

## Work Package 2: Dissemination and Exploitation Activities

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Co-funded by  
the European Union



Republic of Cyprus



RESEARCH  
& INNOVATION  
FOUNDATION



EXCELLENCE/042/0333

The project is implemented under the programme of social cohesion “THALIA 2021-2027” co-funded by the European Union, through Research and Innovation Foundation

# Investigating Emerging Faculty Professional Learning Communities in Higher Education: Insights on Practices, Characteristics and Challenges

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**Abstract:** This study describes the ways four groups of instructors at a university in Cyprus engaged in four faculty Professional Learning Communities (fPLCs). We analyze evidence from these four case studies to comparatively describe how the fPLCs work looked, and present productive facets of the fPLC work and challenges faced. Data were collected from interviews with 14 participating instructors. Themes identified include (a) the composition of the fPLCs; (b) the coordination aspect; (c) the overall operation of the fPLCs; and (d) time as a main challenge faced. We discuss implications related to the institutional, coordination, and structural support for this effort to have long-term sustainable outcomes.

## Introduction

Professional Learning Communities (PLCs) have emerged as a mechanism for professional development and refer to small teams (communities) of instructors with shared interests and visions that meet regularly, exchange expertise, and work collaboratively with the goal of improving their teaching practice (Margalef & Roblin, 2016). In the context of PLCs, professional learning is an ongoing collaborative approach to improving instructors' effectiveness in raising student achievement (Slabine, 2011). PLCs provide flexible but structured "intensive professional development opportunities designed to provide encouragement, support, reflection, and community building" (Ralston et al., 2017, p. 91). This engagement provides instructors with opportunities to refine their content knowledge and teaching approaches, understand the need to change, and helps them find ways to implement changes in their teaching (e.g., Fishman et al., 2003).

## Theoretical framework

The essence of PLCs revolves around a data-driven, systematic analysis and constructive critique of participants' own practices through reflective dialogue, surveys of instructors' teaching practice via observations, data analysis, joint planning, and curriculum development (Stoll et al., 2005). The literature has identified five distinct characteristics associated with effective teacher/instructor PLCs (Bolam et al., 2005): (i) Cultivation of shared values and a common vision; (ii) Fostering collective responsibility for student learning; (iii) Encouraging reflection and professional self-assessment; (iv) Facilitating both individual and group professional development; (v) Nurturing a climate of supportive and collaborative leadership.

Although a recently growing number of studies have investigated the use and function of PLCs at primary and secondary education levels, there is to date relatively little investigation of PLCs in higher education (e.g., Cherrington et al, 2018; Clark et al, 2023), even

though there is an increasing number of higher education institutions that run PLC programs (e.g., McLaughlin & Talbert, 2010). Although under-researched in higher education settings, faculty PLCs (fPLCs) have much to offer to academic developers as a model of professional learning. Cherrington et al (2018) investigated how PLCs supported members to strengthen their teaching and learning practices. Clark et al (2023) suggested that the PLC model can be an effective way for higher education institutions to empower their faculty to develop innovative teaching practices. Cox (2004) indicated that fPLCs can play an important role in faculty development in relation to their role as instructors, with evidence suggesting that both students and faculty learning is improved through this process. Louca et al. (2023) study identified new directions in faculty professional development, focusing more on peer interaction and support, and student data, as well as on learning outcomes aligned with the increasing research interest in the field (e.g., Terry et al., 2018). Studies have suggested that PLCs can play an important role in increasing faculty's self-efficacy, helping them respond to diverse needs, and facilitating instructional change (e.g., Trust et al., 2017). At the same time, they point to a direction for further, more detailed investigations toward shedding in-depth light on the issues related to fPLC work and impact. Similarly, some evidence suggests that PLCs can be productive in higher education; however, the impact of higher education PLCs, and their characteristics, opportunities, and challenges remain largely unknown (Cherrington et al, 2018; Clark et al, 2023). Overall, even though the need to identify productive ways within fPLCs with which faculty can sustain long-term pedagogical changes in their teaching approaches is of high interest (Cox, 2004), there is to date very little evidence of whether these changes are sustained or can be sustainable beyond the participation in fPLCs (Tinnell et al, 2019).

In light of the need for evidence relating to supporting sustainable fPLCs in higher education, this study aims to provide insights into an interpretive inquiry of four emergent fPLCs, that were developed at a university in Cyprus, throughout the academic year 2022-2023. We analyzed evidence from these four case studies to comparatively describe how the work in these fPLCs looked, seeking to describe facets of the fPLC work and characteristics that were deemed productive and supportive, as well as aspects that seemed to be related to challenges faced during the work of the fPLCs.

## Methods, data sources & analyses

This study is part of a larger project seeking to investigate the characteristics of productive and sustainable PLCs. Following a descriptive case study approach (Yin, 2017), this study involved four groups of instructors at a university in Cyprus. The number of participants in the four fPLCs (including the coordinator) varied from 5-8 faculty members. All coordinators had academic work experience of more than 10 years. Additionally, while in all cases, the fPLC coordinators were at the same time coordinators of a specific undergraduate program of study, there were differences in relation to the composition of the teams. In fPLC1 and fPLC2 all participants were instructors in the program of study coordinated by the fPLC's coordinator (Early Childhood Education and Pharmacy respectively), and in the case of fPLC3 the participants taught in the same program, but at the same time, they came from a variety of programs under the domain of the health sciences (i.e., Nursing, Physiotherapy, Speech and Language Therapy, Occupational Therapy). The participants of fPLC4 were instructors from programs not connected to each other (dentistry, music, law).

Data for this study were collected through interviews (about 35 minutes) with all the coordinators (4) and 10 of the participants of the four fPLCs (3-4 interviewees per fPLC). The interviews were conducted at the end of the academic year 2022-2023. All interviews were videotaped and transcribed for analysis. Using discourse-based approaches and open coding techniques (Strauss & Corbin, 1998) we analyzed all primary data, looking for characteristics in faculty work within the PLCs. All data were analyzed by both authors independently and discussed to resolve any differences. Each fPLC was treated as a separate case, and using the constant comparison approach (Glaser, 1965) we identified common patterns. Additionally, different ways of manifestation of these patterns, and differences in the themes also emerged. The authors discussed all themes identified, and all differences were resolved.

## Findings

In this section, we present themes that emerged from the data, focusing on both similarities as well as differences identified in the different fPLCs.

### **Theme 1: Overall operation of the fPLCs: structure and processes followed**

The first theme that emerged is related to the operational aspects of the fPLCs. The four fPLCs reported following a different work structure. The participants described the work of fPLC1 as a scientific process that was based on a repeated process of reflecting on data collected from the members' teaching practices. The work of fPLC2 was described more as technical, using tools provided to support the work of the group. The work of fPLC3 was characterized as a mutual exchange of a wealth of ideas. This resulted in dealing with a number of topics rather than focusing on more depth for fewer topics. Lastly, the work of the fPLC4 seemed to shift focus over time, possibly indicating a need for a longer-term process for identifying a common theme of interest to investigate and reflect the interdisciplinarity of fPLC4.

Reflection was also different in the four groups. Reflection in fPLC1 was an official, formal, and collective process. In fPLC2, reflection was more an informal, less explicit process. However, several members suggested that this process reinforced personal reflection beyond the fPLC's meetings. For fPLC3, reflection was also a structural part of the meeting, but due to the larger number of members, it was also manifested more as a personal, informal practice. Although fPLC4 participants had opportunities for reflection, the investigation of a number of different topics did not provide opportunities to delve deeply into these issues.

### **Theme 2: The balance between fPLC composition's homogeneity and heterogeneity**

All participants reported the role of the fPLC's uniformity composition in the development of a community culture. fPLC1 and fPLC2 participants emphasized that the participants' uniformity contributed to the development of a collaborative culture of trust. Participants of fPLC3 and fPLC4 reported "*the importance of facing similar difficulties and challenges with others*" in building a "*sense of belonging*" and moving away from feeling "*alone,*" "*isolated*" and "*a lonely sense of failure.*" In the case of fPLC4 participants emphasized the identification of the unexpected intersection points and common experiences which in many cases were related to more personal experiences and led to the connection between members and facilitated the development of new ideas.

The importance of elements of heterogeneity was also stressed. fPLC1 participants emphasized that the diversity in the specialization of the members (early childhood pedagogies, teacher training, mathematics education, science education, music education)

was important, allowing “*finding solutions that could be generalized and applied to different domains.*” Participants in fPLC2 identified the need to have group members with different backgrounds, possibly educational. They suggested that in many cases they felt that although important for the development of a collaborative culture, the uniformity of their group prevented them from getting better insights into the challenges they identified and investigating possible solutions. Similarly, participants in the fPLC3 reported that the member “diversity” resulted in making the exchange of ideas richer. In the case of fPLC4, diversity was considered “*the most positive*” aspect of the fPLC, since it led to discovering the existence and borrowing “*out of the box,*” “*fresh*” and “*alternative*” ideas and practices from other disciplines.

### **Theme 3: Coordination of fPLCs**

Our data analysis also reveals important findings in relation to the characteristics of the fPLC’s coordination. The first characteristic is related to the conditions that were supportive of the coordination. The fPLC1’s and fPLC2’s coordinators had a double role: leading an fPLC from their program of study they also coordinated. Due to this, they developed a long-lasting collaboration with all the members of their fPLC prior to the development of their respective fPLCs, which was then reinforced in the context of their fPLC work. In the cases of fPLC3 and fPLC4, both coordinators reported trying to find ways of creating a sense of community among the participants as one of the challenges faced at the beginning of their fPLC coordination.

The data also pointed towards a second characteristic related to how the coordinators managed to balance their role as a leader and an equal member of the PLC. Participants in fPLC3, for instance, reported that it was extremely important that the coordinator was excellent in her role as the fPLC’s administrator, she spent time “*listening*” but at the same time “*was a member of the team.*” Similarly, the coordinator of fPLC4 reported that the challenge was “*to be the first among equals*” while the members of fPLC1 reported that their coordinator was mostly listening rather than speaking.

### **Theme 4: Time as a struggle for fPLCs**

Time was a common, multifaced theme across all fPLCs. All coordinators and participants interviewed referred to time as the main problem faced throughout the year. Finding a common time to meet was a continuous struggle, especially during teaching periods. The data led to the realization that the number of participants in a fPLC might be crucial for finding a common time to meet. Additionally, the coordinators and participants from all fPLCs reported that the meetings usually lasted longer than scheduled which in many cases caused issues of participation.

Additional parameters were reported in relation to time. Time repeatedly came up as an obstacle to the implementation of specific actions. Members of all PLCs suggested that changes in their teaching as discussed during the meetings, required time for designing, and implementing the changes, and then time to allow for the changes to take place and have a sustainable effect. In many cases, this led to giving up the idea of implementing something new from the beginning or trying it out without having the time to build and lead the effort toward a result. Even though in fPLC1 there was a consensus that the work of the team led to a specific result, there was also an agreement among the participants that more implementations, subsequent data collection, and analysis were needed in order for the tool



designed to be scientifically justified. In the case of fPLC1 and fPLC2, the coordinators reported that they had difficulty finding enough time to reflect and prepare between the meetings.

## Discussion

Overall, findings from this study confirmed prior findings in the area that potential benefits of fPLCs may include increased collaboration among colleagues even outside of one's own discipline (Stacey & Mackey, 2009) and the development of inter-instructor relationships (Roth, 2014). However, as this was the first time that we formally applied fPLC in the university, findings suggested that it may require additional time and better support for a productive fPLC culture (e.g., Bolam et al., 2005). Development of an fPLC culture of shared values and a common vision through the identification of common needs seemed to take longer than, in some cases, one academic year. That needs to happen before formal practices of reflection and professional self-assessment take place in a productive manner. In this context, fostering collective responsibility for student learning and nurturing a climate of supportive and collaborative leadership seems to be the next steps in the process. This seems to build on research suggesting that models of PLCs show communities moving through developmental phases before working at full capacity (Grossman et al., 2001; Clark et al, 2023).

The themes identified suggest that the work within fPLCs can be seen as a continuous need for balance. A balance between well-organized and more loose meeting structures is important, as both have advantages and limitations. The same applies to the composition of the fPLCs, with a need for balance between homogeneity (that helps with the development of a productive collaborative culture) and heterogeneity (that supports the content of the work in fPLCs).

These findings suggest that a systematic effort to empower the work of fPLC seems to be important for promoting sustainable fPLCs. This effort should focus on (a) the institutional level for providing support, structure, and time for faculty to participate in these efforts; (b) the fPLC structure level for supporting the formation of the communities that would include faculty members with pedagogical background (e.g., Roth, 2014); (c) the fPLC function level by providing resources for fPLC members to engage in process of data collection, analysis, reflection, and action(s) (e.g., Tinnel et al., 2019). Further studies on this topic are necessary.

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## Acknowledgments

This work has been funded by a project implemented under the program of social cohesion “THALIA 2021-2027” co-funded by the European Union, through the Research and Innovation Foundation.