

2017-8

Developing Communities of Practice in Tertiary Education: Improving Teaching and Learning

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Recommended Citation

Cotter, Aileen; Leahy, Rose; McManus, Michele; Oldham, Mary; and O'Sullivan, Nollaig, "Developing Communities of Practice in Tertiary Education: Improving Teaching and Learning" (2017). *Conference Papers* [online].

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Developing Communities of Practice in Tertiary Education: Improving Teaching and Learning

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Abstract

There is considerable evidence that the development of Communities of Practice (CoP) in education results in improvements in teaching and learning. The reality far too often, however, is that academics remain isolated in their practice with a culture of individualism rather than collaboration the norm. Adopting a case study approach, this research explores the perspectives of academic staff in one department in Cork Institute of Technology (CIT) on CoP. Specifically, the research explores how communities of practice might develop in a third level teaching environment; the type and nature of communities of practice that might develop and if those communities of practice have a resulting impact on teaching and learning. The findings indicate that not only is there an enthusiasm for collaboration and the development of CoP, but that moreover is something that would be welcomed by staff in the department. The research concludes that a significant opportunity now exists to stimulate and support the development of CoP among educators; a move which would have the twofold benefit of both motivating staff and enhancing the student experience.

Background to the Study

Communities of Practice have been defined as groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Lave and Wenger 1991). Barab *et al.*, (2004) regard a CoP as a persistent, sustained social network of individuals who share and develop an overlapping knowledge base, set of beliefs, values, history, and experience focused on a common practice and/or mutual enterprise. Essentially, CoP are voluntary groups of people who, sharing a common concern or a passion, who come together to explore these concerns and ideas and share and grow their practice (Mercieca, 2016). More generally, we can see that CoP can be viewed as a process of social learning that occurs when people who share a common interest collaborate over a period of time. Interestingly, learning in this context does not have to be intentional; it can and often is an incidental outcome that accompanies these social processes (Lave and Wenger, 1998). CoP members explore ideas, discuss situations and needs, and help each other solve problems, although they do not meet every day. Each person has their own experience; CoP simply allows them to share such experience with other members when they meet. Unlike teams and organizational units, CoP are self-organizing systems whose methods of interaction, rules, issues and lifespan are determined by members, based on the intrinsic value that membership brings (Metallo 2007; Sharratt and Usoro 2003).

When exploring CoP in more detail it is found that there are three required components:

1. There needs to be a domain of interest
2. There needs to be a community (engaging in shared activities)
3. There needs to be practice

(Lave and Wenger, 1998)

Further to this, Wenger (1998) proposed that a CoP displays a number of characteristics as outlined in Table 1.

- Sustained mutual relationships — harmonious or conflictual
- Shared ways of engaging in doing things together
- The rapid flow of information and propagation of innovation
- Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process
- Very quick setup of a problem to be discussed
- Substantial overlap in participants' descriptions of who belongs
- Knowing what others know, what they can do, and how they can contribute to an enterprise
- Mutually defining identities
- The ability to assess the appropriateness of actions and products
- Specific tools, representations, and other artefacts
- Local lore, shared stories, inside jokes, knowing laughter
- Jargon and shortcuts to communication as well as the ease of producing new ones
- Certain styles recognised as displaying membership
- A shared discourse reflecting a certain perspective on the world

Table 1 Key Characteristics of a Community of Practice

Source: compiled from Wenger (1998: 125-6).

When these conditions exist and when CoP develop, there are many resulting benefits; both to the individuals involved and to the organisation to which they belong. A synthesis of the literature reveals benefits to the individual such as, a greater ability to manage change, access to knowledge and the fostering of trust and sense of common purpose. Benefits to the organisation include, the generation of knowledge and skill development, identification of best practice, effective responses to problems, and retention of talent (Mitchell and Wood, 2001).

Against a background of well-established and scientifically proven benefits of CoP, numerous research studies in Higher Education have called for increased collaboration and the development of various forms of CoP among academics (for example, McLaughlin and Talbert, 2001; Louis and Marks, 1998 and Darling and Hammond, 1997). In the context of higher education, intentional communities of practice have also been described as 'faculty learning communities' (Cox, 2004) and 'teacher networks' (Lieberman, 2000) and provide a valuable corrective to the isolation experienced by many academic teachers. Indeed, research

by Vescio *et al.* (2008) concluded that CoP result in educators who become more student-centred and that greater collaboration and continuous learning among academics results in an enhanced learning culture in the classroom. Similar research by Berry *et al.*, (2005) examined the relationship between teachers' participation in Professional Learning Communities and student achievement and found that student learning improved where those communities were present. Interestingly, Levine and Marcus (2010) in considering the effects of different types of collaboration among teachers, concluded that collaboration in the areas of assessment and pedagogical approaches may be more effective than other forms of collaboration.

Despite these identified advantages however, recent research indicates that in higher education, academics are often still isolated in their practice, and individualism, rather than collaboration, is the norm (Mercieca, 2016). University teaching has long been regarded as a highly individualised practice (Ortquist-Ahrens & Torosyan, 2008) and this contrasts with the collaborative nature of CoP that involve working directly with peers to solve problems, identify shared goals, and exchange different perspectives and experiences (Åkerlind, 2011). Research by Gourlay (2001) accounts that lecturers who participated in her study did not feel part of a community, but rather felt isolated, and experienced confusion regarding their roles. Further to this, a study in the UK found that a lack of support and isolation are key factors contributing to mental health issues among all grades and levels of academic staff (Shaw, 2014). Perhaps these findings of isolation and individualism are not surprising given the culture of siloisation of academia into distinct discipline areas and the individual pressures on academics to excel at both teaching and research. Traditionally, these have been very individual pursuits and while efforts have been made in recent times to foster a culture of collaboration, the reality for many is that individualism remains the norm.

Against this framework, this study explores the perspectives of academic staff in one department in Cork Institute of Technology on their teaching environment and on the existence, or otherwise, of CoP. The department chosen to participate in the research is made up of three distinct disciplines as shown in Figure 1. This is significant as the empirical data gathered will allow for more in-depth analysis of the potential for collaboration both within and across discipline areas.

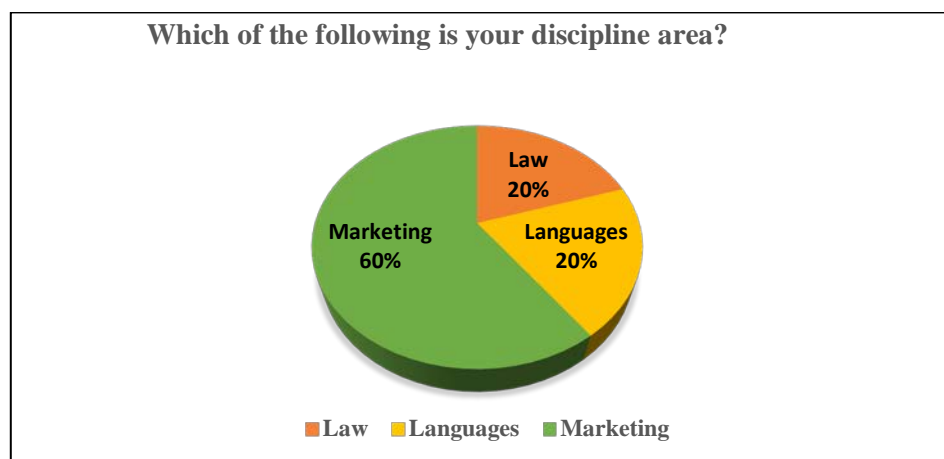


Figure 1

Methodology

A case study approach to the research was adopted, with the academic staff of one department in CIT forming the “case” for the research. The case study research method is an empirical inquiry that investigates a contemporary phenomenon within its real-life context (Yin, 1984: 23). In explaining what a case is, Noor (2008) suggests that the term refers to an event, an entity, an individual or even a unit of analysis. In particular, case studies are concerned with how and why things happen, allowing the investigation of contextual realities and the differences between what was planned and what actually occurred (Anderson and Anderson, 1998). Case study research is intended to focus on a particular issue, feature or unit of analysis (Noor, 2008) and thus was considered particularly suited to this research.

For the collection of empirical data for this case study, a team building day and surveys were used. The team building day was the first of its kind for the department, and 15 staff members and the head of department participated. Mayfield Arts Centre was chosen for the team building day, as the activities which included paint, clay, print etc. were accessible to everyone, with the emphasis on fun and participation. The morning activities focused on everyone getting to know each other on a personal level, through participating in fun, team building activities. The afternoon session took a workshop type approach, where staff explored their roles in detail; the challenges, the positives and the potential for collaboration were all explored and discussed in detail.

In addition to the team building day, all 15 staff took part in two surveys; one prior to the team building day and one following the team building day. In these surveys, staff were questioned on their perspectives of their jobs, collaboration and CoP in the department. The following section presents the findings to the research.

Findings

The team building day was central to the research conducted for this study. Prior to a more detailed analysis of the survey findings, it is interesting to explore the staffs’ more general impressions of the team building day. The results show that 69% of staff were looking forward to the day, while 31% were not.

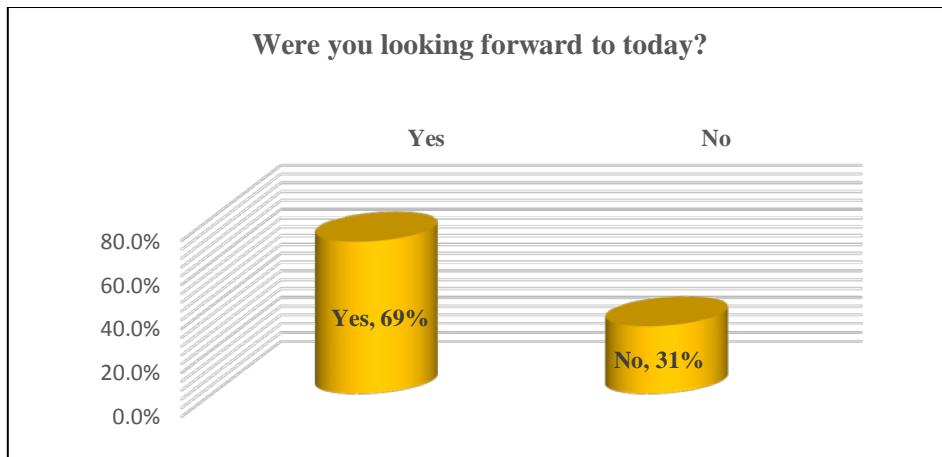


Figure 2

However, when we examine the post team building day survey, it is revealed that 92% of staff reported that they enjoyed the day and found it worthwhile while 8% did not.



Figure 3

This is significant as it highlights the positive impact the team building day had on staff in the department. Further reinforcing this point, 92% of the staff said that they would like to have similar social encounters with their colleagues, while 8% would not (see Figure 4). Given that this was the first team building day for the department, this can be described as a very positive outcome and certainly indicates a strong willingness for further similar activities.

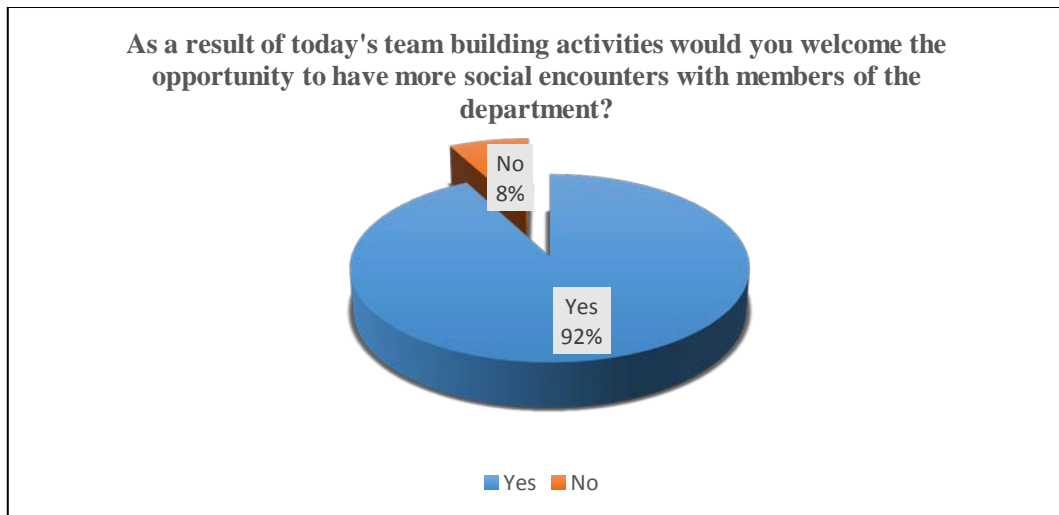


Figure 4

Engaging in social activities and team building days is thus seen to have a positive effect on the staff, with respondents articulating that:

This was a fun event and I got to know my colleagues better.

As a result of today I have a little more knowledge of what colleagues are working on, how they are finding their roles, and their life outside of CIT.

Today showed that many of my colleagues face similar challenges to me and it is helpful to share experiences and ideas more.

Analysis of the survey data reveals that in general, respondents believe that very positive relationships exist among staff in the department, with over 93% of the respondents agreeing:

I find it a very collegiate environment to work in. Most colleagues are open to helping. I get a sense that there are strong relationships built over time in CIT.

Generally, people seem to get on with each other and are happy to help each other out.

I think there is generally a good sense of collegiality and support. Everyone is extremely busy during the semester so it can be difficult to find the time to meet, however, I have always found colleagues to be very supportive.

Exploring these results in more detail, however, is particularly insightful. When asked if a sense of community exists in the department, only 47% agreed there did.

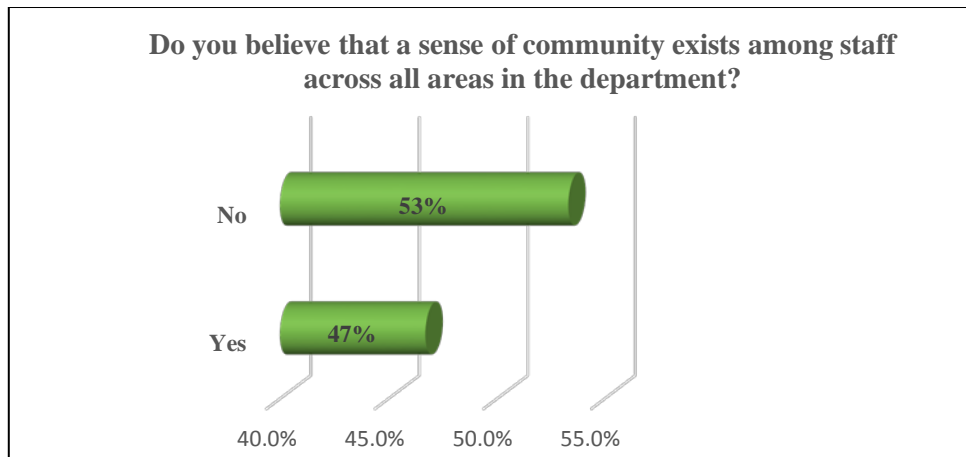


Figure 5

However, when asked if a sense of community exists in each individual discipline area, that figure rises to 87% as shown in Figure 6.

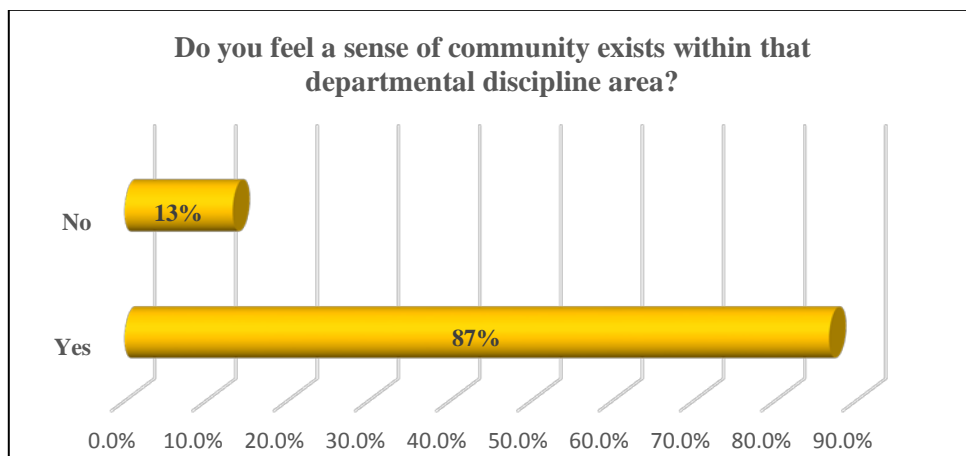


Figure 6

This finding is particularly important as it shows that staff members differentiate between positive relationships and a sense of community (93% agree that there are positive relationships in the department, but only 47% agree that there exists a sense of community within the department). Furthermore, it highlights the divisions in the department along discipline lines. While this is, an understandable finding given the diversity in discipline areas in the department (Marketing, Law and Languages) it is also concerning, as it is likely that it could work against the development of CoP in the department. Given however that the vast majority of staff agree that positive relationships exist in the department, it can be stated that a strong base exists for the development of CoP across the department as a whole, and a high probability of success if appropriate efforts are made to develop CoP in the department. Some quotes that provide some explanation for this lack of a sense of community include:

We are all for the most part doing our own thing around our own modules - nonetheless when we do interact I find all my colleagues very friendly.

In the main I do collaborate with colleagues, however, sometimes lecturers can get very protective of "their" work and are reluctant to change or even discuss change. I think this is the case as some people take suggestions to change as criticism of what they are currently doing. This is not the intention and perhaps better relationships would enable more frank discussion on changes etc. that might take place.

I think that these relationships exist among some members of the department but definitely not across the department as a whole. There are many new members of staff that I don't know at all, and I only engage with some other members at team and department meetings - which are limited in time and number.

There is a willingness to engage, but workloads mean this is not possible for large parts of the semester.

In the context of these quotes, it is noteworthy that 100% of staff members reported that they would welcome the opportunity to work more closely with their colleagues. The door for actions to be taken to facilitate this, in particular to facilitate colleagues working together across discipline areas, appears to be quite firmly open.

In exploring ways that staff members could work together, the research data shows that 80% of the respondents do share their teaching resources and teaching methods with other members of staff in the department.

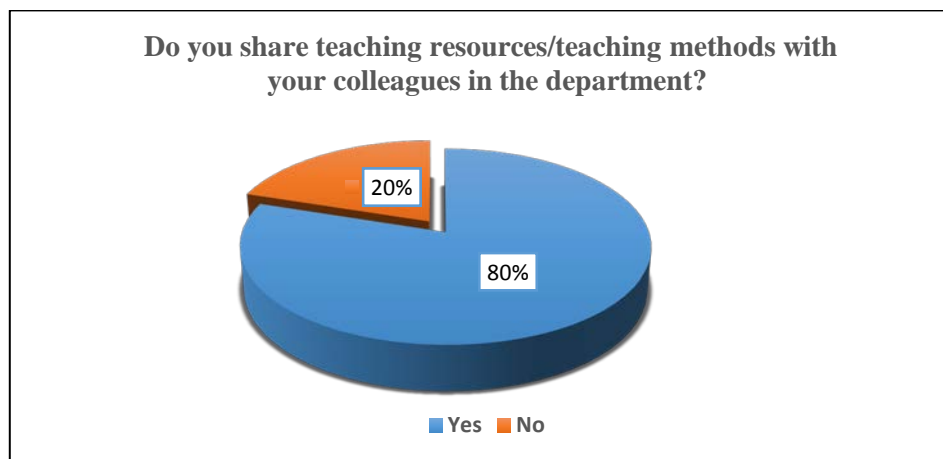


Figure 6

Significantly, however, it is revealed on closer inspection of the empirical results that this sharing of resources mainly occurs between staff in their own specific discipline area.

I do share resources, notes, information etc. with colleagues in my discipline area.

If I have written up a case study or created some slides I will email them on to a few people in my area who I think might be interested (usually this happens once or twice a semester).

I share resources occasionally with certain people, but not as widely or proactively as I would like.

It's quite informal, if someone knows you are in a specific area and may be able to help or share/recommend resources, they will ask you or I will ask about as to who may be the person to speak with and then approach them.

Further to this, the data reveals that this sharing of resources usually occurs in a very informal, infrequent manner. There does not appear to be any formal procedures for sharing of resources etc. among colleagues.

Occasionally if I need 'basic' slides (e.g. for a Marketing 1st or 2nd year undergrad course) or specialist knowledge I'll ask a colleague. Again this only happens maybe two or three times a semester.

If somebody takes over a module from me, or is new to the Institute and speaks to me about a common module, I am more than happy to share notes with them.

We share resources either via ad hoc meetings or because we share an office.

Regarding teaching methods - this is quite informal too, perhaps over tea/lunch when they or I would ask "what would you do?" type questions with regard to teaching methods or where to locate resources or "do you have experience with x,y,z "have you come across this before"....

In addition to a lack of formal structures to facilitate collaboration and the development of CoP, other challenges to the development of CoP were also revealed. These mainly centred on the lack of time to engage in activities outside of one's own "core" teaching load. As evidenced by Eraut (2002) time pressurised environments may limit the occurrence or strength of communities of practice, as there is a lack of time to develop collective understanding. Indeed, it is seen in the literature that collaborations in academic teaching tend to be fragile, compounded by the experience of managing excessive workloads. This is reflected in this research with staff members reporting that:

It's hard sometimes to engage with others as there is too little time for too many tasks at times.

The volume of assessment and exam corrections that need to be corrected mid semester and at semester end, makes engaging with others difficult.

In the context of these challenges and given that the desire for collaboration exists among staff as revealed thus far in the findings, it is important to explore how staff believe such collaboration might happen and how some of the challenges might be overcome. Some of the suggestions include:

Regular departmental meetings

A simple thing like a meet-up over coffee or lunch once a month could help - nothing fancy or structured just a table in the student canteen or Bistro and let us off! An initiative like that planned for next week should also be good in terms of helping boost relationships.

More team building activities. More sync ups between people lecturing in similar subjects/on the same module. A database of content/case studies that people have found helpful.

I think all staff would benefit from information sharing regarding what works well in class - particularly within a discipline area, but at times across disciplines too. As lecturers, we work in isolation most of the time, and I think that there is substantial duplication of effort, particularly among lecturers delivering similar modules. The only information sharing that happens occurs among office colleagues, and even this is occasional.

Some dedicated time to meet in subject groups once a semester.

It emerged from the findings that to be successful, collaboration or the development of CoP must be supported virtually. Buckley *et al.*, (2013) state that management must play a supportive role in promoting the usefulness and advantages of Web 2.0 tools for knowledge-sharing and collaboration and make the technology available to employees. The respondents to this research stated that various technologies should be utilised to enhance collaboration:

I think the best way to promote collaboration would involve the use of technology, so that staff could have access to information at times that suit, and could update this information as appropriate.

A website / FB group / WhatsApp group for sharing of materials might work.

Develop a sharing platform for learning materials.

Specifically, the respondents to the research revealed that they would have particular interest in collaborating in research activities, cross modular projects and case study writing.

I would like to collaborate more with my colleagues in various areas of research, live assignments, sharing of module delivery...

Perhaps in cross-modular project work, assessment and research.

Shared research papers and maybe travelling on Erasmus trips with a couple of members of the department.

There are definitely collaboration opportunities in research. We should have a forum where such potential opportunities could be discussed.

One idea would be to do more 'sharing' of lectures. We often spend a lot of effort sourcing guest lecturers, both to add variety to a course and bring in specialist knowledge. However, we hardly ever use our colleagues as guest lecturers, even though most of us could tick both of those boxes.

I think we all need to make more of an effort to work on cross-modular projects, which we mention regularly, but I have had no involvement in them as yet. We should also work together on research projects, although this is starting to happen now as a result of the research group set up this year.

The development of collaboration and CoP among staff is depended on staff willingness to engage. As discussed by Whalley *et al.*, (2008), if people are forced into participating, their commitment will not be there and they may not share the vision of the program. Involvement in such intentional communities needs to be voluntary and arise out of the desire of teachers to communicate passions, aspirations, frustrations and confusions (Sherer, *et al.*, 2003; Lefoe 2008; Viskovic, 2006). The findings of the empirical research hitherto, reveal a distinct willingness to engage and to improve the nature of collaboration in the department. For this to succeed, staff must be motivated and engaged in their own roles if they are to engage positively with others, and it is particularly enlightening to see, that respondents to the research reveal many rewarding aspects of their roles. These aspects include things like, the progress of students, the passing on of knowledge, engaging in research, and engaging in international collaboration:

I love student enthusiasm, particularly of advanced-level students of languages, for engaging with the language and culture.

Positive interaction with students and colleagues is rewarding. Imparting knowledge that is new, relevant and interesting for students.

Doing research that gets published and positive feedback from colleagues and the head of department....that's rewarding.

Apart from lecturing, I have been involved in a number of projects to improve teaching and learning for students and lecturers this semester, and this has been very rewarding.

Interaction with students. Seeing students grow and develop not only their knowledge but as individuals.

I feel lucky to be in a position to hopefully impact on students lives by giving them the skills to go on to professionals or on to further learning. Love to see their confidence in themselves and their abilities building. Also love to see them coming to life on 'live projects'.

When a class is engaged in vigorous debate about a topic/ case I've brought to their attention I feel a sense of achievement that I've awoken their interest in a given subject area.

The findings to the research reveal that positive relationships exist in the department and there is a strong desire to collaborate among colleagues. The lack of existing formal structures to enable such collaboration and the division of the department into distinct discipline areas, both seem to be impediments to the development of such CoP. In the context of the literature in this area and the empirical findings revealed, the following section will explore ways in which CoP might develop in the department.

Discussion

Overall, staff members agreed that positive relationships existed among staff in the department. A consensus emerged from the findings that improved collaboration would be beneficial for all, resulting in enhanced student learning and engagement. However, some respondents perceived that working independently was still the norm. This has been well documented in the literature (for example Mercieca, 2016) and is reflected here. Of note is the variation in resource sharing within the department. It is concluded from the research that this sharing mainly occurs within specific discipline areas. This again reinforces the culture of siloisation within academia, as referred to in the literature. Respondents identified that the sharing of resources stems from building trust and having a common purpose, which is documented in the literature. The sharing of resources between staff members usually occurs unintentionally or due to physical location, further reinforcing the incidental outcome (Lave and Wenger, 1991) of interacting with colleagues. If CoP are to develop within the department, allowing more positive relationships to develop among colleagues, a more strategic approach to enable colleagues to share resources in an open and transparent manner will need to be adopted. The role of the Head of Department will be instrumental here, and the use of technology in this regard is essential.

The research findings identified areas for collaboration particularly around research, cross modular projects and case study writing. This connects closely with the work of Levine and Marcus (2010), where they conclude that collaboration in the areas of assessment and pedagogical approaches may be more effective than other forms of collaboration. In this study research and case study writing are important drivers for collaboration among staff members and is something that must be encouraged and nurtured.

When staff members identified rewarding aspects of their role, many emphasised the importance of engaging with students and student feedback. This builds on existing literature by Vesico *et al.*, (2008) which concludes that CoP result in educators who become more student centred. The respondents in this study were extremely student centred, with only a small minority identifying the importance of relationships with colleagues, management etc. as motivators or rewards in their current role. This is particularly important as it highlights the necessity to link CoP with enhanced teaching and student learning and the intrinsic motivation therein.

Conclusions

It can be concluded that very positive relationships exist in the department, specifically within discipline areas. A sense of collegiality and a supportive environment is evident from the research. The team building event proved to be a very positive experience with staff members

indicating the need for more events such as this in the future. Respondents indicated that other colleagues within the School of Business would benefit greatly from a similar team building day.

The research found that while staff in general could recognise and appreciate the value of CoP, there is still very limited amounts of collaboration in existence, particularly across the three distinct disciplines. This division within departments is concerning, particularly for the advancement of CoP in the future. As stated in the findings, the collaboration that does occur often happens unintentionally, informally and infrequently. This suggests that strategies around the development of CoP need to be addressed. This research builds on that of Wenger *et al.*, (2002) who propose that managers should foster informal horizontal groups across organisational boundaries. The need to formally support CoP, and in some cases, allow them to develop organically, is of paramount importance. The need to support staff in nurturing and sustaining CoP is vital for communities to thrive and the provision of training and support in relevant technologies in enabling progression of community activities is vital for continued success.

In this regard, it is concluded from the research findings that informal group meetings (such as a regular coffee time for the department) and more team building events could assist in the development of CoP. It was suggested that informal group meetings could play a vital role in allowing CoP to grow organically within the department, where staff members would meet each other and discuss their roles, challenges and opportunities for collaboration, in a relaxed non-pressurised environment. These meetings have a holistic role to play in terms of members of staff feeling more included in overall department activities and thus more motivated in their roles. As identified by Pharo *et al.*, (2014), a community of practice approach is a potentially valuable methodology for overcoming dynamics of fragmentation, isolation and competition within universities.

The findings show that staff members welcome the opportunity to share resources and increase interaction to enhance teaching and learning activities. It can be concluded from the research findings that there is a significant opportunity to collaborate on research activities, cross modular projects and case study writing. Resulting both from the team building day and an increased emphasis in the department on collaboration, there has been some advances in this area and some communities have already begun to develop (for example in research and in case study writing).

Another very interesting suggestion for collaboration put forward in this study was the sharing of lectures; essentially colleagues acting as guest lecturers. This would be a new and exciting departure for the department, as typically lecturers look for guest lecturers from industry. If this suggestion were to be adopted, lecturers could act as guest lecturers for a colleague in a different but related discipline area. This has the potential to enhance teaching and learning while also reaping the benefits of different pools of knowledge internally within the department and across departments. The development of these communities, however, is dependent on the motivation of the educator to engage in such activities. A follow up study on the overall progress of CoP is important to guide and assist with collaboration into the future.

Overall, it can be concluded that there is a significant willingness to engage and improve the level of collaboration within the department. The challenges of the role itself can impede on staff willingness to engage in CoP. However, involvement in CoP activities should assist in empowering educators in tertiary education and subsequently add value to the teaching

experience, with educators who are more student centred. This in turn should enhance the quality of the overall student experience, which then closes the circle by further motivating educators to continue to engage in beneficial and rewarding communities of practice.

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