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Using a Community of Practice in Higher Education: Understanding the Demographics of Participation and Impact on Teaching

Abstract: Research in the higher education literature argues that communities of practice (CoPs) can be effective staff development by helping academics to share teaching experiences and innovations. One of the key proposed benefits of CoPs involves the opportunity for early-career practitioners to learn from more experienced colleagues. This raises the question as to whether the benefits of a CoP differ across academics according to their teaching experience, seniority, or other demographic features. After establishing a CoP within a highly-ranked UK business school, this paper provides a statistical analysis of its ability to engage and influence different academics. As consistent with our hypothesis, the main findings show that that: i) junior staff were significantly more likely to participate in the CoP than senior staff, and ii) conditional on participation, junior participants were also more likely to engage with the CoP by transferring an idea they had learned into their teaching practice.

Keywords: Community of Practice, Teaching Practice, Legitimate Peripheral Participation, Academic Practice

1. Introduction

Enhancing teaching standards is becoming ever more important in higher education. This is especially relevant in the UK following several recent policy changes that aim to encourage competition between degree providers and raise teaching quality. Indeed, Botham (2018) observes that higher education in the UK is 'increasingly focused on teaching and learning practice'. This is in response to factors such as the government-led audit of teaching quality under the Teaching Excellence Framework (TEF) (BIS, 2016) and closer scrutiny of formal teaching qualifications held by staff. At the same time, pressure on academics is also increasing in other areas such as research and funding, and so the time available to develop and disseminate good teaching practice is limited. Indeed, with their emphasis on research and dissemination, academic workload models often constrain the participation of academics in professional development activities related to teaching (Soliman and Soliman, 1997; Hemer, 2014) suggesting that informally organised – community based – initiatives may have an important role in supporting academics in their teaching practice.

In response, 'Communities of Practice' (CoPs) are becoming an increasingly popular framework to enable staff development in higher education (Tight, 2015). More widely, CoPs have been used in many organisational and professional settings to enable learning through discussion of common concerns and interests, in fulfilment of both individual and group goals (Lave and Wenger, 1991; Wenger et al., 2002). In higher education in particular, they provide *informal* opportunities and defined spaces to allow academics to share experiences and disseminate innovative teaching practices (Lindkvist, 2005; Roberts, 2006). Accordingly, CoPs should not be conflated with continued professional development (CPD) initiatives whereby *formal* training is

provided by the institution and often aligned directly with the UK's Professional Standards Framework and staff gaining a recognised teaching qualification (Botham, 2018).

One of the key proposed benefits of CoPs is the opportunity for early-career academics to learn from more experienced colleagues through 'legitimate peripheral participation' (Lave and Wenger, 1991). However, as junior staff often have a higher level of teaching-related training, an opposite learning direction could also be possible with more junior staff updating the skills of more experienced senior staff. This raises the question of how the benefits of a CoP differ across academics according to their level of teaching experience and seniority, or indeed any other demographic characteristics. Evidence on this issue remains scarce.

This paper begins to address this gap by reporting the findings from a study conducted within a leading UK business school. Instead of the more common approach of critiquing the literature from a particular viewpoint, our paper aims to take a complementary scientific approach by testing a hypothesis from the literature using observed data. In particular, the paper uses statistical methods to establish quantitative evidence about the mechanisms under which participation in a CoP and the impact of a CoP on teaching practice vary with seniority and other demographic characteristics of different academics. The use of a quantitative analysis is unusual within the literature. However, one should view it as a complement to the more common descriptive, critical or qualitative approaches. Indeed, as detailed in the next section, Wenger-Trayner and Wenger-Trayner (2015) argue that CoPs can, and should, be measured quantitatively to complement the extensive body of qualitative work in this arena.

2. Theoretical Background and Hypotheses

Originally, the term 'community of practice' was coined by Lave and Wenger (1991) to describe situations where learning is informal, fragmented and serendipitous, and situated in a set of social relationships and shared activities, such as brief chats around the photocopier. Members of CoPs participate voluntarily, are not assessed on their learning, and may alternate between playing the role of teacher and learner. According to Wenger (1998, pp.72-73), a CoP is characterised by three interrelated elements: i) an identity defined by a shared domain of interest; ii) members engaging in joint activities or discussions; and iii) members developing a shared repertoire of practice and artefacts to address recurring problems.

In Omidvar and Kislov (2014), Wenger-Trayner explains that CoPs have evolved through three distinct phases. In Phase 1, learning was seen as a social, rather than individual cognitive, activity (Lave and Wenger, 1991; Wenger, 1998; and Wenger, 2000), and CoPs were described as being formed spontaneously. In Phase 2, scholars began to think of CoPs as communities of potential instruments or tools for knowledge sharing within organisations (Wenger, 2010; Wenger-Trayner and Wenger-Trayner, 2015). A key shift in this phase was the move towards deliberately setting up CoPs with the aim of improving the management and sharing of knowledge within organisations. This notion is not uncontentious – Arthur (2016), for example, cautions against what he calls "a certain commercial instrumentalism" in Wenger et al.'s (2002) suggestion that "CoPs could be managed and cultivated by companies to achieve organisational goals". Phase 3 explored the ways in which individuals participate in a "landscape of practice" across multiple CoPs (Wenger-Trayner et al., 2014). While these phases follow a

chronological progression, CoP initiatives continue to be investigated within all three conceptual frameworks.

The key mechanism by which newcomers to a CoP learn is via 'legitimate peripheral participation' (Lave and Wenger, 1991). This is a direct critique of traditional learning theories whereby the learner is conceptualised 'as a receptacle of (taught) knowledge' and where learning is a set of discrete cognitive processes detached from the learner's own 'lived-in world' (Fuller et al., 2005, p.50). By positioning learning as part of social practice (and learning as generative of new social practices), participation in communities of practice involves learning (ibid.). Within higher education, this would involve early-career academics learning from their more experienced colleagues, indeed:

> "Legitimate peripheral participation provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artefacts, and communities of knowledge and practice. It concerns the process by which newcomers become part of a community of practice." (Lave & Wenger, 1991, p. 29).

Within higher education, Sánchez-Cardona et al. (2012) consider CoPs to be an alternative to traditional training or professional development programmes and suggest that they typically fit within Phase 2 of the CoP taxonomy where CoPs can be deliberately established and managed. Among other benefits, CoPs in higher education are seen to stimulate dialogue amongst faculty (e.g. Lindkvist, 2005; Roberts, 2006; MacKenzie et al, 2010; Herbers, et al., 2011; Nixon and Brown, 2013), to promote self-knowledge and reflective practice (Golden, 2016), enhance disciplinary teaching (Pharo

et al., 2014; Jones, 2010), shaping notions of participatory value through collegiality (Ryan, 2015), and to provide a safe, non-competitive, collaborative and encouraging space within which individuals can improve their teaching practices (Ward and Selvester, 2012; McDonald et al., 2008). Ng and Pemberton (2012) also argue that CoPs in higher education can work with academic networks and cross-cut formal structures and improve collegiality.

The learning mechanism of 'legitimate peripheral participation' would predict that less experienced newcomers become part of a CoP through exposure to activities, identities, artefacts, knowledge and social practice of more experienced old-timers (Lave and Wenger, 1991). However, alternative mechanisms could also be at play. First, as argued by Arthur (2016), junior academics start their careers highly qualified and knowledgeable, and so may have less to learn from their more senior colleagues. Second, early-career academics often have a higher level of teaching-related training, and so the direction of learning may be reversed, with more junior staff updating the skills of more senior staff. Hence, to further explore which mechanism is dominant, we state the following hypothesis:

Hypothesis 1: Relative to more senior academics, more junior academics are more likely to a) participate in a CoP, and b) adapt their teaching practice after participating in a CoP.

The existing evidence on this issue is scant. While the benefits of CoPs are widely documented, as noted earlier, little is known about how the effects of CoPs vary across different types of academics. Cox (2013) reports on CoPs in the USA aimed specifically at early-career academics, which are referred to as Faculty Learning Communities

(FLCs). He finds that these are particularly helpful to academics, while noting that many of the FLCs involved a high degree of traditional training or mentoring elements, where "old-timers" were specifically enlisted to support "newcomers". However, unlike our paper, the results did not analyse how participation and the effects of the community varied between the old-timers and newcomers. Indeed, Arthur (2016) acknowledges the need for studies to better capture individuals and their development as opposed to focussing on the community as a whole or a limited subsection of the community, such as early-career academics (Cox, 2013). To begin to address that gap, the remainder of the paper provides a quantitative analysis of how the benefits of a CoP vary across different types of academics at a UK business school.

3. Implementing the CoP

The CoP was established in early 2015 within a business school in the UK with over 140 academic staff and 3,500 students that offers a full service of undergraduate, postgraduate and MBA programmes. The business school is highly-ranked for both teaching and research and is triple-accredited by the three global accreditation bodies.

The CoP aimed to provide an opportunity for academics to share their experiences, challenges and innovative teaching practices so that staff could diffuse best practice within the school and offer each other mutual support. The CoP was called the 'Teaching Forum', and took the form of a series of lunchtime workshops, to which all academic and academic-related staff within the School were invited.

Each CoP event involved a buffet lunch followed by a series of short presentations by selected staff members about their experiences of different teaching innovations. Such staff were selected based on high teaching scores and/or their innovative practice. After

each presentation, participants were engaged in an open discussion. Following each event, the associated online resources were shared via a dedicated page on the institutional Virtual Learning Environment – these included video recordings, audio podcasts, and presentation slides, as well as an online discussion board to enable further interaction around the topic.

This format is consistent with the definition of Phase 2 in the evolution of CoPs (Omidvar and Kislov, 2014), with a combination of structure and informal elements. In terms of the threefold elements that define a CoP (Wenger, 1998), staff who participated in the CoP i) had a common identity as academics, defined by their shared domain of interest in the scholarship of learning and teaching; ii) engaged in joint activities and discussions via the workshops; and iii) built up a shared repertoire of practice, which was embodied in the resources (or 'artefacts') arising out of each workshop that were shared via the Virtual Learning Environment. Crucially, the CoP can be differentiated from formalised continuous professional development events (e.g. Botham, 2018) as it was initiated by three members of staff to meet the specific need for sharing good teaching practices - which encompasses showcasing new learning technologies, innovative teaching and learning methods, and providing mutual support from colleagues in the school. It was publicised to staff as run by colleagues and was not a formal training event, participation was entirely voluntary and had no impetus from university or department management.

4. Methodology

Our study focuses on the first three CoP events. To assess how the CoP affected different staff members, the study conducted three different surveys:

i) Exit survey: After each CoP event, any new (offline and/or online) participants were identified and surveyed to find out about their experiences and views. This survey was completed voluntarily by 89% of all participants.[1]

ii) Impact survey: Two months after the third event, all staff members that had participated (offline and/or online) were surveyed for a second time. This survey aimed to ascertain a) the participants' views on the relevance of the CoP, and b) how the CoP had impacted on their teaching practice using a series of self-reported measures. This survey was completed voluntarily by 51% of all participants.[2]

iii) Non-participant survey: All staff members that had not participated either face-to-face or online in the CoP were surveyed to assess their perceptions of the initiative and to ascertain their reasons for non-participation. This survey was completed voluntarily by 19% of all non-participants.

The impact survey and the non-participant survey were both conducted online, with £50 voucher prize draws as incentives.

To supplement the survey data, some non-confidential, publicly accessible demographic information about each of the 142 academic and teaching-related staff members within

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[1] Access data of the online resources was collected via the online learning platform's reporting facilities with consent of the users.

[2] Objective measures of the impact on teaching practice were difficult to obtain for this initial quantitative study. More expansive studies that are able to document both self-reported and objective measures would be very useful in future research.

the School was collated. The variables and descriptive data are summarised in Table 1 (all tables are presented in the appendix).

In terms of rank, a total of 37% of staff are lecturers (equivalent to assistant professors), 25% of staff are senior lecturers or readers (equivalent to associate professors), 27% of staff are full professors, and 11% of staff have some other rank. 8% of staff (mostly lecturers) are on probation in the sense of being non-tenured.

In what follows, we define "junior" staff as those ranked as lecturers or senior lecturers, and "senior" staff as readers or full professors. The determination of rank within the university is based upon success in both research (evaluated through publication in academic journals and books) and teaching (indicated by student module evaluations, peer- and formal-observation, staff awards, and in some cases, a teaching portfolio).

Some further observations from Table 1 also include the following. 62% of staff are male. Staff differ in their contracted duties: 85% have teaching and research contracts, 13% have teaching-only contracts, and 3% have research-only contracts. 86% of staff work full-time, and on average, each staff member has been working at the School for over seven years. By using a public website, one can ascertain that 39% of the staff members were submitted to the UK's most recent Research Excellence Framework, indicating a greater research focus for these individuals. Finally, each academic staff member falls into one of seven discipline groups spanning business and economics.

5. Analysis

This section contains our analysis of participation (5.1), perceptions (5.2), and impact (5.3).

5.1 Participation

The paper first analyses the level of participation, how participation was spread across the face-to-face and online formats of the CoP, and how participation varied across different types of academics.

One third of the School participated in the CoP by attending at least one session and/or accessing the online resources.[3] This seems a reasonable participation rate for a new initiative, and this rate is expected to grow as the CoP continues. Amongst those who participated, the face-to-face workshops were substantially more popular than the online resources. 68% of the CoP participants did not utilise the online resources. Out of the 32% of participants that did, 15% also participated in the face-to-face workshops, whilst 17% used the online resources only. The presentation slides and discussion boards were the most used online resources, having been accessed by 49% and 37% of online users respectively. The video and audio recordings were accessed by only 11% and 3% of online users respectively. Most CoPs in the higher education literature focus on using face-to-face gatherings. The few examples that use online platforms reveal some benefits such as flexibility and efficiency (e.g. Golden (2016)), but also significant challenges, as consistent with our results - including difficulties with technology, high set up costs, user confidentiality, and lack of time, e.g. Houghton et al. (2015).

To address the question of how participation varied across different types of academics, the paper first provides a descriptive analysis, before considering a more formal

[3] The statistics in this paragraph are not presented in tabular form to save space; available on request.

multivariate investigation. Table 2 shows how participation rates varied across the demographic variables. After applying some relevant statistical tests to compare the participation rates, one can find the following descriptive results[4]. The first and most striking result concerns the effect of rank - junior staff (lecturers and senior lecturers) were far more likely to participate than senior staff (readers and full professors). As consistent with Hypothesis 1a, this finding is highly statistically significant and very robust: 47% of all lecturers and senior lecturers in the School participated, while only 7% of all readers and professors participated. Second, staff that were entered into the last Research Excellence Framework were significantly less likely to participate. This indicates that staff who are more active and successful in research are less likely to participate in a teaching-focused CoP. Third, a weaker effect suggests that part-time staff were also less likely to participate. Finally, there were no significant differences in the participation rates across the remaining demographic variables, including gender, years completed within the School, job duties, or by probationary status.

These findings are confirmed and extended using a more sophisticated multivariate probit analysis in Table 3, which controls for the effects of all demographic variables simultaneously.[5] Again, as consistent with Hypothesis 1a, an individual's rank is

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[4] Table 3 reports the results of a batch of two-sided non-parametric Fisher Exact tests that are valid for small samples. One can provide very similar results using some related z-tests under a parametric normal assumption. See the technical notes alongside Table 3 for more details.

[5] This methodology estimates the effect of each demographic variable on the probability of an individual participating. In contrast to the previous descriptive tests, it provides a more rigorous analysis by simultaneously controlling for the effects of all the other demographic variables. See the technical notes alongside Table 3 for more details.

confirmed to be the most powerful determinant of participation with more junior staff being far more likely to participate. The results also confirm the effects of past Research Excellence Framework entry and part-time staff. However, compared to the less sophisticated descriptive analysis, the new results now suggest that, separate from the effects of rank, staff that have completed a higher number of years' employment within the School are also slightly less likely to participate.

5.2 Perceptions

Overall, participants viewed the CoP very positively. These views can be documented from the responses to the exit survey (soon after initial participation), and some parts of the impact survey (two months after the third session).

The relevant results from the exit survey are summarised in Table 4. For instance, 86% stated that they were 'likely' or 'very likely' to participate again in the future, and 81% stated that they would encourage another colleague to attend. (The final row of Table 4 is discussed later in the next section.)

One part of the impact survey asked participants for their views on what was most relevant within the CoP. The results are presented in Table 5. Respondents thought that the CoP was most relevant for: i) providing them with a different learning opportunity (75% stated that the CoP was 'relevant' or 'very relevant' for this purpose), ii) encouraging them to try new ideas (71%), iii) improving their confidence (71%), iv) providing them with motivation to enhance their teaching (71%), and v) helping them to balance teaching with other commitments (67%). These reasons are in keeping with the main findings from the literature, as reports of such benefits are typical.

5.3 Impact

This section further analyses the impact survey to determine the extent to which the CoP affected individuals' teaching practice. To recall, Hypothesis 1b suggests that junior academics are more likely to adapt their teaching practice after participating in a CoP. The paper now ascertains the level of impact, the type of impact, and how the reported impact varied across different types of academics.

From the exit survey, the bottom row of Table 4 has already indicated that 66% of participants were likely to use something they had learned from the CoP. To follow this up two months after the third event, the impact survey further asked participants about how exactly the CoP had impacted upon their teaching practice. At this point, 71% of respondents agreed that the CoP had led to them to think differently about their teaching practice. Moreover, 42% of respondents confirmed that they had already used some material and/or ideas from the CoP to support their teaching. For the purpose of the paper, these latter cases, where individuals have used something they have learned from the CoP to support their teaching, are now defined as a form of self-reported 'impact'.

As summarised in Table 6, the most popular forms of such impact included using something they have learned from the CoP to: rethink teaching approaches (29%), updating teaching skills (25%), and help design new material (25%). The most common reason given for why individuals had not yet used something they had learned from the CoP within their teaching practice was the lack of time and opportunity. Once again,

this points to high academic workloads as being the main barrier to participation and engagement in teaching development.

The paper now analyses how the reported levels of impact vary across different types of academics. As the impact survey provides us with a relatively small sample, attention is focussed on a descriptive analysis. After applying some relevant statistical tests to compare the reported rates of impact across different demographic groups[6], Table 7 presents the following results. First, the results provide a further clear indication of the role played by individuals' rank. In particular, as consistent with Hypothesis 1b, conditional on participation, lecturers were significantly more likely to report an impact than senior lecturers.

Hence, when combined with our previous finding on participation, these results are consistent with both of our Hypotheses 1a and 1b. In line with 'legitimate peripheral participation', i) lecturers and senior lecturers being more likely than senior staff to participate, and conditional on participation, ii) lecturers being more likely than senior lecturers to use something they had learned from participating. However, as discussed in the next section, the lack of senior staff participation is of a concern for the full effectiveness of the CoP and for the development of the junior staff.

In other results from Table 7, individuals were also more likely to report an impact if they were on a teaching and scholarship contract (as opposed to those employed on a

[6] As in the previous analysis, these involve two-sided non-parametric Fisher Exact tests that are valid for small samples.

research and teaching contract), or if they were not submitted as a researcher to the last Research Excellence Framework. Intuitively, this is consistent with the idea that staff with fewer research obligations are more likely to try out teaching-related ideas that they have learned from the CoP. Overall, while one must be careful about generalisation due to the small sample size, these findings suggest that the impact of a CoP on academics' teaching practice may vary strongly across different types of staff members.

6. Concluding Remarks

This paper has provided an original investigation into the benefits of a CoP within a highly-ranked UK business school. To complement existing descriptive and critical approaches, the paper has taken a more unusual scientific approach. In particular, by using statistical methods, it has established quantitative evidence about the mechanisms under which participation in a CoP and the impact of a CoP on teaching practice vary with faculty seniority and other demographic characteristics.

At an aggregate level, the benefits of the CoP were clear, and participants' perceptions of the CoP were very positive. As consistent with the existing literature, the participants generally thought that the CoP provided them with a different learning opportunity, a source of improved confidence and motivation, and an opportunity to think differently about their teaching and to apply new ideas to their practice (e.g. Lindkvist, 2005; Roberts, 2006; MacKenzie et al, 2010; Herbers, et al., 2011; Nixon and Brown, 2013).

More substantially, the main results showed how these benefits differed across different types of academics. First, the paper found that participation in the CoP varied widely across some academic characteristics. Most notably, junior staff were far more

statistically likely to participate than senior staff. Participation was also lower for staff with i) a longer employment history within the School, ii) greater research obligations, and iii) part-time contracts. Second, the results showed that, conditional on participation, more junior academics and academics with fewer research obligations were also more likely to apply something they had learned to their teaching practice. Lave and Wenger's (1991) work has been criticised for its attempt to explain all of workplace learning through 'legitimate peripheral participation' by Fuller et al. (2005). However, from their own research they observe that it explains situations with new members joining a CoP, specifically junior members and experienced workers changing jobs (ibid.). Hence, as consistent with the concept of 'legitimate peripheral participation', staff of more junior rank were more likely to both participate in the CoP and apply what they had learned in the CoP. Other demographic variables, such as gender and academic discipline area, had no significant effect on the documented measures of participation or engagement.

These findings generate a number of implications and future research questions. The finding that senior academics may be relatively far less likely to participate and engage in CoPs, suggests that CoPs in higher education may struggle to fulfil their potential. This raises the question of why more senior staff exhibited lower rates of participation and engagement. Some possible explanations include the possibilities that senior staff i) have less to gain from participating due to their higher levels of experience, or that senior staff would gain from participating, but ii) have less free time, ii) underestimate the value of doing so. However, our survey results from non-participants suggest that the increased workload of senior academic staff serves as the major barrier, as consistent with explanation (ii). Indeed, while some respondents commented that the

CoP did not look helpful for them (17%), most respondents said they were too busy (56%) and/or had other commitments (44%). This is in line with findings which show how academic workload models allow insufficient time for engagement in activities aimed at enhancing teaching practice (e.g. Soliman and Soliman, 1997; Hemer, 2014). Hence, future research should be targeted to help understand how to better attract a broader range of staff into CoPs, including those of higher rank. This remains a key question to improve the effectiveness of CoPs and teaching practice in higher education.

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Appendix:

Table 1: Summary of Demographic Data (for all 142 Staff Members)

Variable	Description	Average	Number	Min	Max
Male	Staff member is male	0.62	88	0	1
Lecturer	Staff member is a lecturer	0.37	53	0	1
SL	Staff member is a senior lecturer	0.20	29	0	1
Reader	Staff member is a reader	0.05	7	0	1
Prof	Staff member is a professor	0.27	38	0	1
ReadProf	Staff member is either a reader or professor	0.32	45	0	1
OtherRank	Staff member has another rank	0.11	15	0	1
R+T	Research and teaching contract	0.85	120	0	1
T+S	Teaching and scholarship contract	0.13	18	0	1
R Only	Research only contract	0.03	4	0	1
Years	Number of completed years as staff at School	7.64	-	0	29
PT	Staff member is part-time	0.14	20	0	1
Probation	Staff member is on probation	0.08	11	0	1
REF	Staff member was entered in last REF	0.39	56	0	1
AFM	Member of Accounting + Financial Management	0.14	20	0	1
EC	Member of Economics	0.18	25	0	1
IBSI	Member of International Business, Strategy	0.13	19	0	1
IM	Member of Information Management	0.15	22	0	1
HRMOB	Member of Human Resource Mgt and Organisational Behaviour	0.11	16	0	1
MSOM	Member of Management Science and Operational Management	0.13	19	0	1
RM	Member of Retail and Marketing	0.12	17	0	1
OtherGroup	Member of another group	0.03	4	0	1

Table 2: Participation Rates across Demographic Variables

	Total	% Participated
All	142	33.1
Male	88	28.4
Female	54	40.7
Lecturer	53	47.2
SL	29	44.8
ReadProf	45	6.7****
OtherRank	17	35.3
Years <5	73	35.6
Years 5-10	25	40.0
Years 10+	44	25.0

	Total	% Participated
R+T	120	31.7
T+S	18	50.0
R Only	4	0.0
PT	20	15.0*
FT	122	36.1
Probation	11	63.6
Non-Prob	131	35.9
REF	56	21.4**
Non-REF	86	40.7

Notes: The tests refer to two-sided non-parametric Fisher Exact tests where the null hypothesis states that the participation rates across demographic groups are equal. The stars refer to significance levels: 10% (*), 5% (**), 1% (***), and 0.1% (****). The results in regard to rank indicate that the combined participation rate for readers and professors is significantly lower than that of either lecturers or senior lecturers.

Table 3: Multivariate Probit Analysis of Participation across Demographics

	1	2
Male	-0.04	-0.03
	(0.09)	(0.09)
SL	0.16	0.07
	(0.13)	(0.12)
ReadProf	-0.27	-0.30
	(0.09)***	(0.09)****
OtherRank	-0.18	-0.18
	(0.16)	(0.15)
R+T	-0.29	-0.21
	(0.31)	(0.26)
Years	-0.01	-0.01
	(0.01)*	0.01
PT	-0.25	-0.26
	(0.11)**	(0.09)***

…cont'd

	1	2
Probation	0.17	0.15
	(0.19)	(0.18)
REF	-0.15	-0.13
	(0.09)*	(0.09)
Group Effects	Yes	No
Obs	142	142
LogLik	-69.26	-73.09
LR	41.79****	34.13****
Pseudo R^2	0.23	0.19

Notes: A multivariate probit analysis models the probability of an individual's participation as a function of multiple explanatory variables. In models 1 and 2 above, the explanatory variables include the demographic information, but model 2 excludes the effects of an individual's subject discipline group. For each variable, the table reports the estimated marginal effect on the probability of participation, together with the relevant standard deviation in brackets. The significance level of each variable is indicated with stars: 10% (*), 5% (**), 1% (***), and 0.1% (****). LR refers to test of the overall significance of the model variables, and Pseudo R^2 is a measure of goodness of fit.

Table 4: Participants' Views after Participation (Exit Survey)

	Very unlikely	Somewhat likely	Neutral	Likely	Very likely
Likelihood of Future Forum Participation	0%	2%	10%	50%	36%
Likelihood of Encouraging a Colleague to Attend	0%	2%	17%	57%	24%
Likelihood of Using Ideas	2%	2%	29%	52%	14%

Table 5: Participants' Views on Relevance of Cop (Impact Survey)

Views on the Benefits of the CoP	Not at all	Of limited relevance	Neutral	Relevant	Very relevant
Providing you with a different learning opportunity	4%	4%	17%	54%	21%
Encouraging you to try novel things	0%	8%	21%	46%	25%
Improving your confidence as a teacher	4%	4%	21%	63%	8%
Providing you with motivation to enhance your teaching	4%	4%	21%	50%	21%
Helping you to balance teaching with your other roles	8%	4%	21%	54%	13%
Encouraging you to talk about teaching with colleagues	8%	4%	33%	46%	8%
Providing you with novel ideas	4%	8%	38%	33%	17%
Encouraging you to seek support from colleagues	8%	8%	42%	38%	4%
Letting you express your views about teaching	25%	13%	38%	25%	0%

Table 6: Participants' Views on Type of Impact Experienced (Impact Survey)

Type of Impact (Multiple Responses)	% of Respondents
Rethink my teaching skills and my approach to teaching	29%
Update my teaching skills and my approach to teaching	25%
Design new teaching material	25%
Interact with colleagues	17%
Help with pedagogical research	4%
Develop curriculum	13%
Mentor others	4%
Other	4%

Table 7: Impact across Demographic Variables

	Total	% Participated and Reported Impact
All	142	9.9
Male	88	8.0
Female	54	13.0
Lecturer	53	18.9
SL	29	3.4*
ReadProf	45	0.0
OtherRank	17	0.0
Years <5	73	11.0
Years 5-10	25	16.0
Years 10+	44	4.5

	Total	% Participated and Reported Impact
R+T	120	8.3*
T+S	18	22.2
R Only	4	0.0
PT	20	5.0
FT	122	10.7
Probation	11	9.1
Non-Prob	131	9.9
REF	56	3.6**
Non-REF	86	14.0

Notes: The tests refer to two-sided non-parametric Fisher Exact tests where the null hypothesis states5 that the impact rates across demographic groups are equal with significance 10% (*), 5% (**), 1% (***), and 0.1% (****).

Author Biographies:

Alex Wilson is Senior Lecturer in Strategy at the School of Business and Economics at Loughborough University where he teaches Strategic Management. He has won an award as Early Career Teacher of the Year. He has served as the Chartered Association of Business Schools (UK) Research Fellow in both 2017 and 2018. He has been a visiting researcher at SMU (Singapore). His research examines the strategic development of management education globally.

Chris Wilson is a Senior Lecturer in economics within the School of Business and Economics at Loughborough University, UK. Chris has extensive experience as a Programme Director for the School's undergraduate economics degrees, and has recently served as Co-Director of Undergraduate Studies. He has won a number of awards for his teaching. Chris researches and teaches in the area of microeconomics and game theory.

Gabi Witthaus is a learning design consultant at the University of Birmingham, where her role is to support academics in module and programme design. She previously worked as a research associate in open and distance learning at the University of Leicester, where she was also a tutor and e-moderator on the Online Master's in Applied Linguistics and TESOL programme. Gabi is currently also working towards her PhD in Higher Education, Evaluation and Enhancement, through Lancaster University. Her research focus is on widening participation in higher education through online and open learning. Gabi blogs at ArtofElearning.org. On Twitter she is @twitthaus