

An Investigation of the Introduction Faculty Professional Learning Communities in Higher Education

Loucas T. Louca, Theopisti Skoulia, Marios Vryonides
European University Cyprus

Abstract

Moving from an approach of educating faculty about new teaching and learning approaches, to supporting them in their attempts to utilize paradigmatic changes in their teaching, this study explores the potential introduction of faculty Professional Learning Communities (PLCs) as an innovative way to enhance instructors' teaching competencies in higher education. Specifically, the study seeks to identify faculty PLCs structures that could encourage evidence-based teaching reform within the faculty members' teaching practice. Data were collected from 127 faculty using an online questionnaire in June 2022. Analysis showed factors related to the willingness to engage in PLCs and sources of information which participants highlighted as important in shaping their teaching reform. The study's implications point towards new directions of supporting faculty in their effort to enhance their teaching competencies to enrich university students' learning experiences and opportunities. The policy implications of this investigation point to a novel way of supporting faculty in their effort to enhance their teaching competencies in the context to improve university students' learning experiences and opportunities.

Introduction

Professional Learning Communities (PLCs) are a form of professional development that provides teachers/instructors a framework in which to act as “learners” and schools/institutions as “learning communities” (Clarke & Hollingsworth,2002). PLCs refer to small teams of teachers/instructors with shared interests and visions that meet regularly, exchange expertise, and work collaboratively for improving their teaching practice (Margalef & Roblin,2016). In this context, professional learning is an ongoing, sustained, intensive and collaborative approach to improving teacher/instructors' effectiveness (Slabine,2011) and enhancing student learning.

Theoretical framework

Although a recently growing number of studies have investigated the use and function of PLCs in primary and secondary education, there is a relatively limited investigation of PLCs in higher education (e.g.,Laws,1996). Massy, Wilger & Colbeck(1994) found collegiality to be “hollowed”, with community usually absent from meetings, curricular planning, and pedagogical work. Similarly, there is little evidence showing whether changes within faculty PLCs (fPLCs) can be sustainable (Tinnell et al.,2019), and more generally, fPLCs implementation has been facing several obstacles (Palmer,2002). Despite that, Cox(2004) indicates that faculty PLCs can play an important role in faculty development.

Purpose and Research Questions

This study explores the potential introduction of fPLCs as an approach to enhancing instructors' teaching competencies. It focuses on a “young” private university in Cyprus, which since 2016 has introduced fPLCs in an informal mode, and currently attempts to formalize this approach. Within the context of this effort, this study seeks to identify fPLCs' structures that could encourage the long-term sustainability of evidence-based teaching reform. The study seeks to answer the following research questions:

1. Which factors relate to the faculty's willingness to engage in PLCs?

2. Which sources of information are considered important in shaping their teaching?

Methods, data sources & analyses

Data were collected in June 2022 through an online survey. 127 full-time and part-time faculty responded to a questionnaire (32% of teaching personnel, see Table 1 for details). The questionnaire focused on respondents' self-perceptions about their teaching abilities, investigated the sources of ideas and incentives for teaching innovation, their beliefs about the importance and the nature of teaching, and their views and experiences about professional development in the context of PLCs.

After the analysis of the questionnaire data, a focus group was conducted with 6 different program coordinators from various Departments, in order to probe in-depth into the results from the questionnaire.

Table 1: Respondent Characteristics

Variables	Categories	N	%
School	Humanities, Social & Education Sciences	53	41.7
	Business	13	10.2
	Sciences	40	31.5
	Law	8	6.3
	Medicine	13	10.2
Gender	Female	69	54.8
	Male	57	45.2
Age	<30	3	2.4
	30-39	38	29.9
	40-49	51	40.2
	50-59	26	20.5
	≥60	9	7.1
Rank	Full-time	75	60
	Part-time ¹	50	40
Teaching Experience in Higher Education (years)	0-4	27	22.1
	5-9	25	20.5
	10-14	27	22.1
	15-19	17	13.9
	≥20	26	21.3
I usually teach... (more than one choice may be given)	Undergraduate	103	
	MA	54	
	PhD	19	

Note: Inconsistent sample sizes across characteristics resulted from missing responses.

¹Special Teaching Personnel / Scientific collaborator / Special Scientist

Results

Analysis of the data indicated factors (summarized in Table 2) related to the faculty members' willingness to engage in fPLCs and sources of information that participants highlighted as important in shaping their teaching. Factor analysis indicated that 8 items included in the questionnaire loaded in one factor. Cronbach's Alpha reliability test gave a good score ($\alpha = 0.85$).

Table 2: Factor analysis

Items	Component 1
1. sharing teaching experiences with colleagues,	.552
2. gaining valuable information from hearing about colleagues' experiences,	.789
3. sharing experiences about student results	.697
4. experimentation with new ideas,	.761
5. meetings with colleagues	.801
6. reflecting with colleagues about common teaching issues	.804
7. working in small group of colleagues on improving teaching	.581
8. reflecting on own teaching	.667

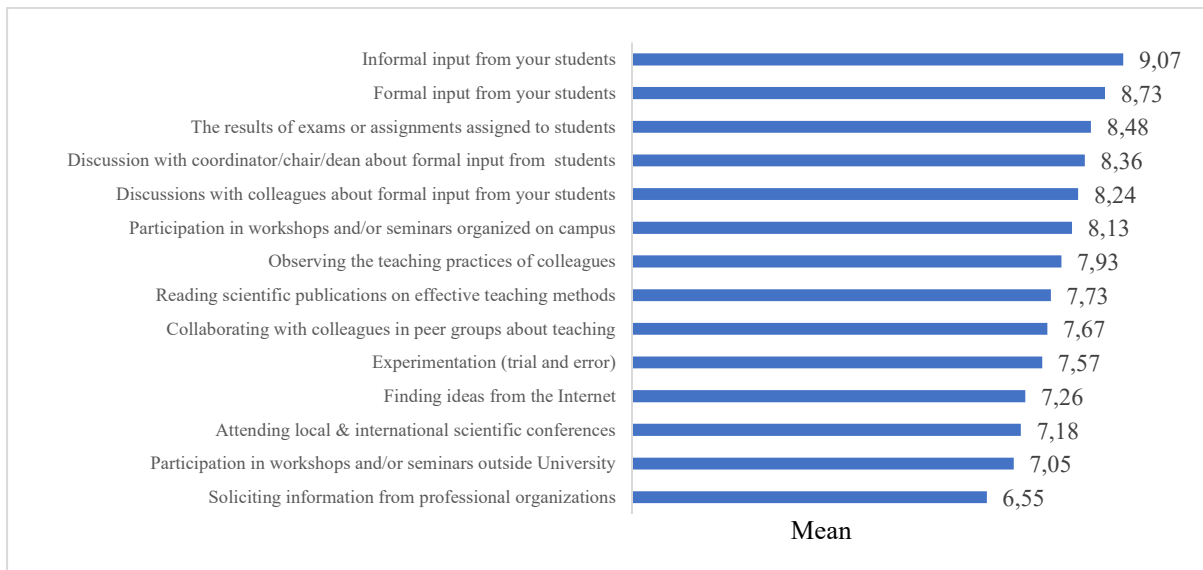
Further, a series of exploratory bivariate analyses were performed using gender, mode of employment (full-time or part-time), rank, and the school that the participants belong to which showed that the demographic variables did not distinguish different modes of willingness (see Table 3). This indicates a uniform approach and positive willingness to engage in PLCs. This willingness to engage in PLCs did not relate to the workload of the teaching staff.

Table 3: Exploratory bivariate analyses

Variables	Categories	Mean	t	Sig
Gender	Male	31.72	-1.959	.053
	Female	33.28		
Rank	Full-time	33.48	1.755	.082
	Part-time	32.01		
F				
School	Humanities, Social and Education Sciences	32.53	.725	.576
	Business Sciences	33.09		
	Sciences	32.30		
	Law	35.00		
	Medicine	31.77		

Other bivariate analyses showed that willingness to engage in PLCs was positively related to the perceived importance of teaching and marginally related to attitudes toward excellence in teaching. An important finding related to the sources of information that participants highlighted as important in shaping their teaching (see Chart 1).

Chart 1: Sources of ideas for Teaching Innovation



In the focus group interview that followed participants reported the importance of faculty working within fPLCs to be (i)open to accept and implement new ideas for teaching and learning in higher education, (ii)ready to take (instructional) risks, but also highlighted that the participation in fPLCs needs to (iii)come from an internal need for improvement and the understanding that it is possible to bring change by collaborating with a group of colleagues. (iv)Commitment and dedication of fPLC participants was also raised as an important characteristic.

Discussion

This study revealed instructors' very positive inclination to engage in fPLCs. Factors connected to that willingness were in line with the literature about characteristics of productive PLCs, e.g., having shared values and vision, adapting a collective responsibility for student learning, and actively and regularly engaging in individual and group professional learning (e.g., Bolam et al.,2005).

Related to the ranking of the items identified as sources of information that shape their perceptions of teaching instructors seemed to feel that collaborative pedagogical reflection is valuable for their teaching duties, despite previous studies suggesting that this is absent from higher education (e.g., Massy, Wilger, & Colbeck,1994).

Results also point to two useful resources: the value placed by participants in student-related data could be the product of the fact that for an amount of their time, university faculty are also working as researchers, and the potential role of faculty independence and autonomy in their teaching and research agenda may have in enhancing both, which are fundamental characteristics in academia worldwide.

References

- Bolam, R., McMahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., Hawkey, K., Ingram, M., Atkinson, A. & Smith, M.(2005). *Creating and sustaining effective professional learning communities*. London: DfES and University of Bristol.
- Clarke, D., & Hollingsworth, H.(2002). Elaborating a model of teacher professional growth. *Teaching and teacher education*,18(8),947-967.

- Cox, M.(2004). Introduction to faculty learning communities. *New Directions for Teaching and Learning*,(97),5–23.
- Laws, P.M.(1996). Undergraduate science education: A review of research. *Studies in Science Education*,28,1–85.
- Loucks-Horsley, S., Hewson, P.W., Love, N., & Stiles, K.E.(1998). *Designing professional development for teachers of science and mathematics*. Thousand Oaks, CA:Corwin Press.
- Massy, W.F., Wilger, A.K., & Colbeck, C.(1994). Departmental cultures and teaching quality: Overcoming “hollowed” collegiality. *Change: The Magazine of Higher Learning*,26(4),11-20.
- Palmer, P. J.,(2002). The quest for community in higher education. In W. M. McDonald and Associates (Eds.), *Creating campus community*. San Francisco, CA: JosseyBass,179-192
- Slabine, N. A.(2011). Evidence of Effectiveness. *Learning Forward(NJ)*.
- Tinnell, T.L., Ralston, P.A., Tretter, T.R., & Mills, M.E.(2019). Sustaining pedagogical change via faculty learning community. *International Journal of STEM Education*,6(1),1-16.

Acknowledgments

The work reported in this paper was supported by the PLCs of us project, funded by the Cyprus Research and Innovation Foundation (EXCELLENCE/0421/0333).