

## Chapter 3

# Relevance of a CoP for a Reflexive Gender Equality Policy: A Structural Change Approach

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### Abstract

This chapter discusses the relevance of a community of practice (CoP) for a reflexive gender equality policy and reflects on the different approaches taken within TARGET. It is based on the literature on CoPs and structural change as well as on experiences in transferring this approach to the context of implementing gender equality plans (GEPs) within different types of research organisations. While the notion of the CoP was coined in the 1990s, literature on gender and such communities remained scarce until a recent wealth of research looked at the role played by inter-institutional CoPs in advancing structural change in research organisations. In this chapter, we examine whether and how an institutional CoP approach has been a useful vehicle for gender equality plan development and how the different configurations of internal and external stakeholders within the CoPs have impacted GEP implementation.

*Keywords:* Community of practice; reflexivity; power; structural change; gender competence; gender equality plan

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**Overcoming the Challenge of Structural Change in Research Organisations:  
A Reflexive Approach to Gender Equality, 53–69**



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doi:[10.1108/978-1-80262-119-820221004](https://doi.org/10.1108/978-1-80262-119-820221004)

## Introduction

This chapter discusses the relevance of a community of practice (CoP) for a reflexive gender equality policy and reflects on the different approaches taken within TARGET. CoPs refer to:

groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis. (Wenger, McDermott, & Snyder, 2002, p. 2)

The concept of the CoP was originally developed by Lave and Wenger (1991), who stated that learning happened in social relationships rather than through simple acquisition of knowledge. Three key dimensions define a CoP: shared interest and commitment on a domain of practice (domain), mutual engagement (community) and development of a shared repertoire of resources (practice) (Wenger-Trayner & Wenger-Trayner, 2015).

Within the TARGET CoPs, the domain is the advancement of gender equality in higher education, research and innovation (R&I), and is defined in accordance with the three European Research Area (ERA) gender equality priorities: removing gender-related institutional barriers to research careers; tackling gender imbalances and gender bias in decision-making; and integrating the gender dimension in education, R&I content. This is promoted within a framework of initiating a long-term process of structural change. The community is made up of members who come together to pursue interest in their domain, interact through activities, discussions and meetings, and engage in mutual learning. In our case, it refers to the group of people representing key institutional and academic stakeholders who come together to support gender equality plan (GEP) development and implementation. The practice involves creating a shared repertoire of resources, including stories, cases and tools, which helps practitioners to improve their practice. We regard practice as gender competence driven by ‘experiential knowledge’, which enables members of the CoP to identify institutional gendered practices and develop non-gendered alternatives.

This chapter is based on different sources, including our reflections as a supporting partner in the implementation of the CoPs in TARGET, a literature review and a documentary analysis, that is, of the monitoring and evaluation reports that have been produced throughout the project. The role of supporting partner meant participation in institutional workshops as well as provision of support throughout the whole GEP implementation process – from audit to GEP design and the development of monitoring indicators. The literature review looks at CoPs that transverse different fields – from business and management (Lee, Suh, & Hong, 2010; Murillo, 2011) to higher education (McDonald & Cater-Steel, 2017), nursing (Gobbi, 2010) and community development (Mathieu et al., 2013; Mohajan, 2017). This was complemented by a study of literature that specifically examines structural change for gender equality in R&I (Ferguson, 2021; Lombardo, Meier, & Verloo, 2010; Wroblewski, 2018). Useful literature

(grey and peer reviewed journals) in both thematic areas was identified throughout the duration of the project. The TARGET interim evaluation, which assessed the CoPs in each institution, was also consulted along with the latest monitoring reports of GEP implementing institutions available at the time of writing (TARGET, 2020, 2021).

The aim of this chapter is to examine the following questions:

- How and to what extent have the TARGET CoPs been a useful vehicle for GEP development?
- How have the different configurations of internal and external stakeholders within the CoPs impacted GEP implementation?
- What benefits and hindrances has the CoP approach provided in the implementation of GEPs?

### **Conceptual Framework: CoP and Gender Equality in Research and Innovation and Higher Education**

While the notion of the CoP was coined in the 1990s and has been widely applied in different domains, literature dealing with gender and CoPs remains scarce (Palmén & Müller, forthcoming). CoPs form part of a relatively new policy approach promoted by the European Commission to facilitate the uptake and successful implementation of GEPs in research performing (RPO) and research funding (RFO) organisations. Consequently, there is little literature available as yet on how this approach can help foster the effective adoption and implementation of GEPs. One of the first projects to take up this approach was the Gender Time project, which views its consortium members, that is, researchers, gender equality practitioners and senior managers, as a CoP (Barnard, Hassan, Dainty, Álvarez, & Arrizabalaga, 2017). Subsequent funded projects have employed different approaches to CoPs to facilitate structural change for gender equality. The ACT project (#ACTonGender) has established a wide range of different inter-institutional CoPs with different foci – geographical, disciplinary, thematic or by type of organisation (see Palmén & Müller (forthcoming) for an overview of the different CoPs supported throughout the ACT project). In their review of CoP literature, Thomson et al. (2021) in turn identify that inter-institutional CoPs can be conducive to effective GEP implementation by:

1. fostering knowledge sharing and knowledge creation to improve the effectiveness of existing practices within and across organisations (Probst & Borzillo, 2008);
2. driving institutional willingness and capacity to think and work together on gender issues by providing a forum for mutual learning and capacity building (Pyrko, Dörfler, & Eden, 2016);
3. reducing the opportunities for resistance by emphasising community engagement, participation, sharing, consensus and competence development (Cambridge, Kaplan, & Suter, 2005); and

4. providing support, expertise, inspiration, knowledge and tools for the different steps in GEP implementation, for example, through
  - a. tools and guidance to assess the status of gender (in)equalities in the institutions (audit);
  - b. ‘good practices’ implemented by other institutions – identification of actions to address gender inequalities (planning);
  - c. involvement of actors through participatory approaches (implementation);
  - d. access to networks of gender experts (to help develop relevant monitoring indicators); and
  - e. engagement of stakeholders (Espinosa, Bustelo, & Velasco, 2016).

These findings relate to inter-institutional CoPs for structural change for gender equality. So the question now is: To what extent are they relevant to institutional CoPs for gender equality in R&I?

In the TARGET project, CoPs were initially conceived as groups operating within each implementing institution to provide a crucial support structure for those tasked with designing, implementing and monitoring GEPs. The rationale behind adopting a CoP approach to initiate a reflexive process of structural change relies on different aspects. The CoP may play a mediating role, bringing together different actors, transcending hierarchies and functional roles and providing a forum for enhancing evidence-based reflection and learning by doing as an iterative process for building gender competence and tackling gendered practices. Structural change means that gender equality is widely discussed and explicitly embraced in organisational processes and practices through mutual engagement. Using a CoP approach to embed a GEP within an institution is a potentially successful strategy to ensure that structural change does not just depend on one ‘change agent’. Responsibilities are instead distributed within the institution, and different stakeholders are involved, thus addressing both the academic and the specific organisational logics (Heintz, 2018). Community engagement in the CoP may also help to handle resistance and ensure the GEP is sustainable.

By providing a reflexive, discursive space where key developments in GEP implementation would be shared, discussed, enacted and reflected on, the CoP was conceived in TARGET as a key factor in building institutional commitment and capacity to initiate structural change. Both aspects – institutional commitment and capacity – were deemed especially important in institutions with little experience in gender equality policies and in countries with a lack of corresponding national discourse. The involvement of representatives from both top management and the academic hierarchy was considered important to support the process of negotiating and building consensus on the short- and long-term priorities for action when it comes to gender equality in the organisation. The CoP was also seen as a forum to develop gender competences and the organisational capacity to tackle gendered practices. Literature on the role of change agents or gender equality practitioners engaged in structural change has highlighted how those who take on this role can often feel isolated and alone in their work and experience a need to recruit ‘allies’ in the organisation (Eriksson-Zetterquist & Renemark, 2016). The CoP approach promoted through the TARGET project

aimed to spread the responsibility for GEP implementation away from one sole agent to a community of agents with distributed responsibilities. The CoP was therefore also conceived as a mechanism to ensure the embedding of the GEP at various levels in the institution.

The main findings of the paper by [Thomson et al. \(2021\)](#) highlight the following three key components of a CoP approach to fostering gender equality in R&I:

- individual agency and activism
- leveraging credibility and legitimacy
- generosity of knowledge sharing and community learning

So to what extent do the CoP experiences of the TARGET project support these findings? If we examine the CoPs that have been developed and supported through the TARGET project for advancing gender equality in R&I and higher education organisations, we see that three main elements related to domain, community and practice have been central:

- domain – negotiating shared meanings
- community – tackling power relations and resistance
- practice – developing gender competences to identify gendered practices and co-producing alternative, non-gendered practices

[Wroblewski \(2021a\)](#) highlights how the meaning of gender equality cannot be taken for granted. There is a great variation in what gender equality in R&I means across Europe and ‘establishing a shared understanding of gender equality and common goals at the EC and Member State (MS)/Associated Country (AC) level’ – must be a priority in order to progress ([Wroblewski, 2021a](#), p. 5). This is also true for the institutional level. CoPs can provide a useful forum for the negotiation of shared meanings. Early practice-oriented studies examining CoPs highlighted the ‘construction of inter-subjective meaning via the social processes of sensemaking, interpretation and negotiation of meaning at the heart of communal interactions’ ([Contu & Willmott, 2003](#), p. 221; [Lave & Wenger, 1991](#)). The reciprocal cycles of constructing meaning and taking action ([Schulte, 2021](#)) highlight the central role of the construction of meaning in CoP development.

Structural change for greater gender equality in R&I invariably places power relations at the heart of any analysis. There is, however, some debate on the extent to which CoP literature is underpinned by a consensus-based approach or can accommodate a more conflictual reading of power relations. [Contu and Willmott \(2003\)](#) argue that Lave and Wenger’s interest in power relations is not marginal and point to the centrality and significance of power relations within their conceptualisation of learning processes. In this vein, they contend that concepts of contradiction, ideology, conflict and power are central for Lave and Wenger’s approach to situated learning. Yet they also note that ‘Lave and Wenger select functionalist or interactionist illustrations of their thinking, in which consensus and continuity are assumed’ ([Contu & Willmott, 2003](#), p. 292). So, employing a CoP approach for structural change proves an interesting context in which to

examine how change can be achieved – particularly through a ‘community’-based approach. How the different CoPs in the TARGET project engaged different actors with differing degrees of power and worked together for structural change helps us to understand how these issues can play out on the ground.

The concept of practice is central to the CoP literature. Gherardi (2009), for instance, stresses the primacy of *practice (above community)* and refers to CoPs as ‘practices of communities’ to make this point. ‘To know’, it is argued, ‘is to be capable of participating with the requisite competence in the complex web of relationships and among people and activities (Gherardi, Nicolini, & Odella, 1998, p. 274). Competence development forms a key part of practice:

The move from apprentice to expert occurs through participation in the CoP over the course of the project and in the institutional context – for example, by becoming a known gender expert in the institution who can provide information and opinion based on research literature and cross-national networks. For Lave and Wenger (1991) the movement from apprentice to expert through participation offers clear indications of the social situation of learning. (Barnard et al., 2017, p. 10)

For Lave and Wenger (1991), learning is located or ‘situated’ within everyday practices (e.g. work). However, learning is not situated in practice ‘as if it were some independently reifiable process that just happened to be located somewhere’ (Lave & Wenger, 1991, p. 35). Instead, it is conceived as ‘an integral part of generative social practice in the lived-in world’ (*ibid.*). This is congruent with the literature on gender equality in R&I, which highlights the importance of developing gender competences for the successful implementation of gender equality interventions (Palmén & Kalpazidou Schmidt, 2019; Wroblewski, 2021b). So while we can see that taking a CoP approach to structural change seems to make sense, what does this approach really add that is not covered by the usual structural change processes?

## TARGET CoPs

The approach taken in the TARGET project foresaw GEP implementation primarily through the setting up of a CoP within each institution. In practice, the types of CoPs established in the different implementing institutions varied greatly. Some of them – mainly the larger institutions (University of Belgrade (UB), Université Hassan II Casablanca (UH2C)) – set up an internal CoP that included different functional responsibilities and hierarchical levels yet was limited by organisational boundaries. The smaller institutions – two RFOs (Fondazione Regionale per la Ricerca Biomedica (FRRB), Research and Innovation Foundation (RIF)), one higher education quality assurance institution (National Agency for Quality Assurance in Higher Education) and one RPO (Hellenic Foundation of European and Foreign Policy) – tended to establish CoPs that branched out

beyond their institutional realm and included relevant external stakeholders from their local R&I ecosystems. The differences in the configuration of the CoPs were not just related to the size of the institutions but also to their main aims in terms of effecting structural change and whether this was conceived primarily as an internal process or linked to change beyond the boundaries of the implementing institution. While the priority of the universities was to initiate structural change within their own institution, the GEPs of the two RFOs and the quality assurance institution aimed to have a multiplier effect, steering change not only in their own institutions but also in affiliated research performing organisations. The involvement of external stakeholders was thus deemed a necessity. This diversity of CoPs with varying levels of incorporation of external stakeholders yet similar aims provides an interesting framework in which to examine how a CoP approach to structural change can promote gender equality in both RPOs and RFOs.

There was another CoP implementing entity in the TARGET project, namely the Network of Mediterranean Engineering Schools (RMEI), which – as a network of higher education engineering schools – already constituted an inter-institutional CoP from the outset. Accordingly, this chapter does not reflect on the RMEI CoP as its make-up is considerably different to that of the others (see Zabaniotou, Tsirogianni, Cardarilli, and Guarascio in this volume for a comprehensive account of this CoP).

### ***Domain: Negotiating Shared Meanings***

The domain should be well defined to affirm its purpose and value to members and stakeholders (Barnard et al., 2017). The domain is important as it serves as the basis of the group's shared identity, which has been identified as a critical success factor. A 'lack of identification with the CoP' is one of five reasons for CoP failure (Probst & Borzillo, 2008, p. 339). In the TARGET project, the domain is GEP implementation in line with the three ERA gender equality priorities: removing gender-related institutional barriers to research careers, tackling gender imbalances and biases in decision-making and integrating the gender dimension into research content and curriculum. This means that all implementing institutions were expected to develop a comprehensive and customised GEP that covered all three thematic areas. The CoP approach should enable a reflexive discussion to be carried out – from the audit process through to the presentation of the audit results and deliberations on the objectives and actions and monitoring indicators to be developed as part of the plan.

In this process, the CoPs played an important role in negotiating the meaning of gender equality in the different institutional contexts. It is widely acknowledged that the concept of gender equality is a 'wicked' one, conceptually contradictory and imprecisely defined. It is, in essence, a political concept that becomes the subject of struggles over its meaning and consequences for action (Lombardo et al., 2009). Thomson et al. (2021, p. 5) stress the importance of 'fostering the less tangible efforts for institutional equality-related change (Sidman-Taveau & Hoffman, 2019), such as group negotiation of meaning' (Annala & Mäkinen,

2017). The TARGET implementing institutions were partially selected because they were located in countries that were ‘inactive’ in gender equality in R&I at the policy level. A requisite for the call under which TARGET has been funded was that implementing institutions had to be in the initial stages of GEP development. This meant that they were essentially embarking on developing gender equality actions for the first time, so the meaning of gender equality had to be negotiated and discussed from scratch. What gender equality means could not be taken for granted. The lack of importance of gender equality – or at least the denial that gender (in)equalities were a problem – was a common issue in some implementing institutions, including those in countries like Serbia and Romania, where the proportion of women in Grade A positions is above the European average and women are in general comparatively well represented in academia. The National Agency for Quality Assurance in Higher Education (ARACIS) in Romania noted in this regard that the establishment of a CoP focusing on gender equality was initially difficult as gender equality is not a topic that is discussed either in national science and research policy circles or in (higher) education policy. Due to the high representation of women among staff or in management boards, gender equality is not seen as a problematic issue or as a topic that raises a need for action. A similar situation was faced in the UB. Research on gender equality in academia in Serbia highlights that the relatively high score on the UN Gender Inequality Index is often invoked in political discourse to support the claim that the country is doing well with regard to gender equality in higher education, stressing thereby the high levels of women among professors and in decision-making boards. However, empirical research reveals persistent gender inequalities, gendered career possibilities and unequal working conditions in academia for women and men (Ćeriman, Fiket, & Rácz, 2018).

Despite these contextual factors, we have seen throughout the TARGET project how the CoPs have created a forum where the meaning of gender equality has been negotiated and the understanding of the concept has matured. At the beginning of the project, gender equality was conceived primarily as a binary issue of representation (i.e. proportion of women among staff or students at different hierarchical levels or in study programmes). Engagement in the project has seen the concept of gender equality mature and become more complex. At UH2C, for instance, the initial focus on increasing women’s presence in decision-making boards through the use of quotas or affirmative action opened a wider debate about deeply rooted prejudices and biases in institutional practices and the need to adopt a comprehensive approach that dealt with cultural and organisational aspects in order to tackle hidden or more overt forms of discrimination. At FRRB, one of the participating RFOs, the initial focus on encouraging female applicants and establishing more equal access to funding paved the way for a broader approach, with the gender dimension in research content becoming an increasingly important element. In a similar vein, the GEPs in several institutions have progressively included efforts to scrutinise processes and procedures that embody gender biases and develop alternative approaches and norms – ranging from the use of gender-sensitive language to the development of an anti-sexual harassment policy.



***Community: Dealing with Power and Resistance***

One of the main tensions to be grappled with when thinking about CoPs as vehicles for structural change is related to issues of power. CoPs tend to be depicted as horizontal structures devoid of hierarchical power relations – ‘communities’ are regarded as harmonious spaces where conflict does not arise and consensus reigns. However, structural change for advancing gender equality must either indirectly or, more often, directly confront issues of power and resistance. Challenging the status quo inherently entails disrupting power relations. So how were these two different logics and subsequent approaches reconciled, or at least negotiated, in the TARGET CoPs and to what effect? Who formed part of the CoPs in each institution? Did they include external stakeholders? Was focus placed on top management or more a widely distributed membership? As the CoPs in the TARGET project show, the involvement of top management or adoption of a strategic approach to involving external stakeholders can result in gender equality interventions having a greater impact at both the national, regional or institutional levels.

Ensuring commitment from top management is key to the successful implementation of gender equality interventions in R&I (European Commission, 2012; European Institute for Gender Equality (EIGE), 2016; Palmén & Kalpazidou Schmidt, 2019). All TARGET implementing institutions made a concerted effort to include top management in their CoPs. How this strategy was pursued and negotiated depended on the particular dynamics of each respective institution and ultimately led to different outcomes in each institution, which impacted GEP implementation in different ways. For example, at UH2C, members of the university’s top management were formally engaged in the CoP and attended three large, public institutional workshops. Their engagement was a pivotal factor in building commitment for the institutionalisation of gender equality policies in the university that was not initially foreseen in the GEP. In this instance, while top management commitment was key, bottom-up activism was a significant driver of implementation and enabled the broad involvement of university and faculty leaders as well as professors with diverse backgrounds, including gender scholars and gender equality advocates. Obviously, action went on well behind closed doors, with intense formal and informal negotiations during the first stage of the project leading to the approval of the Charter for Equality and the establishment of the Gender Equality Commission at UH2C’s highest decision-making body, the University Council. Nevertheless, the formal and public involvement of university leaders in the CoP, coupled with active support from other representatives in high managerial and academic positions, proved to be an effective way to deal with implicit resistance from some top management representatives. A salient feature in this process was the strong involvement of men, either as university leaders or subsequently in the Equality Commission, which is gender balanced.

In the case of UB, while top-level commitment was guaranteed because the rector was a member of the TARGET core team, the real working CoP did not extend much further than the core team. This approach proved both advantages and disadvantages. Gains included a smooth and effective process of design,

approval and implementation of the GEP, which was strategically designed as a low-profile first plan in order to avoid resistance and build consensus for more ambitious gender equality policies in the future. The Gender Equality Committee created by the GEP is the main mechanism to sustain gender equality policies. The creation of this committee has activated a pool of gender scholars, many of whom also have practical expertise in designing and implementing gender equality policies at the faculty level. The main disadvantage was that a change in rector saw the gender equality work faced with a completely new and uncertain scenario.

In the smaller organisations, that is, the RFOs, the quality assurance agency and the RPO, extending the CoP beyond the organisational boundaries proved to be key in fostering change within the local R&I ecosystem, impacting policy at regional and national levels as well as in other RPOs, and kick-starting action within the institutions themselves. For example, the FRRB GEP placed great importance on triggering change for its external beneficiaries (hospitals, research centres and universities located in the Lombardy region). The composition of the CoP reflects this ambition by including (1) FRRB internal stakeholders (management and scientific committee), (2) the scientific community (scientists and researchers who apply for FRRB funding) and (3) policy makers from the Lombardy Region (the regional authority responsible for implementing the main research priorities). Debates within the CoP were instrumental for aligning research agendas and building consensus around the main strategic objectives of biomedical research in the area in relation to gender equality. By coordinating the CoP, FRRB not only raised its steering role as a funding agency but also built internal commitment to and gender competence for the discussion and improvement of gender equality policies.

In the case of the RIF and ARACIS, a similar approach was implemented in a late stage of the process. Initially, the RIF CoP only included internal staff and encountered difficulties in implementing a GEP that included internal measures as well as funding-related measures targeted at potential applicants. The creation of a 'Network of Scientists' that included gender experts from universities in Cyprus was a turning point that enabled the CoP to involve external stakeholders, foster the mutual exchange of knowledge on gender issues in the local scientific environment and gain legitimacy for addressing this topic within RIF. In a similar vein, ARACIS established a CoP involving different universities to debate the need for gender equality policies in Romanian higher education institutions through the development of evaluation criteria, which included the gender dimension for assessing the quality of curricula. This large CoP managed to build a strong consensus regarding the potential impact of such a mechanism and gave internal legitimacy to further advance this line of action within ARACIS.

At the Hellenic Foundation of European and Foreign Policy (ELIAMEP), the initial CoP included different professors, its own board as well as relevant gender scholars from Greek universities. Informal contacts with this group were of great importance in providing advice and encouragement during the initial stage of the process (i.e. the audit and the design of the GEP). Their involvement in the first institutional workshops for all ELIAMEP staff was also of great importance for raising internal gender awareness and strengthening top management

commitment. Since then, the CoP approach has actually been adopted in the regular, monthly meetings of ELIAMEP staff, where gender issues are regularly addressed. In parallel, the TARGET team at ELIAMEP proved quite successful in activating initial contacts with gender scholars and their large network of collaborators in Greek universities to raise the visibility of the institution's GEP as a good practice. They also published various policy papers and a guide to foster the adoption of GEPs in other RPOS. This was supported by recent political changes in Greece (see Anagnostou in this volume).

In general, TARGET CoPs were instrumental in supporting a participatory and evidence-based approach to structural change based on a 'small wins' strategy, which has been recognised as an effective approach to tackling resistance and sustaining change (Callerstig, 2014; Meyerson & Fletcher, 2000). The different CoP approaches outlined earlier also evoke the conclusions of other EU-funded structural change projects. Kalpazidou and Cacace (2017) argue that extending the range of stakeholders involved was a key factor to achieve structural change in the STAGES project. They describe the approach used in STAGES as a 'strategy of successfully widening the circles of actors' (Kalpazidou & Cacace, 2017). Beyond the core team directly in charge of designing and implementing the action plan, the process increasingly engaged other actors – institutional bodies, key institutional players, networks, individuals or groups of people who, in cooperation with the core team, promoted the activities working towards sustainability. The FESTA project also supports the notion that taking a CoP approach to gender equality and structural change in R&I can be an effective strategy to tackle resistance – primarily through its emphasis on engagement and participation. The FESTA handbook, for example, recommends involving more men and women in the organisation's gender equality work as a way to counteract resistance (FESTA, 2016). While the presence of men is important to symbolically counteract the idea that gender equality is about 'women's issues', engaging staff in general in gender equality work is important for building ownership and bottom-up support. Another key recommendation is building networks of people in and outside the organisation who are interested or engaged in gender equality.

### ***Practice: Gender Competence***

Practice is one of the three main elements of a CoP approach. CoP literature stresses that practice is essentially what the members of the CoP *do*, and that knowledge is acquired through engaging with practice, in essence *learning through doing*. This approach is congruent with the literature that examines structural change processes for greater gender equality in R&I, which stresses the need for gender competences throughout each stage of the GEP process to ensure successful implementation (Palmén & Kalpazidou Schmidt, 2019; Wroblewski, 2021b). Gender competence is defined by EIGE (2016) as those 'skills, attributes and behaviours that people need in order to mainstream gender concerns effectively into policies and plans and help build gender equality'. It is no coincidence that it is usually gender equality *practitioners* who are charged with facilitating the

structural change process. Zippel and Ferree (2018) reflect on the achievements of the NSF Advance programme in the United States, noting how

An unintended consequence of NSF ADVANCE has been the creation of crucial dynamic of national and local networks of actors with gender expertise. These networks include administrators and faculty who have had or acquired some form of gender expertise during the course of their involvement in ADVANCE, as well as social science researchers who work on gender, STEM and universities.

They go on to state that:

future research should illuminate how these networks disseminate and bridge both applied and scientific forms of knowledge production, creating the foundation for further self-reflexive processes of institutional transformation both within and across disciplines and systems. (*ibid.*)

This fits well with the CoP approach, which sees competence as developed through practice that manifests through the transition from apprentice to expert via participation in the CoP. In the TARGET CoPs, social scientists come together with natural scientists, mathematicians, statisticians and engineers to work with gender equality experts or practitioners and engage in the practice of developing and implementing a GEP, thereby also developing competence. A significant achievement in this process is that some implementing institutions have been able to strengthen the ties between gender scholars and practitioners, either within the institution (UH2C) or through the establishment of wider CoPs with external stakeholders (FRRB, RIF, ARACIS).

An unintended consequence of GEP implementation using the CoP approach has been the ability of the CoP members to reflect on the process and wider context and adapt the GEP to these broader contextual or procedural developments. As Wenger (2000) suggests: ‘practice is the process and knowledge products of the community developed through communication between members’ (Barnard et al., 2017, p. 4). For example, while many of the outcomes of the GEP were not initially foreseen, the reflexive approach embodied through practice meant that the CoP facilitated the adoption of new measures or actions that were deemed necessary due to a wide range of institutional and contextual developments. These measures or actions, in turn, often became either the most durable or made the most difference. For example, UH2C created a sustainable institutional structure for gender equality to embed measures within policy and procedures and steer future measures, UB developed a sexual harassment protocol, while ARACIS started to work on criteria to evaluate the gender dimension in university curricula. Placing the emphasis on practice in the context of detecting gender biases in institutional processes or procedures and developing and implementing gender equality actions and alternative non-gendered practices has formed a major part

of TARGET GEP development and implementation. FRRB, for instance, added a statement on gender equality to its Ethics Code and included new clauses in its calls explicitly requiring that project proposals address the gender dimension in the design and implementation of the research as well as the composition of the research team.

## **Discussion and Conclusions**

The CoP approach developed throughout the TARGET project has been a useful method to facilitate successful GEP implementation. While the CoPs established through the project differed in line with the aims and objectives of the respective GEPs and the subsequent involvement of internal and external stakeholders, they have all proved essential in the development and implementation of the GEPs. At a very basic level, the CoPs have provided a forum and space for collaborative working (both *within* an institution – i.e. across functional responsibilities and hierarchical levels – and *across* institutions – e.g. from different sectors yet the same local R&I ecosystem) on a joint project, in our case, promoting gender equality in R&I and higher education. This chapter has focused on three main elements that are highlighted in the CoP literature yet also demonstrate synergies with the gender equality aspect in R&I literature and have been embodied in the experiences of the TARGET CoPs.

Firstly, we highlighted the importance of defining the domain through the negotiation of a shared meaning of gender equality as ‘there is a need for creating spaces for the negotiation of the fundamental premises where members involved in common goals can mutually engage’ (Annala & Mäkinen, 2017, p. 1954). This process of constructing a discourse around the meaning of gender equality in each institution was seen as key to underpinning the whole process. While there was a tendency at the beginning of the project to conflate and reduce gender equality issues in R&I and higher education to binary notions of men’s and women’s representation in most institutions, engagement with the project saw how gender equality considerations began to encompass gender bias procedures and processes as well as placing more emphasis on knowledge production through the inclusion of the gender dimension in research content.

Secondly, the project’s CoPs encompassed different approaches to dealing with power: some involved strategic top-level management into the CoP (this was attempted in all cases), while others adopted a bottom-up approach. In the universities, engaging top-level management in the CoP meant that internal resistance to the GEP was easier to overcome. In the case of the RFOs, RPO and quality assurance agency, extending the CoP to other external stakeholders proved key in terms of activating the power of the GEP beyond the institution and impacting the local R&I ecosystem either through the direct involvement of policy makers (FRRB) or the inclusion of universities in the CoP and subsequent development of gender-related criteria (ARACIS).

Thirdly, the CoP approach, with its emphasis on practice, proved congruent with highlighting the necessity to develop gender competences for the successful implementation of a GEP. CoP engagement meant that members developed

the necessary competences to carry out a GEP audit, to develop a GEP and to define and apply relevant monitoring indicators. The reflexive process of GEP implementation supported by the TARGET CoPs meant that GEP actions could be revised, and emphasis placed where it was really required. This gave rise to the development of actions that were responsive to the needs of particular institutions at a given time, such as the development of the sexual harassment protocol at UB or the integration of the gender dimension into research content at FRRB.

The CoP approach has seen real gains made for gender equality in terms of highlighting from the start the need to develop strategies for involving internal and external stakeholders (community), building a deeper and more complex understanding of the meaning of gender equality (domain) and developing key competences through the development of actions and reflection on evidence (practice). The TARGET project CoPs also show that while individual agency and activism has been a key driving force for structural change, the support provided by the extended CoP has proved instrumental in making change happen. In the TARGET project, the external funding from the European Commission clearly gave status to the structural change process, thereby (indirectly) supporting the credibility and legitimacy of the CoP and encouraging participation. However, one of the main gains from the CoP approach lies in the learning through *doing* approach – as demonstrated by the implementing institutions' development of capacity to effectively enact change through GEPs.

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