Beyond Boundaries: Developing Grant Writing Skills across Higher Education Institutions

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Abstract: *Much of the literature on grant writing does not explicitly identify the skills needed to be an accomplished grant writer, or how these skills are acquired. This paper reviews literature on grant writing and argues the need to identify key grant writing skills to improve the quality of grant applications. The ability to persuade, to weave a clear and compelling narrative, to structure and edit text and to be empathic to researchers, are all key grant writing skills. Effective grant writers also need to understand the funding landscape, individual sponsor requirements, and how to transform a research idea into a project. This paper examines these skills in more detail, drawing on existing research and provision to identify knowledge gaps and potential areas for further development.*

The paper also considers how UK higher education institutions in particular can develop a stronger grant writing culture. It explores the existing pathways for developing grant writing skills, arguing that the often-bifurcated nature of these pathways results in only partial attainment of the knowledge, skills and experience required to become an effective grant writer. In so doing, the paper argues the need for a more strategic, flexible and responsive approach that recognises and embeds grant writing skills into organisations through a structured development program.

Keywords: *Grant writing, research management, blended professionals, third space professionals, skills development, training, external funding, researcher development, professional practice.*

Introduction

Good writing skills are essential for researchers and academics to communicate the importance of their research, whether for scholarly publications or grant proposals (Johnson & Rulo, 2019). Yet how do researchers learn to write grants? Do they know what sponsors expect of them, or the quality thresholds they need to meet? From experience the answer to these questions are: trial and error, no, and no. The same is true for the research professional dealing with grant applications, who may be an experienced research manager, but who has little or no formal training in grant writing.

These deficiencies are reflected in the literature of both researchers and research sponsors. Researchers acknowledge the time wasted by both academics and funding bodies involved in writing and reviewing the thousands of applications submitted each year that are rejected (Day-

Peters, 2003). The reasons for rejection are varied but include: applications that do not fit the funding programme remit and are therefore deemed out of scope; applications that do not follow the guidance and are deemed ineligible; and those that do not clearly and fully answer the questions, subsequently scoring too low to be considered for funding. This is a gross waste of time and money for all concerned.

Recognising issues of proposal quality and the related cost and time burdens these create for sponsors and reviewers, UK funding bodies in recent years introduced restrictions or demand management measures on higher education institutions (HEIs). The Economic and Social Research Council (ESRC) for example, introduced measures in 2011 mandating HEIs to improve the quality of submissions (ESRC, 2016). These measures place the responsibility on HEIs to reduce the number of poor-quality applications being submitted. Similarly, in a bid to drive up the quality of submissions, the Engineering and Physical Sciences Research Council (EPSRC) brought into effect a "repeatedly unsuccessful applicant" policy in 2010 (EPSRC, 2010). The policy placed restrictions on individual researchers for repeatedly submitting low quality applications. This was determined on the basis of personal success rates and proposal rankings.

Recent figures from the ESRC suggest these measures have had limited success (ESRC, 2016; 2017). Following implementation of the new policy in 2011, there was a reduction in the volume of unfundable submissions from over 75% to 50%. More recent figures, however, suggest the effectiveness of these measures have worn off. The 2016 demand management report showed that the volume of grant applications had increased, but so had the proportion of submissions identified as being of low quality (ESRC, 2016). Hence, whilst the number of fundable applications had increased, the ESRC were still receiving a high number of low-quality applications. These were applications deemed to be unfundable by a grant assessment panel or that were rejected, at either the submission or post-peer review stages. Similarly, the EPRSC identified an average of 36 people constrained by the repeatedly unsuccessful policy following the year it was first introduced in 2011. This figure tracks the scores of individual researchers who apply to the main EPSRC open funding streams and notifies those who consistently score poorly that they are at risk of being constrained. The number of researchers at risk of being constrained initially dropped to 11 in 2012-13 but this figure has risen to an average of 17 in subsequent years, with the number of people close to being constrained increasing since 2011 from 101 following the first year of implementing the policy, to 147 in 2018 (EPSRC, 2018).

These figures suggest that punitive measures have had a limited effect on the quality of grant applications. The time wasted and the cost to sponsors, researchers and HEIs remain. This paper argues that one possible reason for this is that grant writing skills are not formally embedded into the communities that would benefit from them.

The literature on developing grant writing skills demonstrates this gap. Most of the recent literature on grant writing is predominantly found either in American journals aimed at research administrators and grant writing professionals (e.g., the Journal of Research Administration, the Journal of the Grant Professionals Association or the Journal of the National Council of University

Research Administrators); or in monographs published by academic researchers (Gitlin & Lyons, 2014; Day-Peters, 2003). To date, little UK-based research has been done to examine the craft of grant writing, or to define the skills required to improve the quality of grant applications from HEIs. One reason for this perhaps is that grant writing is a new and developing profession. A second, that it is a profession either seen as a subset of the still developing research management and administration profession, and hence a small part of the research administrator's role; or at the other extreme, it is seen primarily as part of an academic's role.

This is evident from the literature on grant writing, which has approached grant writing from either an academic, or an administrative perspective, showing little consideration for the interface between these two areas. Day-Peters (2003) approached the topic of winning grants as an academic. Her book, written as a researcher targeting researchers, mostly covered background information on the importance of research funding and the funding landscape and focused on project development from the researcher's perspective (it examined cultivating partnerships, sponsor requirements, the assessment process, the difference between an outcome and an output and publication planning). Literature directed at the research manager had a different focus, concerned predominantly with the technical support requirements for the application process. The grant writer, however, often falls between this divide, needing elements of both skill sets to write effective grant applications.

Despite support for the submission of grant applications within main research departments, academic researchers still need to engage with the broader submission and assessment process, to understand both the strategic directives of the sponsor and how to write a compelling grant application. Research professionals, likewise, need to understand these aspects in order to advise on them. This paper arises from the author's experience of working for many years at this intersection. It applies the 'professional knowing' of the research practitioner as its focus (Schön, 1999). To this end, findings are based on the reflective experience of the author over the past twenty-five years spent as a research administrator, manager and grant writer. They offer a reflective space, to consider the tacit skills of the grant writer and to question whether HEIs could do more to instil grant writing skills into their core training and development programmes, for both researchers and research professionals, to support the grant application process.

Third Space Professionals

The skills base for research professionals is often constrained by institutional and professional divides. Recent literature on these divides has looked closely at the informal and often uncharted aspects of these artificial divisions. Findings suggest a shift in recent years from the more traditional academic/administrative divide to a work environment where "third space professionals" have developed informally, often working across institutionally imposed structures. "Third space professionals" to use Whitchurch's recent definition, exist "between professional and academic spheres" (Whitchurch, 2012; p. xii).

Whitchurch (2012) explores the rise of third space professionals in detail. Drawing on studies conducted in Australia, the UK and the USA, she examines the developing space between the

academic and administrative spheres within universities that have led to new forms of management and leadership. Many of these tend to be 'under the radar' and not fully realised (p. iv). The idea of the third space is used by Whitchurch as a way of exploring the "knowledges, relationships, legitimacies and languages" characteristic of people in these roles, to demonstrate what she sees as the gradual move towards a "middle ground". Drawing on Gibbons et al. (1994) and the Dearing report (1997), Whitchurch charts a course through the emergence of this new professional space, referring to the prediction of Coaldrake and Steadman:

> The actual and potential blurring of roles…will continue to grow in significance as universities move into more flexible modes of delivery of teaching and learning and as they seek to support and reward staff for their skills, performance and potential rather than on the basis of job classifications. (2012, p. 15)

This paper will advance the findings of the grant writer as a third space professional. It will:

- Review the knowledge and skills needed to be an effective grant writer, with a particular focus on UK universities;
- Explore current pathways to gaining grant writing skills; looking in particular at the ways this is supported or hindered by institutional and professional bodies.

In so doing, this paper argues that HEIs need to adopt a more flexible, collaborative and cross-cutting approach in order to develop and maintain grant writing skills. It develops the line of thought through Coaldrake and Steadman (1999) to Whitchurch's more recent findings, to look beyond the artificial divide of job classification.

The Developing Profession of Research Management and Administration

Advances in the research management and administration profession have shown that globally, a large percent of research managers and administrators (RMAs) are now educated to masters or doctoral level (Kerridge & Scott, 2018). Many have been, or continue to be, researchers whilst also working as RMAs. Grant writers, whether their role falls predominantly under an academic or an administrative job description, are an example of a third space professional, requiring skills that transgress institutional and historically rigid professional boundaries. The knowledge and skills required of the grant writer exist in the hinterland between the academic and administrative worlds, requiring input from both to produce high quality grant applications.

Current Education Systems for Developing Writing Skills

The skills associated with grant writing are often assumed to be acquired by researchers and RMAs as they progress through their careers. The evidence suggests otherwise. A number of reports and articles, both from the USA and the UK found that not only proficiency with technical aspects of grammar and spelling, but the more complex writing skills, such as building and sustaining an argument have seen a decline with the recent expansion in higher education (see for example, The National Commission on Writing in America's Schools and Colleges, 2003, or the Royal

Commission report on the teaching of academic writing in UK higher education, Ganobcsik-Williams, 2004).

Whilst the UK education system expects all pupils to be educated to General Certificate of Secondary Education (GCSE) level in English language as a mandatory requirement (comparable by age to the US 10th grade), it is quite possible beyond this point for a large proportion of students to have no active engagement in language or in how to develop their language skills. Despite these findings, there is no formal education pathway to develop writing skills beyond the age of 16 in the UK or the USA for disciplines where these skills are not the primary focus. For those who go on to academic careers in the UK, there is also little support beyond supervision meetings and mentoring sessions where practical issues of the craft are picked up. Where these do occur, the focus for many is academic writing, which as will be shown, bears little relation to the skills needed for grant writing.

Career guidance provided by the UK's Universities and College Admissions Service (UCAS) suggests grant writers need 'to have at least Advanced (A) levels, especially English' (UCAS, 2019). A levels are usually taken between the ages of 16-19, roughly equating to grades 11-12 in the US education system. The reason for suggesting that grant writers have A level English language is because students who have studied English at this level or above will have engaged extensively with language, providing them with the skills to analyse texts and reflect critically on their own work. A UK education board AQA, for example, requires A level English language students to analyse, structure and organise a wide variety of texts. It also requires students to produce original writing that is engaging, persuasive and accurate (AQA, 2019). This is a good starting base for a grant writer. These skills need development and application, however, to be of real value in the academic world.

The Craft of Grant Writing

In her chapter on artisanal habits, Sword (2012, p. 63) asked the question "How, where and when did you learn to write in your discipline?" She concludes that many of the academics interviewed for her book admitted that they had never received any formal training in the craft of writing. This is, as Sword points out, a key academic skill, but it is also a key skill that every grant writer needs to develop.

Much of the literature touches on this skill without examining what it involves in detail. Day-Peters for example, listed amongst her top ten tips the need for "concise writing" (2003, p. 3); Dopke and Crawley referred to the "ins and outs" of the grant writer (2013, p. 51); while Monahan identified the need for "well-written" proposals (1993, p. 22). These articles all identified key grant writing skills but offered no support or guidance on what these covered or how they could be attained.

Where these skills were explored in more detail in relation to grant writing, the literature clearly identified what was needed to help researchers develop effective grant writing skills. Porter (2007) continues to be cited extensively by the research administration profession. His article

provided clear guidance on the skills required for a grant writer to be successful, several of which touch upon the need for highly developed language skills. In particular, Porter examined the considerable differences between academic and grant writing prose, identifying the following skills of a successful grant writer. These core grant writing skills are reproduced below in summary form:

Sponsor goals	Adopting a service attitude. Make sure your project goals meet those of the sponsor.
Future oriented	Focusing on work that should be done, not the findings of research that has been done.
Project centred	Addressing clear objectives with a well-defined programme of work. Grant writers 'Draw us into the world of action', as opposed to the more academic realm of ideas.
Persuasive rhetoric	'Selling' oneself to the reader. The language of the grant writer has to sell the project. Its aim is to win over the reviewer.
Personal tone	Conveying excitement to the reader, not maintaining the objective prose used for journal articles.
Team focused	Grant writing needs feedback from those experienced in the pursuit and submission of grants.
Strict length constraints	Most sponsors demand brevity and have strict word limits.
Accessible language	All disciplines have specialised terminology but there reaches a point where this becomes needlessly complex and loses the reader. Complex text must be reworked until it is easy to read and understand, even for the general reader.

Porter argued that the way in which a grant application is constructed, will either improve or impede its chances of success. Of particular interest here is Porter's claim of the need for persuasive rhetoric and accessible, concise language. Whilst Porter goes some way to explaining how to attain this in his discussion of the difference between academic and grant writing, there is a fundamental question that first needs to be asked. What knowledge and skills do we need to have, or learn, in order to write persuasively? I suggest that the following are crucial.

Learning to Narrate

At its core, persuasive, concise, and clear prose is produced when a writer has control of the narrative. The narrative elements of storytelling are effectively the steering mechanism. This requires an awareness of the reader, an understanding of how to retain a reader's interest and a clearly defined plot. In the case of the grant writer, this translates to understanding the reason for the project, the sequence of events necessary for the project to achieve its objectives, its intended outputs and potential impacts. These requirements often fall victim to internalised knowledge and academic training. Pinker refers to this as "the curse of knowledge", describing it as the "difficulty in imagining what it is like for someone else not to know something that you know" (2014, p. 59). This internalised knowledge needs to be expressed as part of a coherent narrative or story, but this is not something that is taught as part of the academic experience, nor is it a skill academics necessarily feel they are responsible, or well equipped, to develop in their students (McVey, 2008). This is despite research showing that reproducing scientific information in narrative fashion makes it more interesting and memorable to the reader (see for example, Ma et al., 2012; Krzywinski & Cairo, 2013; Dahlstrom, 2014; Olson, 2015). Three key narrative elements contribute to persuasive, clear and engaging prose. These are: connecting with the reader, maintaining momentum, and a strong plot.

Connecting with the Reader

Pollock and Bono refer to the importance of the "human face" in engaging the reader, claiming that too often, academic writing is focused on the scholarly elements, not on what these can, or potentially could mean, for advancing science and society (2013, p. 629). A research sponsor will always take the latter focus. For example, the Wellcome Trust, a UK charitable sponsor that funds academic research, describes itself as an organisation that improves health and "believes in the power of ideas to improve health" (Wellcome Trust, 2019). It has a broad range of research funding streams that cover biomedical sciences, humanities, social sciences and creative industries. Throughout all these funding streams, the organisation has one key focus: "improving health by helping great ideas to thrive". It has never lost sight of the human face as a founding principle.

Similarly, the main UK Government funding stream for research development, the recently formed UK Research and Innovation (UKRI) also maintains this human focus. It describes itself as a partnership focussed on "helping to connect the best researchers and innovators with customers, users and the public". This is consistent with the now firmly established impact agenda that came into being in the 2014 Research Excellence Framework, asking that HEIs demonstrate the impact of their research by submitting case studies (Higher Education Funding Council for England, 2014). These now account for 25% of an HEIs selective allocation for research funding and the focus is not on academic impact, but impact beyond academia. The policy suggests HEIs should be doing more to train their researchers on how to apply their findings to real world solutions.

Whilst not undermining the importance of the science, the need for scholars to develop a human face without sacrificing theoretical focus or analytical content is key to developing a successful

proposal. The remit of the major UK funding bodies demands a real-world application of research, one that applies research to the potential impact and influence it might have in the world. A skilled grant writer understands that the application they submit is as much about the sponsor as it is the research. They will address the sponsor's requirements and show how the proposed research meets those requirements.

Maintaining Momentum

In The Science of Storytelling, Storr talks extensively about "moments of unexpected change" (2019, p. 11). This is one of the most compelling and persuasive tools the writer brings to any writing, and whilst change may not be as dramatic or unexpected in a grant application, it can be just as effective in maintaining the reader's interest. Storr quotes neuroscientist, Sophie Scott, "Our perceptual systems don't work unless there are changes to detect" (2019, p. 11). The grant writer needs to learn how to take advantage of this, how to draw the reader in with the why and how of their application. Porter touches on this when he identifies the key differences between academic and grant writing (Porter, 2007). The grant writer needs to sell the project, not describe what they have done. Knowledge of what has gone before needs to be subsumed within the story of why what has gone before has led to where they are now. It should explain any new developments in technology, perception or approach that will be used to advance current knowledge, or to take the research in an entirely new direction. The narrative needs to move forwards, combining information with action. In order to do so, the writer needs to remove any information that impedes a forward direction. Jargon, superfluous words, acronyms and laboured descriptions kill the importance of the argument. Stating the who, why, how, where, and when of a project is a simple skill in principle, but when are researchers given the chance to develop this skill? What mentoring or training is available to researchers or research managers to develop and nurture storytelling?

A Strong Plot

Every story needs a strong plot, as does every grant application. The momentum described above needs stories constructed of who, why, how, where, when, and what. One thing always leads to another. The "who" always refers back to the point already made about connecting with the reader, the human face. The rest, in grant writing terms, is all about project need, design and delivery. It is the backbone of the story. Returning to Porter's (2007) findings, this requires a project centred approach. Training in project design, delivery and management is not something offered to researchers or research professionals, but it is a skill integral to developing a strong grant application. It helps to maintain momentum, to cut through the technical language and pull out the relevant details to drive the plot. Thinking of a grant application the way a writer thinks of a novel can help with this process. Roughly, these can be broken down into the following:

The who: Every novel needs a person the reader can relate to and believe in. Most grant sponsors ask, "Why you"? Key to a successful application is being able to answer why the researcher, or the consortium, is the most appropriate and skilled to carry out the project. What makes the sponsor

believe this? What are the research team's strengths and weaknesses and how have they addressed these in the application? The grant writer needs to identify and incorporate this information into the narrative.

The why: Plot is "not just a bunch of stuff that happens" (Newman & Mittlemark, 2008, p. 1). It is a bunch of stuff that happens for a reason. The evidence provided by the writer should clearly show why the project is needed. The proposal must explain how the research team has come to where it is, and what needs to be done to advance or solve the current issues these give rise to. What are the challenges to be faced, how will these be overcome and what effect will they have?

The how: This is all about project design and delivery. How is the work going to be achieved? For individual researchers, this is often about identifying and applying the most appropriate methodologies. For industry-focused consortiums, it is often about identifying the approach, in particular how a project will improve on the current state of the art and offer practical, market-driven solutions. Importantly, for a grant writer, the how is not just about how to approach the project. It is how to articulate it. Whilst technical content is an essential component of a research application, the quickest way to lose the reviewer is to flex learnèd wings unnecessarily. The how should also anticipate any risks involved in delivering the project. A good proposal will show it has considered and mitigated potential risks as part of the project's design and delivery.

The where: Where are you going to carry out the research and what physical resources do you need to deliver the project? Do you need specialist machinery or equipment? Does the project need to be delivered in a certain way or at a certain location? Grounding your project geographically, be that regionally, nationally or internationally will inform the costs, practical aspects of delivery, and in many cases contribute directly to understanding the potential economic, environmental and social impacts of the project.

The when: What is the timescale? Just as a novel has a narrative arc, a project will need to clearly define what is going to happen at each stage of the project, who is going to lead on each stage, and what the end results will be.

The what: When a reader picks up a book, they don't know exactly what they are going to get, but they have some expectation depending on their chosen genre. Whilst grant applications will be subject to an expert peer review process, this does not necessarily mean that the peer reviewer will automatically understand all the issues in an applicant's research area, particularly if that research is disruptive or reliant on a multi-disciplinary approach. Be clear about what the project is going to do, in terms of the activities, outputs and intended impacts of the project. Consider what is needed, what it will cost, what the end results will be. What will the project contribute to advance research knowledge or to demonstrate impact in the wider world?

In summary, developing a strong project proposal requires the need to develop a strong plot with a strong narrative. The writer needs to move past technical jargon, to eliminate unnecessary description, to consciously apply structure and to deploy an engaging style with confidence.

Empathy Sans Frontière

In addition to the narrative elements covered above, the grant writer needs a fourth skill: empathy.

Daniel Goleman, an expert on the psychology of emotion, describes emotional intelligence as "the capacity for recognising our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships" (1998, p. 317). Empathy is identified by Goleman as one of the five basic emotional and social competencies that fall within his definition of emotional intelligence. It is key to reading and understanding the feelings of others, and to understanding another person's issues or concerns. Good grant writers require an understanding of the differing needs and perspectives of all parties involved in the submission process. They often need to negotiate, advise, mobilise and persuade project partners to ensure the proposal submitted has the greatest chance of success. As Goleman et al. notes, "Being empathic at the team level doesn't just mean being nice... it means figuring out what the whole system really needs and going after it in a way that makes all involved more successful and satisfied with the outcomes" (2002, p. 61). In particular, Goleman notes that empathy between organisational boundaries is a powerful driver of efficiency. It follows then, that creating opportunities for academics and research professionals to work closely together would bring an understanding of the concerns, needs, self-awareness and empathy for all involved, ultimately leading to high functioning, collaborative teams that are not restricted or limited by artificial boundaries.

Grant writing communities seem to suffer from a lack of empathy. There is no official recognition that researchers or RMAs need to be taught these skills, despite findings to the contrary (Kleinfelder et al., 2003; Porter, 2007), and no consensus in the literature about the best way to do so. This is made more difficult due to the artificial borders that exist between academic and administrative realms. Consequently, conversations and training about grant writing; what it involves and what is needed, is happening in two places. Gibson (2015) and Porter (2007) for example, argue the importance of research professionals mentoring junior faculty members. In reality, most junior faculty members take feedback on their grant applications from their academic mentors, who as McVey (2008) noted are often concerned primarily with the academic content, not with checking whether the proposal is written clearly or adheres to the sponsor's technical specifications. Academic mentors, however, are often peer reviewers for grant awarding bodies, giving them valuable insight into the peer review process. How much more effective would it be then, to have expertise from both worlds integrated into one coordinated training course?

Current Resources for Grant Writers and Researchers

These skills appear simple, yet at present, throughout the world there is limited training and very little research on the craft of grant writing that incorporates all the elements identified above. There are even fewer pathways that develop these skills. This in part, is due to the issues already raised about the still developing grant writing profession and the siloed nature of HEIs. Porter's article is evidence of this, as indeed this article will be. These papers will not be picked up by half the grant writing communities who would benefit from them. His 2007 paper was awarded best paper of the year, being re-printed in the 2017 edition of the Journal of Research Administration (JRA).

The JRA note the paper is still regularly cited by the research administration profession. Due to the publication's target audience, however, it is unlikely to reach a wider academic audience, many of whom would greatly benefit from Porter's advice. Similarly, but from an academic perspective, Sword's book on academic writing (2012) examines the habits of the successful writer. Her advice is applicable to those involved in grant writing more generally, but given the academic focus, it is likely to remain solely within the spheres of an academic readership, despite having much of value to offer the research professional.

As the following section demonstrates, existing pathways and provisions exist for grant writing, but they too have grown from these artificial divides. What is needed is to understand current provision and to examine ways of integrating, standardising and improving existing provision to bring them in line with the changing face of HEIs.

Existing Pathways for Developing Grant Writing Skills

The University and College Admissions Service (UCAS) careers page identifies the grant writer as a career in its own right (UCAS, 2019). This is of particular interest, because there are few grant writing posts to be found in HEIs, despite the fact that HEIs gain prestige from, and are often reliant upon, external funding to develop their research. The UCAS page directs potential grant writers to the Association of Proposal Management Professionals (APMP, n.d.). This is a professional body, established in the USA in 1989 with 28 branches (termed "chapters") all over the world, including one based in the UK.

The APMP's mission is to "promote the professional growth of its members by advancing the arts, sciences and technologies of winning business...through proposals, bids, tenders and presentations" (APMP, 2019). It claims membership from "commercial, federal, municipal and academic areas" working in any aspect of the grant writing process. Resources include webinars, bid and proposal writing conferences and a professional certification programme. The programme uses a mixture of examinations and competency-based assessments to provide professional accreditation. The accreditation takes a business approach to grant writing, covering planning, delivery and management of grants and awards that include, amongst others, sections on proposal development, partner finding, managing information and persuasive writing. These courses and accreditations, however, do not focus on UK funding streams and they are costly, precluding them from being of use to most HEIs.

Nine years after the APMP, the Grant Professionals Association (GPA) was established. This currently has over 2,800 members internationally and claims to be the first organisation to focus on the advancement of grant writing as a profession (GPA, 2019). Like the APMP, the GPA holds an annual conference dedicated to the craft of grant writing as well as a journal, published annually, that offers articles and reviews on the profession. These events and resources offer members the opportunity to look in depth at key national funding schemes, to develop and enhance professional skills and to network with other grant writers. As with the APMP, the focus for these associations is predominantly on the requirements for American funding streams.

Both the APMP and the GPA however, do include training and development that acknowledge the more generic skills base of the grant writer. Sessions for the 2019 GPA's annual conference for example, included the craft of grant writing, grant architecture and storytelling, writing refreshers, navigating bureaucracies and egos, avoiding common grammatical errors and well written narratives. They also identified the competencies these topics covered—key areas for the focus of this article being proposal development and communication strategies.

As well as the two bodies already mentioned, chapters of the Society of Research Administrators International (SRAI) hold workshops on grant writing and amongst their training courses deal with the role of the research administrator in coordinating the work of multiple authors and providing editorial assistance on large scale proposals. More broadly, many American universities offer grant writing programmes. For instance, Concordia University Chicago offers an eight-week online Masters in Grant Writing, the University of Massachusetts, a Grant Writing Certificate, San Diego State University a Professional Certificate in Grant Writing. Some universities, such as Maryland for example, offer credit-bearing courses on Grant and Proposal Writing for their students.

Most existing formal pathways for grant writing however, are American either in origin or focus, and do not directly translate to the needs of the UK higher education system. UK HEIs in contrast, do not have formal accredited, standardised grant writing courses or professional grant writing bodies. This is not to suggest that UK universities are not already doing a great deal to support the development of their early career academics. Most UK universities will have an academic skills development unit that develops and runs courses for their research and teaching staff. The University of Sheffield for example, run a 'Think Ahead' programme, specifically designed for early career researchers, which includes short workshops on how to apply for funding. Similarly, King's College London run courses that focus on writing and publishing for early career researchers, including a course on how to write a good research grant application. The University of Kent run a 'Grants Factory' for early career researchers, and the University of Strathclyde offer their staff a six-month course on grant writing. Other universities buy in training for this kind of development support. Companies such as Scriptoria, offer specialist courses in grant writing, to teach research staff the skills needed to strengthen their proposals. Amongst their current clients, Scriptoria regularly provide one day grant writing training for a number of universities. These again, however, are predominantly researcher-focused, researcher-led short courses, often targeting early career researchers.

In contrast, within the higher education research and administration profession, grant writing largely falls under the banner of 'pre-award support' and at most, training offers standard guidance on how administrators can support the grant writing process. This approach is echoed in the type and focus of professional support for grant applications offered by the UK's professional body for research management and administration, the Association of Research Managers and Administrators (ARMA). Currently, ARMA offers one day courses that focus on supporting research proposals and on raising the quality of research proposals respectively. These go some way to providing guidance on how to support research applications but again, the question remains as to whether this is the same as developing the skills required for effective grant writers

and grant writing communities. The fact that the focus of these courses is on 'supporting' the academic process, with a primary focus on the administrative requirements of the submission process, i.e., identifying funding sources, costing projects, research ethics and enhancing research impact, is not an oversight on behalf of ARMA, it is a reflection of the siloed nature of pre-award support as sub-sets of the skills and proficiencies needed to support grant applications.

This approach contrasts considerably with the professional development opportunities offered by the APMP, the GPA and the SRAI. Yet in terms of the UK, their business, or geographical focus, does not necessarily make them the most appropriate bodies to go through for those working in HEIs. Whilst there is a great deal that UK higher education organisations can learn from the grant writing provisions in place in the USA, the UK would benefit greatly from directing more time and attention towards developing grant writing skills and communities through establishing more formal pathways that are both attuned to HEI funding streams and that work across institutional divides.

Recommendations

Given the above findings, there are a number of things that would help to improve existing grant writing provision within the UK:

- To bring together academic and administrative communities on grant writing courses;
- To include grant writing modules on doctoral training programmes;
- To engage research councils and sponsors in developing grant writing skills and examples of best practice; and
- To encourage universities and professional research management organisations to develop professional grant writing training courses based on best practice findings that exist in the US and UK.

Conclusions

An effective grant writer needs to develop persuasive, reader-focused writing skills. This requires an understanding of how to translate academic writing into a strong narrative, clearly plotted, to achieve an overarching goal. At present however, the formal pathways for developing grant writing skills within UK HEIs exist as part of an artificially imposed either/or framework, that is, grant writing is seen from either the academic, or the research management viewpoint. Where these areas do come together, this space is becoming increasingly inhabited by third space professionals—professionals who work across these boundaries, but do so informally, with little acknowledgement of, or reflection on, the skills that they are using whilst they inhabit this space. How much more powerful would it be to realise and inhabit this space fully, formally? To develop grant writing skills in our researchers and research managers that transcend these artificial boundaries and develop pathways that encompass and transfer the skills, knowledge and abilities of both? Removing artificial boundaries, building more formal grant writing pathways and developing an understanding of what grant writing involves, would engender these abilities in future cohorts of both academic researchers and research professionals.

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References

AQA. (2019). English language (8700): Scheme of Assessment. Retrieved May 29, 2019 from https://www.aqa.org.uk/subjects/english/gcse/english-language-8700/scheme-of-assessment

Association of Proposal Management Professionals. (n.d.). Retrieved May 29, 2019 from https://www.apmp.org/page/AboutAPMP

Boyer, P., & Cockriel, I. (2001). Grant performance of junior faculty across disciplines: Motivators and barriers. *Journal of Research Administration, 2*(1), 19-23.

Coaldrake, O. P., & Steadman, I. (1999). *Academic work in the twenty-first century: Changing roles and policies*. Department of Education, Training and Youth Affairs, Occasional Paper 99H. https://www.voced.edu.au/content/ngv%3A21859

Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *Proceedings of the National Academy of Sciences, 111*(Suppl. 4), 13614-13620.

Day-Peters, A. (2003). *Winning research funding*. Gower.

Dearing, R. (1997). *The Dearing Report: Higher education in the learning society.* Retrieved April 21, 2020 from http://www.educationengland.org.uk/documents/dearing1997/dearing1997.html

Dopke, L., & Crawley, W. (2013). Strategies for increasing the efficacy of collaborative grant writing groups in preparing federal proposals. *Journal of Research Administration, 44*(1), 36-61.

Engineering and Physical Science Council. (2010). Repeatedly unsuccessful applicants policy. Retrieved November 26, 2019 from https://epsrc.ukri.org/funding/application process/basics/resubpol/rua/

Engineering and Physical Science Council. (2018). Research proposal funding rates 2017-2018. Retrieved April 5, 2020 from https://epsrc.ukri.org/newsevents/pubs/research-proposal-funding-rates-2017-18/

Ganobcsik-Williams, L. (2004). *A report on the teaching of academic writing in UK higher education*. Royal Literary Fund.

Gibbons, M., Limoges, C., Nowotny, H., Schwartzman, S., Scott, P., & Trow, M. (1994). *The new production of knowledge: The dynamics of science and research in contemporary societies.* SAGE.

Gibson, N. A. (2015). The importance of mentoring junior faculty. *Journal of the Grant Professionals Association, 13*(1), 89-94.

Gitlin, L., & Lyons, K. J. (2014). *Successful grant writing: Strategies for health and human service professionals* (4th ed.). Springer.

Goleman, D. (1998). *Working with emotional intelligence*. Bloomsbury.

Goleman, D., Boyatzis, R., & McKee, A. (2002). The emotional reality of teams. Journal of Organizational Excellence, 21(2), 55-65. https://doi.org/10.1002/npr.10020

Grant Professionals Association. (2019). About GPA. Retrieved May 29, 2019 from https://www.grantprofessionals.org/about

Higher Education Funding Council for England. (2014). Research Excellence Framework guidance. Retrieved May 29, 2019 from https://www.ref.ac.uk/2014/

Johnson, J., & Rulo, K. (2019). Problem in the profession: How and why writing skills in nursing must be improved. *Journal of Professional Nursing, 35*(1), 57-64. https://doi.org/10.1016/j.profnurs.2018.05.005

Kerridge, S., & Scott, S. F. (2018). Research administration around the world. *Research Management Review, 23*(1), 1-34.

Kleinfelder, J., Price, J., & Dake, J. (2003). Grant writing: Practice and preparation of university health educators. *American Journal of Health Education, 34*(1), 47-53. https://doi.org/10.1080/19325037.2003.10603525

Krzywinski, M., & Cairo, A. (2013). Points of view: Storytelling. *Nature Methods, 10*(8), 687. https://doi.org/10.1038/nmeth.2571

Ma, K-L., Liao, I., Frazier, J., Hauser, H., & Kostis, H-N. (2012). Scientific storytelling using visualization. *IEEE Computer Graphics and Applications, 32*(1), 12-19. https://doi.org/10.1109/MCG.2012.24

McVey, D. (2008). Why all writing is creative writing. *Innovations in Education and Teaching International, 45*(3), 289-294. https://doi.org/10.1080/14703290802176204

Monahan, T. (1993). Barriers and inducements to grant-related activity by New Jersey State College faculty. *Journal of the Society of Research Administrators, 24*(4), 9-26.

Newman, S., & Mittlemark, H. (2008). *How not to write a novel*. Penguin.

Olson, R. (2015). *Houston, we have a narrative: Why science needs story*. The University of Chicago Press.

Pinker, S. (2014). *The sense of style: The thinking person's guide to writing in the 21st century*. Penguin.

Pollock, T. G., & Bono, J. E. (2013). Being Scheherazade: The importance of storytelling in academic writing. *Academy of Management Journal, 56*(3), 629-634. https://doi.org/10.5465/amj.2013.4003

Porter, R. (2007). Why academics have a hard time writing good grant proposals. *Journal of Research Administration, 38*(2), 37-43.

Research England. (2014). Research Excellence Framework. Retrieved April 21, 2020 from https://www.ref.ac.uk/about/what-is-the-ref/

Schön, D. (1999). *The reflective practitioner: How professionals think in action*. Ashgate.

Storr, W. (2019). *The science of storytelling*. William Collins.

Sword, H. (2012). *Stylish academic writing*. Harvard University Press.

Sword, H. (2017). *Air & light & time & space: How successful academics write*. Harvard University Press.

Universities and Colleges Admissions Service. (2019). Bid writer. Retrieved November 26, 2019 from https://www.ucas.com/ucas/after-gcses/find-career-ideas/explore-jobs/job-profile/bid-writer

Wellcome Trust. (2019). About us. Retrieved May 29, 2019 from https://wellcome.ac.uk/about-us

Whitchurch, C. (2012). *Reconstructing identities in higher education : The rise of 'third space' professionals*. Taylor & Francis.