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Higher Education Outreach: Examining key challenges for Academics

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Abstract: How should academic staff engage in outreach with communities outside of the university? The need of academics to answer this question has intensified in the UK given the changing priorities of academic job roles, shaped by increasing institutional concern for widening participation, graduate employability and research impact in an era of austerity and high tuition fees. While university outreach professionals, such as those in widening participation, have access to a range of networks, resources and support mechanisms for outreach activity, academics often face a series of profession-specific pressures that make engagement in outreach complex and contingent. This article draws upon the experience of twenty five academics from eighteen different subject areas and eighteen institutions to examine and provide responses to key challenges faced by academics involved in outreach in the UK. We examine such issues as: the conceptualisation of outreach; funding; recognition and management of workload; nurturing relationships with internal and external partners; capacity-building; commercial interests, payment and responsibility; pedagogical style and content; integration of outreach into curricula, and evaluation of programmes. The examination offered is not all encompassing, but acts as a series of reference points to consider the challenges faced by UK academics in an evolving outreach sector.

Keywords: Academic outreach; Higher Education; Widening Participation; Engagement

Introduction

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A number of recent UK institutional and policy developments, notably increased student tuition fees and the intensification of the target driven agendas of research funding bodies, have brought into sharper focus the civic duties of higher education institutions to engage with their local and global communities (see Johnson and Mutton, 2018). This is potentially linked to a broader questioning of the social contribution of universities to civil society, at a time in which a higher education degree is increasingly conceptualised as an individualised self-investment. In this light, Goddard, et al. (2016) drew on research across the European Union to describe the need for higher education institutions to strike a balance between meeting societal and economic demands and adhering to intellectual, institutional and disciplinary values. As such, what constitutes 'outreach' to communities beyond the academy and how it is valued is similarly caught between these potentially conflicting demands and values.

Historically, outreach encompassed any number of different civic roles and activities (see Bowyer, 1996) that serve to advance ideas and practices capable of fostering human well-being (Katula and Threnhauser, 1999: 249–250). Such civic roles have encapsulated, not just the advancement of knowledge, but the fostering of critical cognitive capacities, as well as the desire to have positive impacts on the development of wider communities. Yet outreach now takes place alongside a UK context of increased competition between institutions fostered by the removal of student number caps and intensified through stratified league tables (Morgan, 2016; UCU, 2010). This marketised and entrepreneurial university has been critiqued as positioning higher education as a private, rather than a public good, with resultant trends of consumerism saturating the everyday practices of the academy (Holmwood, 2016) including, as this paper explores, practices and philosophies of outreach.

Outreach is often closely associated with widening participation – a policy and practice aiming to increase the numbers and diversity of students attending universities. Yet the desire to 'cast the recruitment net wide' (Hinton-Smith, 2012, p.2) to groups previously excluded from higher education has blurred the lines between outreach and recruitment. In seeking to meet recruitment targets, outreach becomes less as a practice of public engagement or civil duty but its value conceptualised in terms of student numbers 'outcomes'. This exists concurrently and is related to other shifting pressures facing academics and their work, including the need to ensure research can evidence its impact beyond academia (for example, AHRC 2018). Within such a context, desires to engage with the public, do participatory research or ensure intellectual work effects societal change become constructed and valued through narrow economical vocabularies of inputs, outputs and results.

In response and in relation to outreach, this paper explores how UK academics, are dealing with these challenges in different, often subject-specific ways. Indeed, it is precisely this academic and subject-specific content and focus that distinguishes such approaches from non-academic, non-subject-specific outreach programmes advanced from the university centre (see discussion of shifting administrative roles in Whitchurch, 2006). In terms of the latter, there are clear reference points for outreach professionals in developing policies, practices and targets on widening participation, drawing on guidance provided by the national advisory and regulatory body, the Office for Students (OfS). In addition, specific government initiatives such as the National Collaborative Outreach Programme (NCOP), which focuses outreach on learner postcode, provides a clear direction of focus for activity (Office for Students, 2018; Dent *et al*., 2014). However, there is seldom guidance on good practice for academics, precisely because of divergences in motivation and content and, perhaps most importantly, because outreach seldom forms the central focus of professional life for someone appointed to a traditional academic position. Indeed, it is often constituted an administrative side-line (Johnson and Mutton, 2018). Consequently, the principles behind *academic* approaches to outreach are rarely disseminated, depriving colleagues of essential knowledge at a time in which innovative pedagogic approaches to outreach, such 'Radical Pedagogies' (Hurley and Ritchie, 2018), are

in their experimental infancy. This is unfortunate, as academics are uniquely placed to deliver the very subject- and discipline-specific content capable of engaging and interesting potential students and non-academic communities, in ways that non-subject-specific programmes may not (Harris and Ridealgh, 2016). Moreover, as funded research opportunities become squeezed, outreach activity represents avenues for academics to demonstrate additional forms of 'value' from their work.

In what follows, we draw on our collective experience as twenty five academics from eighteen different subject areas and eighteen institutions to outline and present responses to a set of challenges that we have identified as crucial in order to support academic colleagues engaging in outreach. We examine: shifting conceptualisation of outreach; means of funding activities; approaches to making work manageable in the context of other professional responsibilities; nurturing relationships with prospective partners; pedagogical concerns for style and content; capacity building; responsibilities with regard to payment and commercial interests; integration of outreach into curricula, and evaluation of activities. In some cases, the definitions of outreach are qualified and contextualised and in others, these forms of engagement are more open and flexible. This difference in engagement with the concept of 'outreach' itself reflects how academic's approaches to these activities are necessarily innovative and organic, constantly subject to revision as external pressures, the moving parts of a career and the set of relationships forged through outreach shift.

Methods

The research underpinning this article constitutes a form of practical action research (Susman and Evered, 1978: 589) in being initiated to address a collectively perceived challenge (Denscombe, 2010: 6) of engaging in outreach as academics, and approached through development of a targeted Community of Practice (Denscombe, 2008). This is informed by the perspective that an 'insider' researcher interest in the topic of investigation is not a hindrance to insight but rather an integral aspect of the richness of insight that can be generated (Richardson, 2001).

The project was conceptualised, publicised and developed via an initial call in February 2018 to two international academic practice online discussion groups that seek to disseminate and develop forms of academic practice. Twenty five academics (the co-authors of this article) ultimately committed to joining a new Community of Practice developed as part of the action research approach, with the planned remit of co-production of a resource tool for effective outreach, drawn from collective professional expertise; and development of an academic network for outreach as a mechanism for fostering sustainability and a forum for generating future collaborative opportunities. Though the self-selecting recruitment approach (Khazaal *et al*., 2014) did not set out to achieve a representative sample, the Community of Practice does accommodate academics from a wide range of UK higher education institutions, including pre- and post-1992 institutions, those with divergent research and teaching intensive foci and those at opposite ends of the urban/rural continuum. Importantly, it also includes diversity in contributing academics with regard to disciplines, subject areas, career stages, gender and ethnicity. As such, the opportunistic case study approach offers an important opportunity to identify not what necessarily is true in every case, but rather what *may be* (Flyvbjerg *et al*., 2006).

A draft resource was co-produced via initial synthesis of individual practice-informed contributions. This fed into a process of collective ongoing development commenced at an extended first face-to-face meeting of the Community of Practice in spring 2018. This was intended as an action research opportunity for collaborative co-production of a set of guidelines and toolkit for good practice in academic outreach. The small number of Community of Practice members unable to attend in person, contributed insights electronically. No

confidential information was provided or reported in this article. The Community of Practice meeting was followed by a subsequent collective feedback and redrafting process carried out collaboratively electronically. A project website was developed (Association for Academic Outreach, 2018) as an open forum for wider sector discussion and knowledge sharing, and the guidelines were made available via this website to maximise accessibility and reach.

The research design was informed by a commitment to methodological approaches that foster co-production of knowledge (Hinton-Smith *et al*., 2017). This aimed to shift 'the focus from individual experiences… to empirical evidence from a study crossing research methods, disciplines and nations' (Lethwaite and Nind 2016: 413). The contribution of the research to understanding academic outreach is informed by our belief in the value of case study as an empirical investigation of 'a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used' (Yin, 1984: 23). Here, we employ a case study approach with the goal of understanding and explaining the practice of academic outreach for its own sake (Stake, 1995) and in its own context (Mann, 2006: 78). Our approach, combining practical action research and case study, has synergies with participatory methods insofar as the latter involves collaborative transformation of people's lives and the practice of outreach is directed in various different ways aimed at transformative intervention (see McAllister and Vernooy 1999: 48-59). This is emphasised by all twenty five participants' being credited as co-authors.

While the details of what constitutes effective and 'good' practice in academic outreach will vary according to the intricacies of institutional, disciplinary, and student profile contexts, this research set out to generate insights and recommendations around those wider sector challenges that remain largely consistent. We present these insights with the intention of providing a tool for colleagues to utilise and build upon the utility of, in developing their own programmes of academic outreach as pertinent to specific localised contexts, and around which more in depth, systematic and context specific disciplinary research can be developed in future.

'Outreach' in a civic context: shifting conceptualisations

The intellectual heritage of outreach is rich and has often been seen to be captured within Boyer's (1996) notion of the 'scholarship of engagement'. This civic account holds that scholarship fulfils four key social roles: the scholarship of discovery through research; the scholarship of integration through situating ideas within broader contexts; the scholarship of sharing knowledge through dissemination beyond academia; and the application of knowledge, in which theory and practice interact reflexively informing one another in the process (*ibid,* 16-23). Reflecting on contemporary discussions, Fitzgerald, *et al*., (2016) call for engagement scholarship to be made central to higher education activity in order to 'contribute meaningfully to transformational change in society' (245). The means of achieving that change include, but cannot be limited to, fostering of cognitive skills and expansion of institutional networks (see Granovetter, 1983; Ó Tuama *et al.*, 2017). While each of Boyer's roles relates to different social goods, he is clear that, cumulatively, 'higher education must focus with special urgency on questions that affect profoundly the destiny of all' (Boyer, 1996: 77). Given the diversity of ends to which such a normative account might give rise, this concept of 'outreach' is all encompassing, embodying a range of activities, engagements and relationships with non-academic communities.

Most clearly, academics are often engaged in research on and with specific groups, with an increasing shift away from the former to the latter as intrinsic and instrumental concerns for impact and attendant ethical processes evolve (Banks and Manners, 2012: 8). There is already guidance and theoretical discussion relating to management of the more elaborate, participatory incarnations of research relationships that seek to dissolve distinctions between researcher and researched (Pain, Whitman and Milledge 2011). At the dissemination end of the research cycle,

there is an additional strategic concern for talking to non-academic audiences about the significance of the findings beyond the academy. This form of outreach is increasingly a precondition of external funding, which demands evidence of non-academic engagement and also of the impact on non-academic communities. This has resulted in the need for projects to plan demonstrable transformative outcomes from the outset that reach far beyond narrow academic communities. For example, institutions and individual academics themselves are making innovative use of public space through such projects as pop-up campuses. These involve university events and talks taking place outside of campuses, in city centres and other public spaces, to bring research findings, processes and outcomes to the general public (Paul and Motskin, 2016). In keeping with Boyer's scholarship of engagement, the outcomes of this form of outreach may range from cognitive development, to intersubjective change through relationship formation, to transformative change cumulatively (Bassford *et al*. 2015) through dissolution of social and spatial barriers to higher education (West and Pateman 2016).

Perhaps the most substantive, long-standing site of outreach lies in networks of practice between academics and professional practitioners. In many cases, such networks revolve, again in the spirit of Boyer, around relationships between academic theorists and professional practitioners, often, as in Law, when the latter become the former. Such networks might effectively be distinguished by symbiotic concern for civic matters - from contracted forms of work, which relate much more clearly to enterprise, extra-curricular capitalisation on skills and commercial knowledge exchange. Through engaging with a broader public, professional networks can facilitate the exchange of subject knowledge and pedagogical expertise with opportunities for practice and continuing advancement of practice knowledge. For example, the Planning department at the University of Chester (2018) are linked with, among other organisations, Planning AID Wales (2018).

A particular consequence of the increasing marketisation of higher education is that both the widening participation and employability agendas have emerged as being of central institutional importance (McCaig, 2015). This has been shaped particularly via the removal of caps on student numbers and attendant performance indicators, such as retention, degree outcomes and graduate employability that inform student choices. These factors have fostered a series of, long predicted (UCU 2010), but increasingly evident, threats to the viability of institutions (Fazackerley, 2017). Put simply, recruitment of undergraduate students is now, more than ever, the key determining factor in the health of departments, faculties and institutions in UK universities. Indeed, this sparks an impetus to provide for employability and work placement opportunities, including with external organisations, to foster CV-enhancing skills and experiences among students, since recruitment depends increasingly upon the ability of prospective students to conceive study as a means of career progression (see Johnson 2016). While the focus on instrumental outcomes for students is not universally problematic, it does further evidence a shift towards higher education as a private, as opposed to a public, good, which has concurrently re-conceptualised the value and purpose of outreach.

A key shift is the increasingly blurred lines between widening participation, outreach and recruitment. Indeed, central teams are sometimes grouped under the banner of 'recruitment' *and* 'outreach', which may lead to an attendant assumption that the two are interchangeable. Moreover it implies and that 'best practice' in widening participation can be calculated on the basis of returns on investment in student numbers. While widening participation is an example (along with knowledge exchange, public engagement, professional and academic networks, employability, and other instances of engagement with non-academic communities) of outreach, outreach itself simply cannot be reduced conceptually to widening participation. Moreover, widening participation *ought* not to be reduced to recruitment. Given the civic concerns informing the scholarship of engagement, there are good reasons politically and professionally to resist that slide. However, in this UK context, it is essential that academics

understand the elision, not least because funding sources relating to outreach may exclusively and implicitly be reserved for widening participation or recruitment activities – a reservation overseas colleagues may find confusing. Accordingly, the language of outreach is in flux and it is important that academics understand both that government policy has a particular impact on its conceptualisation and that, as a consequence, that conceptualisation is liable to shift with government. With that caveat, how can academics secure support for outreach?

Funding and the particular needs of outreach

There are many different sources of funding for outreach, including *ad hoc* departmental or faculty funds for research, impact-, widening participation- or recruitment-related activity, to university-wide Office for Students allocated funds countable spend and knowledge exchange programmes, to research council (e.g. Medical Research Council), funding body (e.g. British Academy) and professional and charitable organisation programmes grounded in specific subjects and disciplines (e.g. Wellcome Trust). Those funds relating specifically to research and knowledge exchange can generally be expected to be competitively awarded on the basis of the academic profile of the project lead and the rigour and originality of the research. Those relating to widening participation may more often tend toward allocation on the basis of departmental need or demonstrable prior success in terms of recruitment and retention interventions due to the financial imperatives outlined above (Johnson and Mutton, 2018). Appreciating the distinction between the two criteria of evaluation can save considerable effort in developing applications, since the latter may depend more on recognition of deficit in student numbers or demographics than assertion of academic excellence. Given the elision noted above, it is also essential to recognise that funds for 'outreach', often refer to widening participation-related activities, whereas other forms of outreach are generally supported through funds for knowledge exchange or public engagement.

In either instance, however, there is good reason to expect funding to be allocated predominantly to programmes that demonstrate potential for sustainable and incremental impact, rather than *ad hoc* individual activities, even when those activities might have some demonstrable impact and require relatively small investments in materials and equipment. This is, in part, because longer-term projects generally represent investments that attract buy-in from partners and increase, in cases of internal sources of funding, chances of external funding. In addition, the success of proposals is often determined by the way in which particular 'publics' are reached, since there is no 'general public' that extends across forms of engagement (see West and Pateman, 2016). While this is often lost through conceptual elision, collective experience demonstrates that funders, in particular, have very specific ends in mind and that the likelihood of a project's being funded is increased by the extent to which the engagement is planned with those specific groups in mind, not least because such projects will be more able to collect and draw evaluative conclusions on relevant data (see Reed *et al*., 2018). In all of these cases, funding that reflects and supports a research career is both more attractive for applicants, since the funding itself and resulting impact can be articulated in ways conducive, say, to REF Impact Case Studies[2] (see Harris and Ridealgh, 2016: 80), and for funders, since it increases the likelihood of academics devoting necessary energies towards completion of projects. As such, the more particular and long-term the focus, the greater the chances of securing additional funding for either related or follow-on activities. How, though, do forms of outreach fit in to academic workloads?

[2] This refers to the UK Research Excellence Framework (REF) which attempts to measure the quality of individual and institutional outputs. This includes the submission of 'impact case studies' which must demonstrate how research has changed policy and practice,

The place of outreach within academic workloads

At some institutions, outreach is viewed as an essential part of a portfolio of academic work and evaluated within promotions frameworks, often under the category of 'Citizenship and Leadership' or, even, 'Teaching'. In various instances, outreach activity has been integrated into workload models. For example, as part of its Office for Students Access Agreement, a public document outlining the details of an institution's commitment to widening participation, the University of East Anglia created one academic post per faculty with an administrative workload allocation focused solely 'on the development, coordination and delivery of outreach activities and establishment of strategy within their faculty' (Harris and Ridealgh 2016, 74). In some other instances, however, outreach work is not recognised within workload and, even if it is, the allocation may not be sufficient to enable fulfilment of responsibilities without impinging upon the research work that is more likely to lead to career development and advancement (see Harris and Ridealgh, 2016: 81). In part, this is because departments often operate with a misconceived understanding of outreach as *ad hoc* delivery of guest lectures to Sixth Form students or other non-academic parties. However, the activities and programmes needed to make a significant impact often require much more active and innovative engagement.

In our experience, it can prove difficult to demonstrate this to colleagues and Heads of Department, with colleagues having to produce especially cogent cases on the basis of previous years' experience with regard to the amount of time spent on tasks and the products of those tasks. The workload allocation that results depends upon such factors as: the extent to which departments recognise the need for coherent programmes of outreach; the scale of recruitment pressures; the relative weighting of other administrative workload allocations (and the relationship of activities to admissions roles), and the full investment in time needed to ensure that a programme fulfils its intended function. It must be also recognised that some institutions may respond to decreased recruitment and research funding with reduced workload allocations for outreach - a phenomenon noted by several contributors to this article. This is counter-intuitive and we argue that, regardless of the ways in allocations are organised, calculated and recognised, there are good intrinsic (scholarship of engagement) and instrumental (recruitment and funding) reasons for departments to create academic roles that formalise outreach.

Managing workloads

Given the emerging pressures on academics, it is important to recognise that outreach bears a high opportunity cost. Whether recognised in workloads or not, there are good reasons for academics to carefully manage their engagement with outreach, with the authors adopting a number of approaches to achieving this.

Firstly, there are clear means of avoiding, without sliding into plagiarism, duplication of activity and sustenance of networks, such that up-front investments turn into sustainable programmes of engagement. To this end, colleagues are increasingly sharing practice to relevant online networks (AFAO, 2018). Colleagues are also engaging, within their institutions, in multidisciplinary programmes that reduce costs involved in establishing external partnerships by individual departments, while maximising the value of outreach for the respective partners. This is apparent in Bassford et al.'s (2015) work on Crime Scene Investigations at De Montfort, and the University of Portsmouth's (Hill and Mulhall 2017) STEM programme in primary schools, in which colleagues from a range of disciplines each contribute to a single programme of engagement, with outcomes enhanced by multi-disciplinarily.

Secondly, there is benefit in work around effective targeting. This is apparent with regard to widening participation and recruitment insofar that there is a need to deliver outreach across the broadest range of schools and learners to both maximise civic engagement and target

the largest number of potential 'recruits'. Targeting has been highlighted as increasingly problematic in its focus on 'easy wins' as opposed to the most marginalised minorities (Danvers, 2015; Harrison and Waller 2017). Indeed, there are good reasons to believe that the criteria deployed by specific institutions to identify 'widening participation' students may replicate inequalities in access (Rainford 2017). To balance these intrinsic and instrumental concerns, there is scope for using data derived from national mapping, either through university-specific Office for Students target schools or other sector-wide projects that identify 'cold spots' or underrepresented demographics or areas (see Wass, 2016). Other value commitments may lead academics towards programmes that are sub-optimal in terms of data, but more efficient, focused and sustainable in advancing those values than they would otherwise be.

Thirdly, there may be support for organisation, delivery and evaluation from administrative teams within departments as well as central teams. Within departments, where administrative support is not provided, colleagues have secured support from paid or unpaid internship positions for undergraduate or postgraduate students, specifically with the employability agenda in mind. Central teams may often offer means of targeting or hold pre-existing funded programmes and networks into which subject-specific initiatives can be added. Indeed, institutions often have designated outreach leads at departmental, faculty or university level, each responsible for supporting and facilitating academic engagement. There is the potential, within such teams for production of non-academic, non-subject-specific materials, organisation of risk assessments, delivery of training to students engaged in programmes and dissemination of activities through email lists and newsletters.

Nurturing relationships

Effective academic outreach is seen to require significant effort in terms of nurturing collaborative network, even if such relationships are not problem-free. For example, out authors report a lack of support from central teams in advancing activities and programmes, even when they feel that those activities and programmes are directed toward institutionally valued ends, such as recruitment (see Johnson and Mutton, 2018). Conversely, outreach professionals sometimes report a perceived hierarchy in relationships with academics, particularly when developing academic programmes of study in which they feel reduced to an advisory capacity that fails fully to recognise their professional knowledge and understanding. In part, this is due to the contrasting terms of employment and workloads of the respective parties. Full-time, indefinite academic contracts (with the exception of those on teaching only contracts) recognise research, teaching and administrative responsibilities (often in that order of importance). In contrast, outreach professionals' contracts, whether full- or part-time, are often fixed-term and dependent upon internal recognition and funding for their existence. This results in differing incentives for outreach actors to pursue different programmes and courses of action (Niskanen, 1971).

As such, the implications of Dent et al.'s (2014) nurturing of networks in this context must surely include attempting to find forms of mutual understanding, including through translation where necessary, and patterns of working that draw upon the particular strengths of different actors. This is especially important in those instances in which academic researchers and outreach professionals approach the same issues with very different languages and strategies, as in the case of 'resilience'. Here, academic sociologists may refer to this as enhanced social or emotional capital to negotiate complex identity transitions experienced in university (Bathmaker, et al., 2016), whereas in practice this can get read as the need for the 'subjects' of widening participation to re-fashion themselves as more determined, aspirational and strategic beings (Grit, 2018). There are good examples of successful efforts to overcome these conceptual clashes. At the University of Sussex, there has been a concerted effort by

academics, university widening participation teams and other outreach practitioners to close this loop through close, ongoing collaborative work. This has included: secondment of three academics from Education to widening participation teams to foster relationships and knowledge exchange; widening participation practitioners studying towards postgraduate qualifications, and different stakeholders co-researching and co-authoring (Gazeley et al., 2018). In addition, at the University of East Anglia, the designated academic widening participation roles ensured post holders to become 'intermediaries' who 'bridged the gap' between academic and professional or central departments (Harris and Ridealgh, 2016: 76).

There are different challenges to nurturing relationships between institutions. While there are various forms of, sometimes precarious, co-operation between universities, such as through STEM, Doctoral Training Consortia, the Russell Group or the N8 Research Group, collaboration on outreach presents challenges insofar as recruitment, funding and even sites of impact are often, understandably, viewed in terms of zero-sum competition (Harrison and Waller, 2017; Rainford, 2017). However, there may be specific forms and sites of outreach collaboration that side-step competition. For example, the Universities of Nottingham and Leicester have collaborated with a communications company, Gallomanor Ltd, to enhance recruitment to medicine in Lincolnshire – a significant recruitment 'cold spot'. This work stems from recognition of the gap between demand and supply of primary healthcare practitioners and the likelihood, acknowledged within NHS England's sustainability and transformation plans, that it will grow more acute. Wass's (2016) report, *By choice not by chance*, identified raising awareness and interest of children in secondary education as one component in a multi-pronged approach to the sustainable training of GPs. To address this, the universities used funding from Health Education England to create an interactive website – I'm a Medic (2018) – to support online webchats between school children and panels of primary care practitioners, including GP partners, GP trainees, practice nurses, practice managers and healthcare assistants. Three 2-week events were run that engaged 42 widening participation schools and over 700 young people in years 9-12 across East Midlands. Without collaboration between the universities to achieve scale, and the assistance of professional communications services, it may not have been possible to engage pupils in areas of low levels of progression to healthcare careers. One key reason for the success of the approach may lie in the two institutions' having a shared non-zero-sum interest in attracting students from an otherwise under-represented area and a shared professional interest in fostering pathways to practice for reasons of civic, sectoral responsibility.

Given the predominance of widening participation and recruitment within understandings of outreach, perhaps the most important partners for outreach activities today are the schools and colleges from which students are drawn. Yet both the compulsory schooling and predominantly post-compulsory college sector faces a number of serious constraints on their ability to engage in activities that are largely extra-curricular. These include an increase in the quantity and intricacy of assessments, risk aversion with regard to engagement with external organisations and periodic reorganisation of institutions which produce a squeezed space for teachers to engage in outreach programmes. In our experience, colleagues seek to secure collaboration with schools either by linking programmes into the National Curriculum (see Department for Education, 2014) and Schemes of Work (see, for example, Historical Association, 2018) to ensure that teachers value the activities as more than abstract opportunities to raise aspirations or by challenging deficits within the curriculum, as in the case of Second Thoughts Philosophy (2018), which seeks to foster critical thinking. Whatever the pitch, effective forms of outreach with schools ought to lead to sustainable, long-term relationships with individual teachers or groups of teachers capable of supporting, integrating and, even, delivering elements of programmes. This nurturing of relationships increases the

breadth and number of incidental contacts between academics and students as interests among the latter emerge, opening new, and particularly local, pathways to university in the process.

Style and content

Achieving these sorts of outcomes rests upon developing, pedagogically, style and content that differ significantly from those found in traditional, lecture-based university teaching. Indeed, activities that lie within an academic's traditional comfort zone may end up alienating audiences, which, in the case of widening participation, serves only to compound disadvantage. Colleagues are pursuing various, innovative means of deploying complex ideas in ways that work for non-academic groups. In schools, these include concern for active learning and the use of activities such as role plays and engagement with mock research or workplace scenarios (see Williams 2017; Street Doctors 2016).

A good illustration of this is De Montfort's 'CrashEd', a multi-disciplinary project that arose from the collaborative commitment of six academics, a Further Education lecturer and a police forensic crash investigator to develop a car crash scenario as a means of integrating undergraduate study and WP work in schools. to develop a car crash scenario as a means of integrating undergraduate study and widening participation work in schools. The approach involves academically challenging forensic scenarios being deployed in five Schools, a further education college which focuses on post-compulsory education and Leicestershire Constabulary. CrashEd team members and the Police Forensic Crash Investigator deliver subject-specific content on anatomy and physiology, ballistics and trauma injuries to students on an FdA Artistic Make-up and Special Effects course, who then develop bespoke prosthetic resources designed from remits written by University Forensic Science students for use in an undergraduate module. Bassford *et al.* (2017) describe this approach as one where students become motivated by working as co-creators that think and work creatively across subject boundaries. Indeed, it is apparent that a range of outreach activities have the capacity to foster skills and knowledge incidental to tasks, but essential for personal and professional development. For example, the University of Portsmouth's Raspberry Pi programme introduces a hacking mind-set to students, which provides strategies for solving real world problems in areas such as cybersecurity, engineering and maths (Marsden and Hill, 2017), while the University of Nottingham's (2018) 'Healthy Bodies' programme fosters understanding of health of direct relevance to children aged 9-11 who undertake the sessions. While activities that take place with much younger pupils re unlikely to appeal to recruitment-oriented funders, they occur at a time more likely to make a substantive difference to educational careers (Department for Business, Innovation and Skills, 2013). Concern for authentic targeting leads to the co-design of interventions between academics and schools to take account of age, subject and the agendas, including attendance and attainment (see University of Bath, 2018). This also means that activities across age groups ought to build upon one another, such that information from one level of activity informs the next. Specificity of style and content extends to recognition of the needs of pupils with learning difficulties and language barriers, such as those who speak English as an Additional Language (EAL). Precisely because it can be extremely difficult to tailor content and style to such diverse groups, there is good reason for collaboration with teachers and practitioners within target non-academic groups, since it is those individuals who will know how best to meet pedagogical needs.

More broadly, there is scope within engagement, for fostering understanding of healthcare workplace demands and attendant issues, such as diversity. As in I'm a Medic (2018), the STEM Learning (2018) Ambassadors scheme, which involves experienced professionals demonstrating and discussing their work with students, illustrates the importance of authenticity to engagement, since impact stems, not just from appropriate content, but from

the social capital inherent in contact between practitioners, or trainee practitioners, and potential students (see Jackson and Price, 2017). In both cases, open-ended engagement is supplemented by concern for placing control over conversation in the hands of school students. This reflects concern for the power relations at play in outreach, fostering innovative styles of engagement and divergent forms of content.

Perhaps most importantly, as academics, the key defining value of work is subject-specific input. Whereas outreach professionals have the capacity to contribute essential administrative, organisational and, in parts, subject-specific content relating directly to the particular issues addressed by programmes, such as the nature of widening participation and enterprise, academic involvement, if it is to be justified, has to be grounded in subject-specific and research informed activity. As in De Montfort's role play work (see Bassford *et al*., 2015), academic facilitation of subject-specific content may better engage target audiences in ways that do not feel commercial, which may be beneficial in terms of not alienating those who dislike active forms of selling institutions to potential students.

Capacity building

Concern for civic duty leads naturally into concern for the contribution of outreach to capacity building and career development among participants. This is a specific occasion where the role of academic outreach is focused on developing the capacity of others, including students, employers and professional colleagues, to engage in outreach activity. This stems most easily from participatory projects (see Banks and Manners, 2012: 8), but also, as indicated above, from recruitment and widening participation work, in which there are good reasons to place onus development of a complex cluster of skills through collaboration between, not simply academics and teachers, but also undergraduates, academics, employers (see, for example, Bassford *et al*., 2016) and professional bodies (see, for example, Nicholls, Wilkinson and Bull, 2018). This has been a core element of the Sussex Learning Network's (2018a) approach which, by creating research skills training materials for widening participation staff to train young people as researchers of their own higher education hopes and journeys, has enabled young people to tell their own perspectives and design outreach activities of the future. This is one area in which collaboration with central teams capable of delivering training is likely to prove fruitful. Indeed, collective experience demonstrates that engagement in outreach does not leave academic practice untouched. The insight and experience of teachers in schools, professional partners in networks of practice and community professionals in collaborating organisations offers significant scope for impact on subsequent work in higher education, particularly with regard to pedagogy – an important concern in an age of TEF (Teaching Excellence Framework), a national assessment of the quality of university teaching.

The importance of capacity building as a form of outreach ought to be understood in its broadest sense as a means of creating pathways to ends, particularly with regard to widening participation. Given the role of authenticity noted above, the value of undergraduate participation is often underestimated and sometimes considered solely within the context of the employability agenda. This serves to marginalise a potentially vital component of outreach, since students often have the insight and social capital capable of forging links with partners. This is because obstacles to higher education may only fully be felt from the inside, such that any widening participation programme, however thoroughly advanced by those within the academy, may misunderstand and misarticulate the interests and identities of those outside it. One useful guiding principle in widening participation work, seen in various disciplines and universities, including Brighton (University of Brighton, 2018) and Bath (in2science, 2018), is that involving students multiplies the benefits of any piece of outreach work. In addition to supporting the activity, students often provide a stronger connection or example for attending students.

This is important for all parties, as navigating and managing institutional transitions from school to university to employment requires investment in self-confidence, self-efficacy and social capital (see Jackson and Price, 2017). Given the relationship between entry (recruitment) and exit (employability) concerns in a number of predominantly non-vocational subject areas (see Johnson, 2016; Newcastle University, 2018a), it is essential that institutions view widening participation, in particular, as a cycle requiring a different set of interventions before (Access), during (Retention) and after (Progression) undergraduate study (Canning, 2017; Rainford, 2017). There are various examples of institutions succeeding, to different extents, with the entry element. For example, Newcastle University runs a PARTNERS summer school aimed at students from non-standard backgrounds for whom the typical entry requirements might prove unfairly exclusionary. The programme combines academic subject- and discipline-specific interventions, such as a summer school, with periodic in-school non-subject specific interventions on finance and employability (see Newcastle University, 2018b). Awareness is also increasing about the importance of the second and third elements of the cycle, leading academics to a number of curricular and extra-curricular programmes. Examples of approaches include POL2096 Politics Work Placement at Newcastle University (2018a). This year long module normally offered in the second year of undergraduate offers students the opportunity to undertake work-related learning in a variety of different politics-related placements, including the government, charities and businesses. For students, it is an opportunity to enhance employability skills and to examine the application of political theory to practice. For hosts, it is an opportunity to embed fresh perspectives on the organisation and, ideally, to benefit from a completed piece of research on organisational interests. In the Department of Politics, Philosophy and Religion at Lancaster University (2018), 3rd year students on PPR390: PPR in Education gain experience of educational environments. The module is organised and delivered collaboratively between the department, LUSU (Lancaster University Students Union) and the schools in which placements are based. Students work with teachers, LUSU representatives and the module convener to develop a series of reflective assignments that hone the application of subject area knowledge, the development of transferable skills and the production of pedagogical resources. This fosters clear professional pathways to education, in particular. The importance of mentoring of others as a form of outreach is also highlighted by research on a postgraduate mentoring programme for undergraduate Music students at Trinity Laban of Conservatoire of Music and Dance, which demonstrates such outcomes as ‘greater understanding of routes of progression into further study and modes of networking with regard to developing employment opportunities’ (Jackson and Price 2017: 2). Each of these approaches takes collaboration with external partners and fostering of relationships with experienced colleagues and students within institutions as the very foundation of outreach, since it is these experiences that serve best to foster social capital and awareness of institutions needed for the pursuit of any career.

Evaluation of activities

Finally, there is increased concern from the authors about the evaluation of activities and programmes, which is, again, often derived from concern about value for money (see Harrison and Waller, 2017). Increased scrutiny from the Office for Students with regard to university-wide allocation of funds trickles down to departmental level, with the results that the criteria by which outreach programmes are evaluated are asserted are designed and monitored at an institutional , rather than a departmental or local level. While this may make designing evaluation less onerous, there are ways in which the inflexibility of such approaches may lead to inaccurate, ineffective or partial assessments that fail to reflect the value of the programme in its broadest terms (Bateson, *et al*. 2018). As Johnson and Mutton (2018: 137) note, students participating in North East schools widening participation outreach were not offered household

income below £42,600 – the threshold for means-tested benefits in England – as a criterion of qualification for widening participation status. This meant that the widening participation rate returned was around 20%, when the teachers who knew their students' circumstances asserted that it was closer to 90% according to that criterion. Such differences in data can fatally undermine projects and mean that the up-front investment is wasted, compounding the opportunity cost.

To address these concerns, the widening participation sector have central tracking databases, such as HEAT (Higher Education Access Tracker 2018) and, regionally, EMWPREP (2018), allowing entry of data by subscribing institutions which is then linked annually with data from the Higher Education Statistics Agency on progression of students into Higher Education. These data enable an evaluation of the impact of widening participation programmes on progression, albeit in causal terms that Harrison and Waller (2017) find problematic and reductionist. To address this potential evaluation deficit, departments and institutions have created their own frameworks and approaches to measure the impact of outreach activities. For example, the ESRC-funded Aspires (see Institute of Education 2018), engages in longitudinal, mixed methods evaluation of the factors that shape young people's science aspirations. The means by which data can be secured are myriad. While questionnaires are often seen as the most straightforward, the wide array of methods seen in other educational research activities, such as interviews, focus groups and observations (see Cohen, Manion and Morrison, 2017), still apply, especially where they make completion of evaluation less onerous for the participants. Indeed, in terms of accessibility, there are, in general, good reasons for serious user engagement in determining, designing and analysing research questions and approach. This has been modelled in the Sussex Learning Network through the 'Access your Future' peer mentoring project. The same network (Sussex Learning Network, 2018b) has produced a series of Open Access resources for evaluating projects to be co-opted and amended by partners for their specific contextual requirements. Similarly, the NERUPI framework (Hayton and Bengry-Howell, 2015) can be used by academics and widening participation practitioners to design and evaluate interventions aimed at fostering cultural capital, agency and a sense of belonging among High School students. Yet even when criteria for evaluation are carefully considered, it is often difficult to find means of establishing causation rather than simple correlation when linking, say, participation in outreach programmes to final outcomes, such as progression to selective universities. It may be that open-ended qualitative questions reveal more than interval data about the transformative capacity of impact given the radical complexity of factors at play, as Pawson (2013)'s realist framework implies. While problematic, then, colleagues are developing responses that offer hope of more effective evaluation.

Conclusion

This paper explores some of the contemporary challenges of academics engaging with outreach in the UK. Our engagement is weaved around examples and illustrations of projects that form precedents from which to work. Despite concerns raised around workloads and support for developing good practice, this should not discourage innovation in academic outreach, but identify obstacles, and responses to those obstacles, around which that innovation can take place. As such, this article serves, potentially, as the first codification of an ever-expanding body of experience to be iterated periodically as academic engagement with outreach evolves. One of the clearest reasons to engage in academic work on and through outreach is precisely because it upholds age old civic responsibilities captured by Boyer. In an age in which students, employers, politicians and the general public are beginning to question the value of degrees, it is worth remembering that subject-based academic outreach aimed at fostering and facilitating interest in study cannot be criticised on the grounds of mis-selling: some ideas are valuable in

their own right. Our engagement with the challenges noted is intended to assist colleagues as they seek to take those ideas outside the academy's walls.

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