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Graduate students' motivations for participating in development workshops

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Abstract

Despite a clear interest in and demand for professional development opportunities, attendance is consistently poor for many development workshops. The aim of this project was to gain a better understanding of PGRs' motivation for attending or not attending professional development workshops in order to explore potential areas for action which may improve future attendance rates. Initial evidence was gathered through a survey circulated to a large number of PGRs. Themes emerging form the survey were explored further through a pair of focus group interviews. PGRs are motivated to register for workshops seen as relating specifically to the process of completing a PhD such as viva preparation, thesis writing or research methodologies. Despite being relevant, the consequence of attending is sometimes seen as too high and other commitments such as PhD research, teaching responsibilities and other work, take priority at the last minute. This unpredictability is leading not only to low workshop attendance, but also high stress levels among PGRs. Based on these findings three key areas for action are proposed. Firstly, ensuring that specific benefits of participation are clear and relevant to individual participants. Secondly, ensuring our programmes are flexible enough to be accessible in light of the very unpredictable and diverse PGR contexts. This means diversifying our delivery modes to include on-line and remote access as well as asynchronous engagement opportunities. Finally, addressing the need for mental health support by recognizing and expanding how we can use our programmes to build resilient communities and peer support networks.

Key words: Post-graduate researchers; professional development; researcher development, engagement, workshop attendance

Where is everyone?

> *I am sitting in an empty classroom, ready for my next workshop to begin. Slides are loaded, workshop materials are set up, tables and chairs suitably arranged. So far only a couple of people have arrived, but I'm still hopeful. The session was fully booked weeks ahead, with a waiting list hoping for a place. I am expecting 30 participants to join me this morning, but at the scheduled start time only 10 people have arrived. I give it another 5 minutes for any latecomers to arrive, and then I start despite the disappointing attendance. I can't help but wonder – where is everyone? Where have I gone wrong?*

This scenario is not unusual. In conversations with other colleagues around the UK it is clear that low attendance rates are common for everyone. Surveys of students has shown a demand for relevant training and development (e.g. Bussell, Hagman, & Guder, 2017; Fong, Wang, White, & Tipton, 2016); and the consistent number of students registering for workshops here at this institution are encouraging. Despite this clear interest in and demand for relevant development opportunities, attendance records from workshops at this institution show that actual attendance rates are often low with on average only 65% of those registered actually attending the session on the day (Saetnan, 2017). Discussions with colleagues from other institutions and independent development consultants suggests that this is a widespread issue, and indeed both Bussell et al. (2017) and Fong et al. (2016) report this as an issue also in US institutions. Such unpredictable and low rates of attendance becomes a serious issue for planning as well as delivery of workshops. Among the concerns raised, it has meant students being told that a workshop is fully booked when in actual fact they could have participated.

Expectation of generic skills training

Professional development and skills training has a relatively long history in the UK (Cumming, 2010). Although often implicitly so, the skills debate which took off in the 1990s centred on the purpose of the PhD and the desired outcomes. Increasingly, desired outcomes were being described as a distinct sets of skills as seen from the perspective of potential future employers taking a deficit view listing discreet skills perceived to be lacking when graduates enter employment (Cumming, 2010). Governments responded with policies intended to increase the development and training of generic and transferable skills. In particular, the Roberts Review highlighted

the purported lack of transferable skills among graduates and postgraduates, recommending increased focus on and funding for generic transferable skills training as part of the PhD (Roberts, 2002). At the same time, the Joint Skills Statement by UK research councils highlighted the range of skills and attributes expected of doctoral students (UK GRAD, 2001). Although the funding made available on the basis of the Roberts Report has long since come to an end, the structures put in place largely remain and the professional development of researchers has continued to receive attention. Growing out of this continued focus on professional development and skills training, the Researcher Development Framework (RDF) launched by Vitae in 2010 was intended to be a tool used by researchers to assess their own knowledge and skills against explicit standards expected for successful researchers (Vitae, 2018). Similar developments leading to specific skills programmes were seen also in the USA and Australia (Gilbert, Balatti, Turner, & Whitehouse, 2004).

As highlighted by both Mowbray & Halse (2010) and Cumming (2010), the voices of PhD researchers themselves have largely been lacking from this wider debate around skills development or need for skills training. As McAlpine (2010, p.230) points out, a skills discourse focusing on "the 'supply and demand' of researchers and 'supply of skills'", ignores the emotional and physical lives of the researchers themselves. In order to understand engagement with and motivations for personal and professional development we need to develop an understanding not only of employers' skills needs but also researchers own motivations, fears and priorities.

Today, postgraduate researchers (PGRs) are widely encouraged to participate in training and professional development as part of the PhD, and such programmes are often directly aligned to the RDF framework to highlight which specific skills and attributes are being addressed. For example, at the author's university PGRs are encouraged to complete a Development Needs Analysis or create a Professional Development Plan as part of the induction into the PhD. Such a process highlights an expectation of engagement with professional development. However, PGRs are being socialised into a community with potentially conflicting expectations, leading to a sense of ambiguity over expectations (Gardner, 2010). If the supervisor, or department, is not supportive of central professional development, then PGRs will perhaps also be less likely to prioritise participation and engagement with such programmes even if they do see them as potentially beneficial.

One of the frequently raised concerns about professional development is lack of relevance to the participants' specific discipline. University-wide training and development programmes are necessarily removed from any disciplinary context. Porter & Phelps (2014) argue that context matters, and that learning to apply skills cannot happen without relevant context. Indeed, PGRs themselves may not see the value of development and training opportunities which are not directly and explicitly linked to their own day-to-day research tasks. A recent survey of Arts and Humanities PGRs by Thouaille (2017) shows that although the majority of PGRs see professional development as valuable, a smaller proportion actually make time for it in a pressured academic environment. Priority is given to activities which directly progresses their thesis research or their employability, with broader career skills considered not worth the time (Thouaille, 2017).

Despite these criticisms and constraints many, including Craswell (2007) and Porter and Phelps (2014), do see value in training and development provided outside the discipline for building confidence and allaying fears of life post PhD. Several studies have shown that students generally value such training and development opportunities (e.g. Pritchard, MacKenzie, & Cusack, 2009; Walsh, Seldon, Hargreaves, Alpay, & Morley, 2010). As Walsh et al. (2010) report, final year STEM students see a positive impact on their own behaviour as a result of participating in transferable skills training, although a considerable number of respondents did see such training as distracting to research suggesting that skills training is prioritised less. Following up students after successful PhD completion, D'Souza & Mandeville (2015) show that former students continue to see direct benefits of transferable skills training in their careers also beyond the PhD. Many PGRs do report being interested in or wishing to attend training and development events when these are available, and are particularly motivated to do so by fear and anxiety about their future academic prospects (Thouaille, 2017).

Expectation of development within the academy

Despite this expectation of continued professional development, aspects of the academic journey remain mysterious, and 'cloaked in normalcy' as Starke-Meyerring (2011, p.77) has pointed out. Not only are PGRs expected to learn the explicit disciplinary curriculum, they are also navigating a hidden curriculum never explicitly stated or clarified. This hidden curriculum includes expectations of what it means to be a

successful academic, of what is valued within the community (Foot, 2017). The short timeframe and pressure for timely completions means limited time for learning through trial and error by watching and imitating established academics without explicit instruction.

As a result, many PGRs seek out training and development especially in topics relating to aspects of the PhD that can seem most high-stake, challenging or confusing such as thesis writing or viva preparation. This fear of the unknown, or genuine confusion, combined with the high stakes involved can be a big motivator for PGRs to sign up for development and training. They might be looking for reassurance, or to demystify processes, rather than specifically learning something new. And by examining elements of this hidden curriculum through conversations with peers and developers, as well as with faculty, this 'cloak of normalcy' can be lifted (Foot, 2017).

Turning interest into actual attendance

The research on PGRs and early career academic development, has provided rich insights into which aspects of the PGR journey can seem particularly challenging or confusing. Along with surveys of PGRs, this has given us a good understanding of the demand for training and development in terms of subjects or topics to explore. Surveys by Thouaille (2017) and Walsh et al. (2010) show PGRs are interested in professional development and motivated to participate in development opportunities. However, neither study fully explored how this motivation for engagement with professional development translates to the day-to-day decisions on how to prioritise their time. Data on how many attended development workshops, as reported in Walsh et al. (2010), gives an indication of the level of interest in professional development but ignores the stories of those who were interested enough to sign up for a session but then failed to attend on the day.

Although individual PGRs may have valid reasons for deciding at the last minute not to attend a workshop, widespread low attendance rates suggests that there may be wider issues to consider. The aim of this research project was to gain a better understanding of PGRs' motivation for attending centralised professional development workshops in order to explore potential areas for action which may improve future attendance rates. Specifically, this project explored the following three research questions:

1. What factors do PGRs report as motivating them to register for professional development workshops?
2. What reasons do PGRs provide for choosing not to attend professional development workshops for which they have registered?
3. How would PGRs like to see the programme develop in the future?

Gathering the evidence

Data reported here were gathered at a UK Russell Group University in a two-step process. First, a brief survey was circulated to all current PGRs. Themes emerging from the survey were then explored in greater detail through a pair of focus groups. Ethical approval for the full project, including both the survey and focus groups, was granted by the University Ethics Board before any data collection was initiated and informed consent was obtained for all participants.

The survey was circulated widely to gain a broad overview of PGRs' motivations for attendance or non-attendance at development workshops. In addition to some initial demographic data, the survey asked participants whether they had ever not attended a session for which they had registered, and their reasons for doing so. Respondents were also asked to comment on what motivates them to attend workshops, and what kinds of workshops they would like to see more of in the future. Although previous research has addressed interest in skills development (e.g. Bussell et al. 2017, Fong et al. 2016), no literature could be found to suggest specific reasons for non-attendance. Survey questions were therefore left open ended to allow respondents to generate their own factors rather than be constrained by any preconceived list. Survey responses were compiled in an Excel spreadsheet, and common themes were noted from among the free text responses.

In total 88 PGRs responded to the survey, with 66 PGRs providing free text responses. This represents only a very small proportion of PGRs enrolled at the institution (institutional data from December 2016 indicate approximate enrolment figures of 1700). The majority of respondents were in the middle (41 respondents – 62%) or late (25 respondents – 38%) stages of their PhD studies and a wide range of disciplines were represented. Only 18 respondents (27%) indicated that they had chosen not to attend a

workshop for which they had registered.

After the survey had been completed, invitation to participate in a focus group was sent to all PGRs who had registered for a workshop in the last two years. Response to this invitation was low, with only 10 PGRs volunteering to attend and 6 actually attending one of the focus groups. As a result, two 60-90 minute focus groups were attended by 2 and 4 PGRs respectively, representing all faculties and stages of PhD. Focus groups were facilitated by two current PGRs, both trained in facilitation techniques, to encourage participants to speak freely and openly. Focus group interviews were structured semi-structured, in four parts. At the start of the interview, facilitators encouraged a discussion around PGRs motivations for signing up to workshops and what they feel makes workshops worthwhile. The second part of the interview focused on PGRs priorities. Here, the facilitators presented the participants with a set of typical PGR tasks or activities and asked them to create a prioritised list. This list was then used to prompt a discussion around who sets those priorities and why. In the third part of the interview, participants were asked to write out topics they would like to see in a development programme and to place these onto a PhD timeline to indicate when they felt these topics would be most relevant (Figure 1). Finally, participants were encouraged to suggest what they felt would improve attendance rates at development workshops, and to raise any further comments or suggestions they might have about the current programme.

Focus group discussions were audio recorded while the list of priorities and suggested topics were photographed. The resulting audio recordings were transcribed in full by the researcher and the resulting text analysed thematically using the process described by Braun & Clarke (2006). Through repeated close reading of the transcript texts, dominant topics and themes were chosen and illustrative quotes highlighted. Themes identified were then compared with those emerging from the survey data.

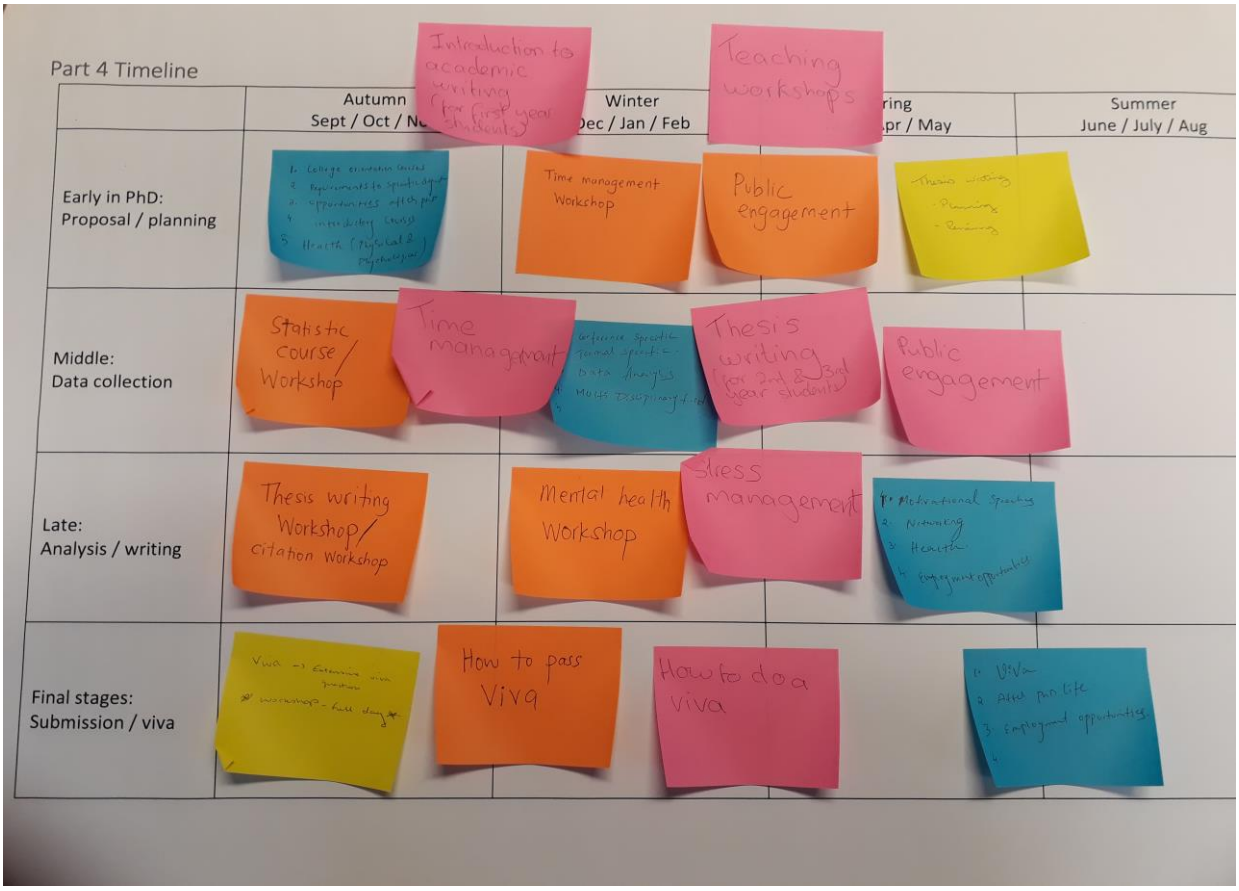
Diagnosing the problems

What motivates PGRs to attend (Research Question 1)?

The majority of respondents focused on the relevance of workshops when deciding

whether or not to attend (Table 1). More specifically, the content needed to be seen as relevant or useful either to their subject area, their career aspirations, or specific skills they felt the need to develop. The focus group participants particularly talked about taking advantage of opportunities and resources on offer to further develop skills they needed. Workshop topics they were particularly interested in were specifically related to the PhD such as viva training, thesis writing or statistical methods (Figure 1).

Figure 1. During the focus groups, participants were asked to workshop themes they felt were particularly important and map these onto four different stages of the PhD as an indication of when they felt the workshop themes would be most relevant.



Two other themes emerging from the survey responses were *access* and *information* (see table 1).

Table 1. Themes emerging from free text survey responses.

What would make you more likely to attend? N=54		**Why did you not attend? N=18**		
Theme	Responses	Theme		Responses
Relevance of topic	25	Commitment/time		14
Access: Timing/length/location	19		PhD research	4
More information	12		Other work	3
Tangible outcomes	5		Unspecified	7
Other	2	Illness / Other		4

A total of 54 PGRs responded to the survey with free text comments. Only 18 of respondents indicated that they had not attended a workshop for which they had registered and offered reasons for not attending.

Finding the time for a full day workshop is challenging for some, and many find it challenging to access workshops on campus as they are based elsewhere or work part-time as illustrated by these quotes:

> *Make sure that timings fit in with my dates at Liverpool. I am currently based at my CASE partner*

> *The main obstacle to me attending workshops is prior commitments as part of my PhD project, running workshops a number of times, on different days of the week would make it easier for me to attend.*

Participants also suggested that more information about the content, format or outcomes of workshops would make sessions seem more attractive and therefore make them more likely to sign up as illustrated in these quotes:

> *More awareness about workshops and what benefits you will gain from attending*

The focus group participants expanded on this *information* theme by suggesting that recommendations from supervisors or peers would further motivate them to engage in the workshops, and recommended using feedback from past participants as part of the

promotion for future workshops to raise awareness of both content and potential benefits.

Why do PGRs sometimes not attend (Research Question 2)?

A wide range of reasons for not attending were offered, but by far the most common theme related to **commitment clashes** (Table 1). Some examples included:

> *Busy in the lab or other commitments with my research*
>
> *Unfortunately I was not able to attend as I had a student (I'm also an academic advisor) turn up needing urgent help and they needed to take priority*
>
> *Suddenly have other more important commitment*

This theme was explored in depth during the focus groups through discussing how they would prioritise different demands on their time. Discussions kept returning to the unpredictability of PhD research and the many demands on their time. Although they all felt that training and development was important, quite often other things would take priority depending on how severe the consequence was considered for either missing out on the workshop or missing out on something else important as illustrated in this exchange from one focus group:

> *So a lot of these things depends on the kind of consequences of it. You don't do it, what will happen? So some things are probably contextual like I don't know like with thesis writing or with I don't know task to supervisor sends task to complete this week. It depends on whether I've got a deadline coming up or not*
>
> *Or the type of task. So the type of task my supervisor normally sends is it doesn't really need to be done right now. He acts like it needs to be done right now, but it doesn't so I will probably still go to the workshop*
>
> *My supervisor doesn't tend to do that so she sends things when it needs to be done like straight away*

The loss of research progress if time-sensitive or pressing lab work was missed was considered a greater consequence than missing out on potentially useful skills or information in a workshop. Similarly, missing a chance to meet with a busy supervisor or

collaborator was seen as a more severe consequence than missing a workshop as it will have a direct impact on their research and potentially delay their progress. Other work commitments were also raised as an issue, relating to teaching or to work outside the university. As one participant pointed out, many PGRs have part time jobs outside of their PhD studies and feel under pressure to take on work when offered even at short notice:

> *But I imagine there are other people who have different kinds of jobs where they may be on again zero hours contracts and asked to come in at the last minute and they can't really say no or they can't afford to or there's that kind of pressure and I think that could well be an issue for some people who don't show up.*

What would PGRs like to see in the future? (Research Question 3)

Because many of the demands on their time and attention were last minute or unpredictable, they reported finding it very difficult to plan ahead, including making time for wider development and training despite seeing it as an important element of their PhD. Several respondents therefore highlighted the need for developing a more flexible programme with frequent repeats of sessions or on-line access.

The unpredictability of PhD research and multiple pressures seem to be the principle factors contributing not only to low attendance rates, but also to high levels of stress highlighted by participants in the focus groups. They all discussed feeling stressed or struggling to cope at some point due to being under pressure to deliver on their research, while juggling teaching or other part time employment and demands from supervisors and collaborators. This exchange from one of the focus groups is particularly poignant illustration:

> *I have a colleague in my group, he's now in he's now taking antidepressants in his final year of writing because too much stress and then he has anxiety problem that really exacerbates the problem so he is now on antidepressants. I don't know how to help him. He looks fine, he looks fine, he looks normal, but he has to take the antidepressants, like, yeah .. I'm afraid I'm turning like him because I'm so stressed at the moment because of the move*

> *I think I was really really mega stressed a couple of months ago, I think I'm kind of coming out of it now because of partly like time management and financial issues, and then I wasn't making much progress with my, well, I'm still writing but I wasn't making much use ...*

The solution to this wellbeing issue suggested by the focus group participants included stress management workshop and more social activities.

> *I think like it's something where you can introduce like social events where people can go just to meet other PGR students and do it sort of like everyone is going to be individual but don't worry whoever is gonna be organising the event is their responsibility to make sure they're talking to everybody that's coming in because then you're always going to have somebody that are more confident than other people in a group situation so it's then encourage those links and then it's a case of you'll find that most people going through similar sort of things and it helps lot of you solve of any social issue that you're having, any issues with supervisors and it will give them an idea as well as people who are too scared to attend conferences by themselves and things like that it will give them a sort of ok I see this conference I want to go to is somebody else available? Because that's why I was thinking that could be a good thing to do, because when I was talking to people especially people who are quiet they're sort of like yea I don't really know many people and it seemed like it was a little you know it's difficult getting to know people because of this or this*

What action can we as developers take?

PGRs do clearly see the benefit of participating in development opportunities (Research Question 1), yet such opportunities are not always prioritised ahead of other tasks if the benefits are not seen to outweigh the potential consequences (Research Question 2). As Craswell (2007, p.384) explains: "*The [PGR] students are very pressured, as are all involved in their research training and educational development. In this pressured environment, students are strategic about value adding in terms of skills training. […] they do prioritise skills needed for candidature, understandably so – they want that degree*". Based on the findings presented here, three areas for potential action which might go some way to addressing the issues of poor attendance are explored: content, flexibility and community.

Content – clarifying relevance and value

Time constrains have been cited by many PGRs as a key reason for not engaging in professional development (Thouaille, 2017), and the same was clear from this study. When faced with conflicting commitments, PGRs weight up whether the content is valuable enough to forego other important tasks. They may sign up for a session early,

with the intention of attending if they have nothing more urgent to do at the time. However, if the content is perceived to only be vaguely relevant or potentially useful, then something more urgent will always present itself. Researcher developers therefore need to ensure that the content of programmes meets the needs of the PGR community. Training and development opportunities, if not directly related to specific research related tasks, can be seen as a distraction from research and therefore be priorities less (Thouaille, 2017; Walsh et al., 2010). The topics suggested by participants in this study are similar to those surveyed elsewhere (e.g. Bussell et al. 2017) as being directly relevant to the ongoing tasks of the PhD such as thesis writing, project management and viva preparation all of which are offered as part of the current PGR development programme. However, one area where provision is clearly lacking is in the area of mental health and stress management. With high levels of stress and mental health risk reported among PhD students (Hargreaves, De Wilde, Juniper, & Walsh, 2014; Levecque, Anseel, De Beuckelaer, Van der Heyden, & Gisle, 2017), and the importance placed on these themes for the focus group participants, this is clearly an area where further action is needed.

It is not only imperative that we offer relevant content, but that topics offered are perceived as relevant by the PGRs themselves. Centralised training and development opportunities necessarily have generic titles without reference to specific disciplines. PGRs may therefore perceive that the content will be too vague or generic to be of relevance, or think that the content will only be relevant to some other discipline. Both respondents to this study and elsewhere (Thouaille, 2017) suggested that they were looking for more discipline specific training, that interdisciplinary workshops were perceived to be less useful or less relevant. As developers, it seems we can (and should) do more to express how and why our sessions are relevant to a wide range of participants, along with the benefits of participating in development alongside colleagues from other disciplines.

Flexibility – ensuring availability and access in light of unpredictability

For many respondents, an important reason for not attending despite the content being seen as relevant (Research Question 2) was their experience of unpredictability of PhD research. Many gave examples of when experiments unexpectedly failed or processes took longer than anticipated due to unexpected technical problems. When this

happened, the research would take priority over additional development opportunities despite their keen motivation to participate. In addition, life itself can of course be unpredictable. PGR communities are very diverse, including students working full or part time, with caring responsibilities, or based in a wide range of locations (Thouaille, 2017). Due to financial pressures, family responsibilities, or transport issues, attendance at a workshop may need to be rescheduled or cancelled at the last minute.

Our approach to professional development therefore needs to be flexible to allow different forms of access suitable for the many different contexts PGRs are working in. It is interesting to note that students show a high preference for face-to-face workshops, both in this study and in Bussell et al. (2017), yet this is not always matched by attendance. Although face-to-face workshops are preferred when the timing works, we also need to recognize that they may not be accessible for many students. It is therefore necessary to consider alternative approaches, including on-line interactive sessions and on-line materials students can access as and when the information is needed or they have time. Some of the participants in this study even suggested the possibility of using Skype to connect with what are otherwise face-to-face workshops when travelling to campus or escaping the lab was not possible. The development of blended and on-line communities of learning is not new to Higher Education, but perhaps less developed within the researcher development area. It is therefore timely that we as developer explore opportunities to expand our online and asynchronous engagement with the PGR community to support their development on their own terms.

Community – providing support and raising awareness

As developers, we may need to engage more directly with the wider academic community to raise the profile of development and encourage an environment where professional development is seen as valued by all including PGRs and their supervisors and mentors. When making decisions about whether a workshop is worth attending or something else should take priority, PhD students consider their own needs at that particular time as well as the opinions of their social networks. These social networks include supervisors, fellow students or even connections beyond immediate research or disciplinary groups (McAlpine & Norton, 2006; Sampson & Comer, 2011; Sweitzer, 2009). As such, supervisors often act as gatekeepers to information and engagement. Some of the respondents in this survey suggested that supervisor had not granted

permission to leave the lab to attend development, or that supervisor meetings took priority. Similarly, in the survey by Thouaille (2017) many reported that supervisors were not supportive of or indifferent to engagement with professional development. In order to raise awareness of the value of development opportunities, we therefore need to engage with the whole community not only PGRs. In particular, we need to engage with supervisors, helping them see the value of development workshops for improving productivity and future prospects of their students. As suggested by Browning, Thompson, & Dawson (2016), 'it takes a village to raise and ECR'. As developers, we need to be working with the whole village rather than cheering from the side-lines.

As part of this process of community engagement, it is also important to explain the value of participating in development workshops beyond the specific content covered. As mentioned above, it is clear that PGRs are in need of greater mental health and stress management support. More than just providing workshop content, Wisker et al. (2010) suggest that peer support is crucial in coping with a stressful academic environment. As suggested by the focus group participants, the support we as developers could provide may include stress and time management workshops, but more importantly facilitate social events to help build those peer support networks. Such peer networks could serve an important secondary purpose. Experienced PGRs can give new PGRs a better idea of what they may gain from participating in the workshops in a relevant context, as well as provide some perspective on how to balance research demands with other commitments. Through this process of engagement across cohorts and disciplines, we can foster a greater sense of community and belonging among out PGR community and hence reduce potential for isolation among PGRs (Wright, 2003). This community building, would address the issue of content information as well as go some way to addressing the issues of increased mental health support by building resilient communities and peer support networks. The challenge remains to find flexible ways in which PGRs can engage with this community support when the timing is right for them. Hence there is a need to explore more diverse methods of engagement and development opportunities, including online and asynchronous opportunities for engagement.

Implications for the development discourse – is an alternative narrative for development programmes needed?

From the discussion above, it is clear that as developers we have some work to do to shape the discourse around professional development in order for the whole PGR community to see its value and benefit. It is increasingly clear to me that we need to continue to move this conversation beyond basic transferrable skills training also among the academic communities we serve. Seeing the PhD as merely a mechanism for building a prescriptive set of distinct skills is constrictive and does not fully grasp the intention or outcomes of the PhD. It is also clear that PhD researchers do not suffer a skills shortage.

Employment data shows that a high proportion of PhD researchers are employed in a wide range of careers, both within and outside academia soon after graduation (Neumann & Tan, 2011). Although some employers still continue to push the employability agenda, the discourse around PhD training will clearly need to shift away from a focus on distinct lists of skills. Mowbray and Halse (2010) propose a different view of the purpose and outcomes of a PhD. Building on Aristotle's model of interconnected intellectual virtues they aim to reframe the PhD, not as a means of acquiring specific sets of discreet skills, but rather "acquiring and improving an interdependent suite of skills from a range of contexts that transcend disciplinary boundaries to fashion students' personal and professional growth" (Mowbray & Halse, 2010, p.662). In a similar vein, Cumming (2010) proposes a holistic model of learning and skill development in research degrees, that of 'contextualised performance' where learning is an active process involving skilful performance in response to changing circumstances, as well as thinking about, reflecting on and refining that performance, all in a social context. Reflecting this understanding of PhD skill development, a key 'skill' described by participants in Mowbray and Halse (2010) was personal resourcefulness, understood to include assertiveness, confidence, resilience and persistence. They describe this as the ability to act reflectively and consider options, guide actions and make deliberate choices which very much mirrors the 'contextualised performance' as described by Cumming (2010).

Perhaps a more appropriate aim for centralised development programmes, in light of

the models proposed by Mowbray and Halse (2010) and Cumming (2010), is therefore not to develop discrete or discipline specific research skills, but rather provide opportunities to make the 'contextualised performance' of broader research skills explicit through discussion and reflection in a social context. In this way development programmes equip students with practical strategies to better take control of their own learning and development, to provide them with learning strategies which are not sector bound and strategies to adapt skills across sectors as suggested by Craswell (2007). As developers, our challenge is to make this message clear for potential participants, their supervisors and wider network of supporters to ensure that engagement with development opportunities more often is prioritised when PGRs make day to day decisions about how to spend their time more effectively. At the same time, we need to show that we see this as valuable to all PGRs regardless of their circumstances and therefore provide a flexible programme which all can engage with whether they are on campus, in our classrooms or engaging with our programmes remotely.

References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Browning, L., Thompson, K., & Dawson, D. (2016). It takes a village to raise an ECR: organisational strategies for building successful academic research careers. *International Journal for Researcher Development*, *7*(2).

Bussell, H., Hagman, J., & Guder, C. S. (2017). Research Needs and Learning Format Preferences of Graduate Students at a Large Public University: An Exploratory Study. *College & Research Libraries*, *78*(6), 978–998.

Craswell, G. (2007). Deconstructing the skills training debate in doctoral education. *Higher Education Research & Development*, *26*(4), 377–391.

Cumming, J. (2010). Contextualised performance: Reframing the skills debate in research education. *Studies in Higher Education*, *35*(4), 405–419.

D'Souza, K., & Mandeville, P. (2015). Longitudinal Evaluation of the Postgraduate Certificate in Advanced Research Methods and Skills Programme. *Education in Practice*, *2*(1), 30–33.

Fong, B. L., Wang, M., White, K., & Tipton, R. (2016). Assessing and Serving the Workshop Needs of Graduate Students. *The Journal of Academic Librarianship*, *42*)5(, 569–580.

Foot, R. E. (2017). *"It's not always what it seems": exploring the hidden curriculum within a doctoral program*. Kent State University College.

Gardner, S. K. (2010). Contrasting the socialization experiences of doctoral students in high- and low-completing departments: A qualitative analysis of disciplinary contexts at one institution. *The Journal of Higher Education*, *81*(1), 61–81.

Gilbert, R., Balatti, J., Turner, P., & Whitehouse, H. (2004). The generic skills debate in research higher degrees. *Higher Education Research & Development*, *23*(3), 375–388.

Hargreaves, C. E., De Wilde, J. P., Juniper, B., & Walsh, E. (2014). Re evaluating doctoral researchers ' well being : what has changed in five years ? *Graduate School Imperial College London Http://Www.Imperial.Ac.Uk/Media/Imperial-College/Study/Graduate-School/Public/Well-Being/Wellbeing-for-GS.Pdf*, (Imperial College London).

Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organization and mental health problems in PhD students. *Research Policy*, *46*)4(, 868–879.

McAlpine, L. (2010). Fixed-term researchers in the social sciences: Passionate investment, yet marginalizing experiences. *International Journal for Academic Development*, *15*(3), 229–240.

McAlpine, L., & Norton, J. (2006). Reframing our approach to doctoral programs: an integrative framework for action and research. *Higher Education Research &*

Development, *25*(1), 3–17.

Mowbray, S., & Halse, C. (2010). The purpose of the PhD: Theorising the skills acquired by students. *Higher Education Research and Development*, *29*(6), 653–664.

Neumann, R., & Tan, K. K. (2011). From PhD to initial employment: The doctorate in a knowledge economy. *Studies in Higher Education*, *36*(5), 601–614.

Porter, S. D., & Phelps, J. M. (2014). Beyond Skills: An Integrative Approach to Doctoral Student Preparation for Diverse Careers. *Canadian Journal of Higher Education*, *44*)3(, 54–67.

Pritchard, J., MacKenzie, J., & Cusack, M. (2009). The response of Physical Science post-graduates to training courses and the connection to their PhD studies. *International Journal for Researcher Development*, *1*(1), 29–44.

Roberts, S. G. (2002). *SET for Success. The supply of people with science, technology, engineering and mathematics skills*. Retrieved 11 January 2020 from http://webarchive.nationalarchives.gov.uk/+/http:/www.hm-treasury.gov.uk/d/robertsreview_introch1.pdf

Saetnan, E. R. (2017). Where-have-all-the-students-gone? Retrieved December 1, 2017, from https://drsaetnan.wordpress.com/2017/12/01/where-have-all-the-students-gone/

Sampson, K., & Comer, K. (2011). Engineering research teams: The role of social networks in the formation of research skills for postgraduate students. *International Journal for the Scholarship of Teaching and Learning*, *5*(1).

Starke-Meyerring, D. (2011). The paradox of writing in doctoral education: student experiences. In *Doctoral Education: Research-Based Strategies for Doctoral Students, Supervisors and Administrators* (pp. 75–95(.

Sweitzer, V. (Baker). (2009). Towards a Theory of Doctoral Student Professional Identity Development: A Developmental Networks Approach. *The Journal of Higher*

Education, *80*(1), 1–33.

Thouaille, M.-A. (2017). *One size does not fit all: Arts and Humanities doctoral and early career researchers' professional development survey*.

UK GRAD. (2001). *Joint statement of the UK Research Councils' training requirements for research students*. Retrieved 11 January 2020 from http://www.plantsciences.uzh.ch/dam/jcr:63e603d5-9c40-4223-968a-76bc9877d1fd/TrainingRequirements_UK_Research_Council_2001.pdf

Vitae. (2018). A brief history of researcher development in the UK. Retrieved October 31, 2018, from https://www.vitae.ac.uk/policy/a-brief-history-of-researcher-development-in-the-uk

Walsh, E., Seldon, P. ., Hargreaves, C. E., Alpay, E., & Morley, B. J. (2010). Evaluation of a programme of transferable skills development within the PhD: views of late stage students. *International Journal for Researcher Development*, *1*(3), 223–247.

Wisker, G., C. Morris, M. Cheng, R. Masika, M. Warnes, V. Trafford, G. Robinson, and J. Lilly. 2010. *Doctoral Learning Journeys. Final report*. www.heacademy.ac.uk

Wright, T. (2003). Postgraduate research students: People in context? *British Journal of Guidance & Counselling*, *31*(2), 209.