2015).

cial Policies at the University of Sassari which, as said, stands on two legs: Community Social Work and Community Based Participatory Research.

### 3. Community Social Work

Community Social Work (CSW) is a complex approach based on an ecological-systemic matrix that combines the typical professional social work's knowledge, skills, method, techniques, and tools to contribute to community social change (Allegri, 2016).

In Italy CSW refers to an understanding of social work as based on a unitary method that is applied by the social worker in dealing both with the individuals and their community. This approach is based on a processual and inductive action that involves community members in a process of mutual and equal partnership which is aimed at formulating cognitive and operational hypotheses to pursue societal change, through a process of constant verification.

In this perspective, the social worker takes on the task of accompanying community members in developing own capacities and potentialities through the weaving of a continuous dialogue with the community, which is considered as a subject able to activate itself and to activate its own members (Martini Sequi, 1988). CSW envisages going beyond the promotion of initiatives aimed at individuals or families to move towards the collective dimension and the promotion of a dialogue and interconnection between the different community components and sub-systems, also considering the various levels that make them up. Which is not an easy task.

CSW conceives the community as the main subject – rather than object – of the intervention: a positive collective actor who can take charge of its wellbeing through effective involvement of all its members (professionals, experts, institutions, politicians, organisations, citizens) in a process of collective empowerment that considers individual problems as social problems (Ferrario, 1996; Allegri, 2016). This specific perspective implies working out professional actions in cooperative, inclusive, confrontational, and reflective contexts (Ripamonti, 2011). The underlying logic envisages a collaborative, shared and participatory design approach that involves the various community actors at all stages, each with their own skills and knowledge.

The orientation is towards the promotion of a more inclusive 'competent community' that can stimulate its members awareness and knowledge of the issues at stake. A community able to strengthen social ties and activate internal resources so to engender change through collective participation and problem solving capacity (Gui, 2004). In this vision, participation and social aggregation act as a catalyst. The term participation is understood in its double meaning: as "taking part in", as well as "being part of" something. It is therefore conceived both in terms of belonging and inclusion. As such, it can be seen as a functional tool to nurture learning and training, as well as aggregation and empowerment, that can bring about societal change and "revolution" (Merton, 1949; Merler, 2006).

Change is promoted by means of a conscientization process (Freire, 1970) which is based on the idea that each person (taken individually or as an aggregate) bares capacities, skills and competencies that are not always manifest (Sen, 1992; Nussbaum, 2011). Thus, in the CSW approach, the ability to get to know in greater depth the dynamics of a specific community context (its resources, needs, problems etc.) is crucial to formulating and activating possible solutions, and to setting in motion actions that can provide effective responses through participation (Dal Pra Ponticelli, 2003; Gui, 2004). Not only does participation bring about solutions to actual problems, but, by involving the population in the definition of policies and actions, it promotes a wide sense of citizenship, ownership and social justice (Gui, 2004).

This does not go without conflict and power struggles, precisely because effective CSW is about change. As an anti-oppressive approach CSW aims at moving away from the system logic in which practitioners themselves are entangled (Gui, 2004; Jones, 2001) so to activate transformative change through a new configuration of power relations within the whole operational context (Freire, 1970; Payne, 1997; Dominelli, 2002; Allegri, 2016). Collective action is mobilized to redefine role-status expectations by means of a conscientization process. Group and community dynamics are to be managed in such a way as to allow people to expand the scope of activities within which they can act for change and improve their living context and their overall well-being (Dominelli, 2002). This requires a weighty renegotiation of power asymmetries, as empowerment is expected to take place as a consequence of a renewed configuration of the overall social work approach, as well as of relationships with the community and within the community. Undoubtedly, this is not an easy task for social workers who are called to act on two fronts: internal (within own working context) and external (with communities).

Therefore, CSW requires social workers and social change practitioners in general to be equipped with the technical competences and strategic thinking abilities that are necessary to handle conflict and manage power unbalances. Hence the need for solid analytical and cooperative competences declined through systematic reflexivity.

### 4. Community Based Participatory Research

A similar emphasis on the centrality of the community is placed by what the Anglo-Saxon literature defines as Community Based Participatory Research (CBPR): an approach based on the active involvement of citizens as co-researchers and the enhancement of skills, knowledge and know-how within the community.

Within such an approach, community and academic knowledge are shared, as well as decision-making and ownership (Israel et al., 1998). The aim is to balance the relationship between knowledge production (research) and application (action) through a cyclical action that creatively articulates between intervention and knowledge.

CBPR implies a collaborative and constructionist approach aimed at producing societal change by means of shared analysis of the issues faced by the community. Unlike classic social research approaches, CBPR does not take the community as an object of observation but is oriented to working out collaborative action *with* the community, rather than *on* it (Strand et al., 2003; McNiff Whitehead, 2006; Mayo et al., 2013; Reason & Bradbury, 2006; Sclove et al., 1998).

Such an approach normally leads university lecturers and students to come into deep interaction with community members. This implies considering power and resources asymmetries that normally exist among 'change advocates' and the status quo structures.

According to Capecchi (2006), this approach can be referred to as a kind of co-research to be run with those who classic research approaches tend to consider as objects, rather than subjects. This reversal of perspective encompasses the idea of producing knowledge and developing self-determination and growth through interaction and belonging.

The method is articulated and adapted to real-world problems, needs and demands. The very essence of CBPR lies in community work aimed at ensuring the improvement of the living conditions of community members by strengthening self-confidence and sense of belonging, in the perspective of self and mutual help (Twelvetrees, 2008). It is about fostering a competent community that can define the objectives of the policies needed to improve its own well-being (Gui, 2004).

Like other participatory research approaches, CBPR projects and activities imply a certain degree of conflict which is connected to power unbalances and diverging perspectives and interests among participants (Vargiu, 2008). Hence, like community social workers, community based researchers must regularly monitor their action through systematic reflexive practice, notably aimed at critically addressing the issue of power asymmetries. This also implies that a great effort be dedicated to providing for a safe and healthy relational environment, with the aim not to avoid (inevitable) conflict, but, rather, to funnel it towards truly transformative societal change.

# 5. Enacting social responsibility of research and higher education at the University of Sassari: the PERARES project

From an academic perspective, CBPR is a form of engaged scholarship intimately connected to the idea of universities moving away from the ivory tower model where knowledge production is generally abstract and largely disconnected from the needs and concerns of the community (Strand et al., 2003; Collini, 2012). The engaged university is a place of social practice, i.e. a place devoted to promote societal change towards more democratic, inclusive and solidaristic communities by enhancing collective responsibility, valuing diversity and reinforcing their composite connective tissue (Hall & Tandon 2021; Merler, 1996).

At the University of Sassari, the guiding principles of engaged scholarship animate the work of the FOIST Laboratory for Social Policies and Formative Processes. As said above, this included collaborative work with students and communities since the very foundation of the FOIST Lab. Yet, albeit extended practice, engaged scholarship was not formally embedded in the study curriculum until recent time when, in 2014, the Laboratory was associated to the PERARES project, which was funded by the EC's 7th Framework Programme.

PERARES' main aim was to strengthen public engagement in research (PER) by involving researchers and Civil Society Organisations (CSOs) in the formulation of research agendas and the research process. In this perspective, it explored ways by which community-university cooperation could encourage, stimulate, and generate research questions from civil society that could be dealt with by universities and research organisations. This overarching idea of the project built on the experience of Science Shops. According to the Living Knowledge website, «Science Shops are not "shops" in the traditional sense of the word. They are small entities that carry out scientific research in a wide range of disciplines – usually free of charge and – on behalf of citizens and local civil society. The fact that Science Shops respond to civil society's needs for expertise and knowledge is a key element that distinguish them from other knowledge transfer mechanisms». In short, therefore, «A Science Shop provides independent, participatory research support in response to concerns experienced by civil society.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Living Knowledge is the international network of Science Shops. Its websites (*https://www.livingknowledge.org/*) hosts information on main projects promoted by the network, including PERARES and EnRRICH.

Science Shops act in a variety of ways as mediators between citizen groups and research institutions and have been contributing to social change through co-creation of knowledge by involving civil society organizations and the world of research in open dialogue, public engagement, and debate. Their specificity may be identified in a bottom-up approach to research. The topics are identified upon request of citizens and/or CSOs on issues of common interest (Mulder & De Bok, 2006).

Generally, universities run Science Shops projects by involving students in research activities which they experience under expert supervision. Students are therefore given the opportunity to learn and to improve their skills through training in real context (Zaal & Leyddesdorff, 1987). Direct involvement of students in research oriented to respond to actual issues of societal concern showed to be a very effective way to address some key learnings that are listed in the so called "Dublin Descriptors". As Hende and Jørgenses (2001) argue, the explicit request of the community to investigate a concrete problem allows students to improve both scientific skills that are proper to academic training, and socially relevant practical skills to be spent in everyday life.<sup>6</sup>

Science Shop projects are normally accredited as curricular activities in various forms, typically as final dissertation thesis work, internships, research projects, etc. Through the PERARES project, besides other things, Science Shops projects were piloted and thereafter institutionalised at the University of Sassari, mainly as MA students' final dissertation thesis, although other possible applications were also implemented at BA and PhD level. Final dissertation Science Shop projects for MA students in Social Work and Social Policies are today called TUC, an acronym which stands for "Tesi di Utilità Collettiva", i.e., Collective Utility Thesis, to recall the objective of serving the public good.

Among the first Science Shops projects that we launched at the University of Sassari was, for instance, a final dissertation that responded to the request coming from a public institution that needed background inquiry to

<sup>&</sup>lt;sup>6</sup> After the Ministerial Conference that took place in Prague in 2001, a group of experts from different countries drafted a series of learning outcomes that should be common to all qualifications of each of the three Bologna Process cycles. Those objectives were described by a set of general descriptors, which eventually became known as "the Dublin Descriptors". As far as the second cycle is concerned, Science Shops projects notably favour descriptors related to: originality in developing and/or applying ideas, often within a research context; applying knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts; integrating knowledge and handle complexity, and formulating judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of own knowledge and judgments; ability to communicate conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously.

elaborate its Charter of Services. Furthermore, many requests coming from public and private non-profit entities have to do with evaluation. For instance, a TUC provided for a set of customer satisfaction instruments for a social cooperative providing support and services to elderlies; while another one carried out in-itinere and final evaluation of a youth promotion project organised by the local municipality. A special case was the mapping of social resources in the city of Sassari, which was conducted by two subsequent waves of practicum students to respond to a need expressed by the municipal social services. Another TUC went as far as engendering a whole new CBPR stream: this eventually evolved onto a stable community-university cooperation and partnership which finally generated the PISA platform which will be mentioned further below at paragraph 8.

### 6. The EnRRICH project

The outcomes and legacy of the PERARES project was shortly thereafter picked up and brought further thanks to the EnRRICH project which explicitly aimed at embedding Responsible Research and Innovation (RRI) in Higher Education curricula.

The European Commision defined RRI as «an ambitious challenge for the creation of a Research and Innovation policy driven by the needs of society and engaging all societal actors via inclusive participatory approaches» (EC 2012: 1). The expression Responsible Research and Innovation «refers to the comprehensive approach of proceeding in research and innovation in ways that allow all stakeholders that are involved in the processes of research and innovation at an early stage (A) to obtain relevant knowledge on the consequences of the outcomes of their actions and on the range of options open to them and (B) to effectively evaluate both outcomes and options in terms of societal needs and moral values and (C) to use these considerations (under A and B) as functional requirements for design and development of new research, products and services» (EC 2013: 3).

EnRRICH piloted several activities and gathered information on best practices in embedding RRI in academic curricula. The goal was to examine and share these models of practice and draw on lessons to influence both practice and policy, and, at the same time, to improve the capacity of students and staff in higher education to develop knowledge, skills and attitudes that support the integration of RRI in curricula by responding to the research needs of society as expressed by CSOs. This was done by identifying, developing, piloting, and disseminating good practice and relevant resources to embed the different RRI methods in academic curricula across Europe.

Like other EnRRICH partners, the team at the University of Sassari ran pilots at local level that would thereafter be shared and compared with other experiences and practices developed elsewhere. One such pilots explored the possibility of integrating RRI into the Social Work professional traineeship. Two more pilots implied the initiation of two 6 ECTS courses at MA level respectively on "Responsible social research and innovation" (in the first semester) and "Community based action research" (in the second semester).

As to professional traineeship, in academic year 2015/2016 a series of "altervision meetings" was carried out with students and their placement supervisors to discuss the skills that were being acquired through the traineeship conceived as experiential, reflective and transformative learning. The meetings involved students and thereafter associated their supervisors so that relevant professional skills and knowledge could gradually emerge, become explicit and usable. A PhD thesis eventually discussed the process and its outcomes (Laconi, 2017). Besides those pilots, EnRRICH also contributed to further consolidation of TUCs which are nowadays a distinctive component of the Social Work and Social Policies MA Course curriculum at the University of Sassari.

Setting up and running pilot activities within EnRRICH did not go without difficulties, as we had to face a major unforeseen contingency when, in academic year 2016/17, the MA Course in Social Work and Social Policies at the University of Sassari had to face a sudden stop of students' matriculation. This was due to the progressive, yet rapid changes of the funding system of Italian universities, as new regulations provided for an increasing share of funding being assigned according to students' enrolment ratio. Consequently, among others, the University of Sassari opted for the setting up of new courses to increase matriculation. Incidentally, this all happened in a context of progressive decrease of human resources due to generalized blockage of turnover. As a general rule, the combination of these two factors led to the setting up of new BA courses to the detriment of MA ones which, physiologically, have smaller numbers of students.

Like for any institutional governance process, although the origins of these changes can be traced back to budgetary instances, the very decisional process is regulated according to academic power dynamics and is therefore connected to such issues as unbalances among disciplines, strategic and tactical alliances, relative academic position of main actors involved in decisions and so on. As a result, albeit relatively high and stable enrolment ratio, the MA Course in Social Work and Social Policies was among the courses that had to leave room to new BA programmes. Albeit at high risk of perennialization, exceptional mobilization of internal and external resources allowed for the blockage of matriculations to be limited to just one academic year. A relevant support to tenacious negotiations notably came from the Regional organization of social workers: a strategic and operational partner to which we are bound by robust reciprocal engagement ties. Furthermore, the very existence of a Horizon 2020 funding – a relatively scarce resource among social sciences and humanities disciplines at the University of Sassari – also provided a relevant leverage for negotiation.

Besides pilot activities, the EnRRICH project provided for the sharing of best practices and a formalized evaluation programme. The latter was implemented under the coordination of the University of Sassari unit. Further in this paper we shall discuss some of the main results of this evaluation exercise which engendered learning and guided further efforts to improve the educational offer of the MA Course. This was eventually further enforced thanks to the involvement in a new initiative: the K4C – Knowledge for Change Programme.

### 7. K4C - Knowledge for Change

K4C is an international programme promoted and coordinated by the UNESCO Chair in Community Based Participatory Research and Social Responsibility in Higher Education. It was conceived with the aim of training the next generation of Community Based Researchers by establishing training hubs across the world, notably in the so called Global South and Excluded North.

Each hub delivers training by means of specific programmes that are suited to local contexts yet agreed upon with coordinators and other partners within a shared pedagogical framework. Each hub typically comprises at least one university and one community partner, normally a CSO. Training programmes are delivered thanks to the work of mentors and leaders in CBPR who themselves are trained according to a global standard developed by the UNESCO Chair.

The critical challenges facing humanity today require new understandings and solutions. Each K4C hub is therefore typically committed to one or more Sustainable Development Goal (SDG). This is connected to the idea that achieving SDGs requires new insights and connections at local and global levels. New understandings and innovative solutions have proven to be catalysed through the co-construction of knowledge carried out in respectful partnerships with local communities. In this respect, the K4C Consortium has developed global standards of curriculum and pedagogy for training the next generation of CBPR researchers. These are based on recent studies that have shown a growing demand for learning CBPR methodology among professionals and students, especially in hitherto excluded contexts in the Global South (Hall et al., 2005).

In 2017, the FOIST Laboratory for Social Policy and Formative Processes, of the University of Sassari, was the first European Hub to be established after specific training of two mentors who were accredited to the K4C men-

torship training programme. As anticipated above, the work of our hub is aimed at combining CBPR with CSW. As said, CBPR aims at producing social change through participation and co-construction of knowledge, while CSW promotes community well-being through collective activation. Both are based on the principles of equity, social justice and democracy and work through cooperation, empowerment, and participation to improve the living conditions of a community.

The idea behind the MA Course curriculum that is progressively taking shape at the University of Sassari is based on the assumption that the two approaches can be mutually fertile and that a solid training, based on the principles and methods underlying them, can provide a robust reference base for future professionals able to move confidently and effectively in the operational contexts that have been emerging for some time now, in relation to the most recent orientations of social policies and in relation to the reconfiguration of old and new needs. The aim is to train a new generation of researchers and professionals capable of combining action-research and community work and interested in combining knowledge and practices for change in an interdisciplinary and multi-professional perspective.

Building on the EnRRICH experience, this is nowadays done through specific courses, but also by means of a peculiar articulation of the students' learning experience. Today only one of the three EnRRICH pilots is definitively consolidated within the curriculum: the Community-based action research course which is now run under a different heading ("Social research and community development"), but holds same contents and structure, i.e., a one semester course worth 6 ECTS. Through the K4C programme another training activity was piloted: the Community Action-Research Laboratory which is run jointly by all five authors of this paper. The presence of the two mentors who are also social workers (Francesca Antongiovanni and Valentina Ghibellini) ensures that the CSW principles are appropriately considered along with the focus on CBPR. The Laboratory has been piloted as a one semester optional course. The first edition was thoroughly evaluated by means of extensive reflective practice and a final focus group with students. This pilot faced a difficult start, as it was set to begin precisely when the first lockdown due to Covid-19 pandemic was decreed in Italy. Hence the radical challenge for a Laboratory which was conceived to extensively build on fieldwork. We decided to address this difficult situation by means of such fundamental of CBPR and CSW as collective reflexivity and cooperation. This eventually allowed for enhanced solidarity among participants and thereafter facilitated mutual learning. The challenges raised by this unexpected situation as well as the results of the evaluation were published on a special issue of the Italian Review of Social Work dedicated to teaching in times of pandemics (Antongiovanni et al., 2020).

Following up on that first experience, a second pilot edition was then initiated and we're now about to institutionalise the Laboratory as an optional modular activity that can be experienced by students in two subsequent semesters each worth 6 ECTS. The Laboratory aims at training critical and reflective professionals by means of a good balance between classroom activities, study, and fieldwork. Through the proposed activities we want to make sure that students acquire multiple ways of constructing knowledge by training them in the ethics and values of community work and ensuring a thorough understanding of the dynamics of power and partnership in the construction of knowledge. To do so, proposed activities include the study and origins of CBPR and its concrete applications in research projects on the ground, i.e., community projects in which the research question does not originate from the sole curiosity of the researcher but is negotiated with the community and relevant stakeholders, with the objective of producing tangible social change. Such an unconventional research approach, of course, proposes and uses a variety of methods of investigation and data collection that profoundly differ from classical research. This is why great importance is given to the study of CBPR epistemology and methodology within the Social research and community development course, while the Laboratory aims at familiarizing students with the such techniques as Photovoice and other Art-Based Research techniques, World Café, Critical Discourse Analysis or Storytelling.

Albeit somehow peculiar within the general landscape of Social Work and Social Policies curricula in Italy, if taken alone, those two courses cannot altogether be seen as a radical innovation of the overall educational offer. In fact, their potential is increased when a positive articulation takes place with the possibility for students to propose and work out a TUC. Therefore, the Laboratory is also aimed at encouraging students to explore and identify, early in their study career, potential TUC projects. Furthermore, this possibility can eventually pave the way for the truly innovative curriculum articulation which is presently proposed to students as a specific study path named "Social policies and community development". This option does not differ from the "classic" curriculum as to subjects and courses that are proposed to students, but rather in the way the learning experience is conceived and can be dealt with by students. This builds on a sort of "extension" of the TUC project along the learning itinerary: students attending the Laboratory can work out a comprehensive plan for a "community project", which will result in the final dissertation thesis. This gives the student the possibility to dedicate a whole year to a real CBPR project structured around actual community needs.

A community project is to be intended as something more complex than a TUC, as it not only implies responding to a cognitive need arising from civil society but articulating a whole action-research plan to tackle complex societal problems. Therefore, among other things, it requires time and a multidisciplinary approach, along with robust expert supervision. As to the first requirement, the timing for the Laboratory implementation is crucial, as this shall leave the student with at least a year before the prospected discussion of the final dissertation, so that sufficient time can be allocated to the complex negotiations that are usually required when working out a participatory community project.

Multidisciplinarity is ensured by connecting the community project to single courses. Therefore, for instance, a student working on a community project aimed at empowering a group of women through self-entrepreneurship discussed the possibility to integrate the course in Corporate strategies and policies with a special insight connected to this issue. Likewise, a connection with the course in Informatics was sought through the actual planning of the business-to-be website. And so on. This way, each study subject provided for in the curriculum can potentially be associated with an overall experiential learning process.

This, of course, requires robust expert supervision. Therefore, a special consultancy group for learning paths was established with the aim to orient and support students in managing their studies. Furthermore, besides the "ordinary" final dissertation supervisor, students opting for a "Community development" path can also count on the operational support of the two K4C mentors.

### 8. Some lessons learned

The process outlined above has been the object of several evaluation exercises which took place in the framework of each specific mentioned project and beyond. Therefore, the degree of formalization and deepening of each evaluation varied significantly. Nonetheless, we can affirm that their overall articulation engenders a rather robust analysis of outcomes achieved so far. It is not hereby possible to discuss evaluation methodology. Nonetheless, it is worth recalling some of the more structured evaluation activities that were implemented.<sup>7</sup>

Within PERARES, our team was actively involved in the evaluation Work Package (WP). A relevant output of that WP was a questionnaire aimed at both summative and formative evaluation of Science Shop projects, which we extensively used throughout the start-up stage of our TUCs. Within EnRRICH, our team led the evaluation WP and thus coordinated its main

<sup>&</sup>lt;sup>7</sup> Among conspicuous documentation, see the following for more in-depth scrutiny. PER-ARES: Emery et al. (2014). EnRRICH: Vargiu (2018; 2021). K4C: PRIA (2019). Overall: Cocco, Ghibellini & Vargiu (2019); Antongiovanni et al. (2020).

tasks of accountability (commissioned to an external evaluator) and learning. The latter made use of participatory methodology within a constructivist approach and generated both extensive and in-depth evaluation through cross-national comparison of pilot activities. K4C does not provide for structured evaluation activities, but, like PERARES and EnRRICH, ensures that constant monitoring leads to mutual learning, notably by means of regular reporting and exchange of practices. As it can be seen, a great deal of these evaluation activities aimed at generating learning and provided very useful insights for the progressive steering of the curriculum design. We cannot discuss evaluation outcomes in detail, but we can schematically summarize some of the main results emerged so far, so to evidence some of the lessons learned as well as the main challenges.

Most of the innovations that were introduced throughout the process described above are characterized by a consistent pedagogical approach based on students' involvement in learning experiences grounded in community engagement and real-world situations. Notably, learning with communities (Community Based Learning – CBL) allows for effectively dealing with such complex issues as power unbalances, inequalities, and conflict. This is not a new approach within the FOIST Lab's initiatives. The novelty resided in confronting students *systematically throughout the curriculum* with complex issues. This implies engaging them in making connections among different disciplines and working collaboratively while acquiring and mobilizing transversal competences. We observed that this can be rather challenging for some students and that, therefore, not all of them are prone to such a kind of pathway.

Thus, we learned, a frank pedagogical agreement must be established to make as early as possible clear that engaging in real-world educational experiences is time demanding (see also below) and often working outside one's comfort zone. One of the reasons that led to the institutionalization of the "Social Policies and Community Development" path resided in the need to make this peculiar pedagogical agreement clear. The peculiarities of this path are evidenced in the Single Annual File: the so called "Scheda Unica Annuale - SUA", which is intended to provide students with a thorough description of objectives, structure and contents of the educational experience delivered through the Study Course. This description is generally renewed in person at the beginning of the academic year with students who participate in meetings aimed at verifying their eligibility to access the course. Yet, we acknowledge the need for a more structured communication strategy, because the SUA is not suitable to effectively communicate with stakeholders: albeit initially conceived with that function, it actually is a multipurpose document mainly oriented to fulfilling a Course's accreditation requirements. Hence, dedicated means of communication should be developed to specifically address students and their families.

Furthermore, clear and fair agreements with community partners need to be established as well. This must be done by explicitly addressing existing power relations between academia, practitioners, and citizens, with the objective of instituting equitable partnerships. This is crucial for evident ethical reasons, consistent with an authentic Community Based approach, but also to create safe and just conditions for all actors involved in the learning experience. Reciprocity and trust are keys. This requires time and perseverance, which are not always compatible with the learning pace of students, nor are they attuned with the generalized pressure for students to rapidly gain credits or with the rigidity of strict academic schedules.

We addressed that challenge mainly by relying upon existing relationships with community partners while establishing and nurturing new ones. This is pursued notably though CBPR projects and activities, thus also strengthening the vital link between teaching and research. Since mobilizing a relevant amount of time and human resources are key to the development of common objectives, procedures, and results, we worked out a specific strategy to optimize resources and ensure sustainability by building on what we call Durable Partnership Instruments (DPI).

A DPI mutually engages a plurality of stakeholders in a long lasting cooperation which is not connected to a short-medium term objective or specific project, but rather to a series of long term objectives which stem from a shared vision. Examples of such DPIs are a social promotion association – named IntHum – that was created as an outcome of the PERARES project in partnership with three Civil Society Organizations (CSOs) to ensure institutionalised and durable linkages between science and society: nowadays IntHum acts as an instrument to ensure mutually beneficial cooperation between university and third sector.

Eventually, this partnership originated a new DPI which is different in nature and content but relies on similar principles and pursues analogous purposes: PISA a Participatory platform for Innovation, Social inclusion, and Active citizenship. In short, PISA is a shared vision which was elaborated through a fully bottom-up approach, initially kickstarted by a student engaged in a TUC and shortly thereafter continued by FOIST and IntHum which collaboratively worked with a group of residents of a disadvantaged neighbourhood of the city of Sassari who were aided by the municipal social services. FOIST and IntHum have been active in that neighbourhood for the last ten years now, with a series of diverse action-research projects and activities. While engaging with the community, we observed that many projects and initiatives aimed at tackling the great variety of societal problems that afflict the neighbourhood, yet with little or no continuity and/or coordination. This led us to eventually work out with community partners an open programmatic document (named PISA) which calls on all individual and collective stakeholders to join and work within a shared vision built around five "pillars" that act as a sort of community Sustainable Development Goals (Antongiovanni et al., 2019). This is expected to ensure the harmonisation and durability that are needed to generate effective change. Needless to say that this long and active permanence in the neighbourhood provides for the necessary levels of reciprocal trust and confidence with community members. And PISA provides for a framework for students' community based learning projects.

This kind of arrangement allows also for addressing problems connected to the partners' different and sometimes conflicting time scales and perspectives: the institution's, the teachers', the students', the community partners'. A cooperation scaffold like PISA allows for shared agenda setting and management, thus providing for a framework to equitably address issues connected to power relations and reciprocal adaptations among all parties involved. In this respect, we found that an excessive institutional rigidity can be counterproductive. In fact, real world issues and community partners' expectations do not necessarily coordinate with the articulation of courses in semesters or the like. This, we found, could be addressed by breaking down a complex societal challenge or a long CBPR programme into learning units or teaching modules. Which, of course, requires enhanced coordination and programming flexibility. Whereas, dealing with sometimes very diverse stakeholders asks for adequate operational infrastructure to harmonize the different agendas and organize participatory activities, and expert knowledge brokering to profitably connect users and producers of research and learning and eventually facilitate knowledge co-production and sharing (Ward, House & Hamer, 2009; Cocco, Ghibellini & Vargiu, 2019).

### 9. Main challenges and possible perspectives

Overall, we can summarize our experience so far by highlighting the tri-focused theory of change which led us. A constant feature of our work was based on the combination of universities' three missions of teaching, research, and service. This we tried to articulate with the social work tri-focal approach combining the people and personalisation of the learning experience, the community needs and resources with the organizational and institutional constraints and means. This tri-focused theory of change aims at enhancing students' autonomy through an emancipatory learning process which, at the same time, is consistently related to community empowerment through cooperation and equal partnership. Our experience shows that this is not an easy task, notably as it is constantly confronted with several challenges.

A competitive and turbulent institutional context does not favour this kind of experiences. Growing pressure for so called "measurable" productivity of teaching and research plays a negative role. Widespread instability of regulations, norms, institutional and organizational infrastructure endangers continuity, as initiatives and activities often rely on a delicate equilibrium.

Along our experience we could observe that the durability of this kind of initiatives is jeopardized by both internal and external factors. Internal fragility factors are connected to human resources: to their number and to their relational skills and motivations. External fragility factors depend on power struggles and unbalances within universities.

Similarly, relations with the community stakeholders and partners can be very fragile. Community engagement cannot be episodical but needs to be systematically addressed through well-defined and strategically oriented modes of action.

The recent emphasis, in Italy, on the so called 'third mission' of universities – which has been, for instance, the focus of a recent evaluation exercise – might provide momentum for a more widespread diffusion of community engaged teaching and learning practices. Yet, reasonable doubts exist about the consistency and authenticity of this new orientation, also given the persisting confusion among concepts, terms and related practices that can be, for instance, observed in the operational indications identified by ANVUR, our National Evaluation Agency. Likewise, we shall see whether reference made to such concepts as RRI, or Public Engagement and Open Science by the recent National Research Plan (PNR) 2021-2027 will go much further than a mere ritualistic mention of fashionable terms.

Not to mention the fact that the above both relate to research rather than to teaching. The substantial absence of rewarding that the Italian academic system acknowledges to teaching further justifies the need for practices that structurally connect teaching and research. We have remarked above that this requires relevant resources. Given the widespread funding limitations, two options can be therefore foreseen for the institutional up taking of community engaged teaching and learning such as the one descripted above: one is based on individual initiative of a highly motivated group of scholars, while the other is based on a specific institutional strategy that focuses on the constituent relationship between teaching, research, and service. Clearly, the two are not mutually exclusive: quite the contrary. Furthermore, they could eventually align with ad hoc policies aimed at rewarding such institutional orientations and individual commitment. The alignment across those three levels was observed to be positively connected with win-win outcomes for all involved stakeholders: students, teachers, institution, and community.

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### References

Allegri, A. (2016). Il servizio sociale di Comunità. Roma: Carocci Faber.

- Antongiovanni, F., Chessa, S., Cocco, M., Congiu, M., Deriu, R., Ghibellini, V., Merler, A. & Vargiu, A. (2019). Dignified Work in Poor Communities. In GUNi. *Higher Education in* the World 7. Humanities and Higher Education: Synergies between Science, Technology and Humanities (pp. 495-500). Barcelona: GUNi.
- Antongiovanni, F., Chessa, S., Cocco, M., Ghibellini, V. & Vargiu, A. (2020). Apprendere il lavoro sociale in contesti di emergenza. Il laboratorio di ricerca-azione di comunità. La rivista di Servizio Sociale, 2, 27-38.
- Capecchi, V. (2006). Per una storia della ricerca-azione in Italia. Inchiesta, 151, 1-13.
- Chessa, S., Cocco, M., Sharp, K. & Vargiu, A. (2016). The FOIST Laboratory: University Student Engagement and Community Empowerment Through Higher Education, Sardinia, Italy. In R. Tandon, B. Hall, W. Lepore & W. Singh. Knowledge and Engagement. Building Capacity for the Next Generation of Community Based Researchers. (pp. 220-229). New Delhi: PRIA.
- Cocco, M., Ghibellini, V., & Vargiu, A. (2019). Ensuring durability of community-university engagement in a challenging context: Empirical evidence on Science Shops. Gateways: International Journal of Community Research and Engagement, 2 (12). doi: http:/dx.doi. org/10.5130/ijcre.v12i2.6726
- Collini, S. (2012), What are universities for?. London: Penguin.
- COM (2016a) 381 final. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. A New Skills Agenda for Europe working together to strengthen Human Capital, Employability and Competitiveness.
- COM (2016b) 940 final. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Investing in Europe's Youth.
- COM (2017a) 240 final. Reflection Paper on Harnessing Globalisation.
- COM (2017b) 247 final. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a Renewed EU Agenda for Higher Education.

- COM (2017c) 250 final. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Establishing a European Pillar of Social Rights.
- COM (2017d) 2025 final. White Paper on the Future of Europe. Reflections and Scenarios for the EU27 by 2025.
- Dal Pra Ponticelli, M. (2003). Empowerment e servizi alla persona. In: F. Lazzari & A. Merler (a cura di). La sociologia delle solidarietà (pp. 142–148). Milano: FrancoAngeli.
- Dominelli, L. (2002). Anti-Oppressive Social Work Theory and Practice. London: Palgrave.
- EC (European Commission Directorate General for Research and Innovation) (2012). Responsible Research and Innovation. Europe's ability to respond to societal challenges. Bruxelles: European Union.
- EC (European Commission Directorate General for Research and Innovation) (2013). Options for Strengthening Responsible Research and Innovation. Report of the Expert Group on the State of Art in Europe on Responsible Research and Innovation. Bruxelles: European Union.
- Ferrario. F. (1996). Le dimensioni dell'intervento sociale. Un modello unitario centrato sul compito. Roma: Carocci.
- Emery, S., Kendall, H., & Frewer, L.J. (2014). Independent Evaluation of the Public Engagement with Research and Research Engagement with Society (PERARES) Project. Deliverable D9.3. Retrieved October 31, 2021, from https://www.livingknowledge.org/fileadmin/user\_upload/ PERARES\_Independent\_Evaluation\_of\_PE\_with\_Research\_and\_vice\_versa\_D09.pdf
- Freire, P. (1970). Pedagogia do oprimido. Rio de Janeiro: Paz e Terra.
- Gui, L. (2004). Le sfide teoriche del servizio sociale. I fondamenti scientifici di una disciplina. Roma: Carocci Faber.
- Hende, M., & Jørgenses, M.S. (2001). The impacts of science shops on university curricula and research. Utrecht: Utrecht University.
- Israel, B.A., Schults, A.J., Parker, E.A., & Becker, A.B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. Annual Review of Public Health, 19, 173-202. doi: https://doi.org/10.1146/annurev.publhealth.19.1.173
- Hall, B.L., Tandon, R. &Tremblay, C. (Eds.) (2015), Strengthening Community University Research Partnerships: Global Perspectives. Victoria, BC: University of Victoria.
- Hall, B. L. & Tandon, R. (Eds.) (2021). Socially Responsible Higher Education. Leiden, The Netherlands: Brill. doi: https://doi.org/10.1163/9789004459076
- Jacob, W., Sutin, S., Weidman, J. & Yeager, J. (2015). Community Engagement in Higher Education: Policy Reforms and Practice. Rotterdam: Sense Publishers.
- Jones, C. (2001), Voices from the Front Line: State Social Workers and New Labour. *The British Journal of Social Work*, 31 (4), 547-562.
- Klatt, G., & Milana, M. (2020). Education and Training 2020. In: Milana, M., Klatt, G. & Vatrella, S. (Eds.). Europe's Lifelong Learning Markets, Governance and Policy. London: Palgrave Macmillan.
- Laconi, A (2017). Apprendere e valutare per competenze: una proposta operativa per il tirocinio professionale di Servizio sociale. Doctoral thesis, PhD Course in Political and Social sciences, Università degli Studi di Sassari and Università degli Studi di Cagliari, XXIX Cycle.
- Martini, E.R., & Sequi, R. (1988). Il lavoro nella comunità. Roma: Carocci.

- Mayo, M., & Bendek Mendiwelso, Z. (2013). Community research for community development. New York: Palgrave.
- Mcniff, J. & Whitehead, J. (2006). All you need to know about action research. London: Sage.
- Merler, A. (1996). Le isole nei percorsi di autonomia e di autogoverno. In A. Merler, & M.L. Piga, Regolazione sociale insularità e percorsi di sviluppo (pp. 21-116). Sassari: Edes.
- Merler, A. (2006). L'azione comunitaria dell'io composito nelle realtà europee. Possibili conclusioni eterodosse. In Corsi di studio in Servizio sociale (a cura di) Nuove solidarietà nell'allargamento dell'Unione Europea. Milano: FrancoAngeli.
- Mulder, H.A.J. & De Bok, C. (2006), Science Shops as university community interfaces: An interactive approach in science communication. In D. Cheng, J. Metcalfe, & B. Schiele (Eds.). At the human scale: International practices in science communication. Beijing: Science Press.
- Nussbaum, M. (2011). Creating Capabilities. The Human Development Approach. Cambridge (MA) and London: Harvard University Press.
- Payne, M. (1997), Modern social work theory. London: Macmillan.
- PRIA Participatory Research in Asia (2019). Global Consortium of Knowledge-for-Change (K4C). Consortium Meeting Report: First Edition. Retrieved October 31, 2021, from https:// unescochair-cbrsr.org/wp-content/uploads/2019/07/K4C-Consortium-meeting-Report-Final-1.pdf
- Reason, P., & Bradbury, H. (eds) (2006). Handbook of Action research. London: Sage.
- Ripamonti, E. (2011). Collaborare. Metodi partecipativi per il sociale. Roma: Carocci.
- Sclove, R.E., Scammell, M.L., Holland, B. (1998). Community based research in the United States: an introductory reconnaissance, including twelve organizational case studies and comparison with the Dutch science hops and the mainstream American research system, Amherst (MA): The Loka institute. Retrieved October 31, 2021, from https://pdfs. semanticscholar.org/9c70/848c36fdb54bb3f7732f0327a87ebd55d3ed.pdf
- Sen, A. (1992). Inequality Reexamined. Oxford: Oxford University Press.
- Strand, K., Marullo, S., Cutforth, N., Stoeker, R. & Donohue, P. (2003). Community Based Research and Higher Education. San Francisco (CA): Jossey-Bass.
- Twelvetrees, A. (2008). Community Work. Basingstoke: Palgrave Macmillan.
- Vargiu, A. (2008), Le diversità nella ricerca-azione partecipata: alcune implicazioni metodologiche e procedurali. *Studi di Sociologia*, 2, 205-232.
- Vargiu, A. (2018). Evaluating the Embedding of RRI in Higher Education Curriculum: The EnRRICH Experience. In F. Ferri, N. Dwyer, S. Raicevich, P. Grifoni, H. Altiok, H.T. Andersen, Y. Laouris & C. Silvestri (Eds.). Responsible Research and Innovation Actions in Science Education, Gender and Ethics (pp. 15-20). Heidelberg: Springer Nature.
- Vargiu, A. (2021). Embedding RRI in Higher Education curriculum. Lessons learned from evaluation of the EnRRICH project. In V. Tudisca, C. Pennacchiotti & A.Valente (Eds.). Co-create. Competence development and educational research through the lens of knowledge co-creation (pp. 35-46). Roma: CNR-IRPPS e-Publishing. doi: 10.1460/978-88-98822-22-5.
- Ward, V., House, A. & Hamer, S. (2009). Knowledge Brokering: The missing link in the evidence to action chain? *Evidence and Policy*, 5 (3), 267-279.
- Zaal, R. & Leydesdorff, L. (1987). The Amsterdam Science Shop and its Influence on University Research: The effects of ten years dealing with non-academic questions. *Science and Public Policy*, 14 (6), 310-316.