



How diverse is your reading list? Exploring issues of representation and decolonisation in the UK

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Abstract

There is a growing impetus, from university students and administrations, to decolonise the curriculum and develop diverse reading lists. Yet, there is limited theoretical or empirical analysis of the authorship of current reading lists to justify this imperative. The present study developed and applied a method for auditing the authorship on reading lists of two modules, one from science and one from social science, in a research-intensive British university. The paper explores whether these reading lists can be considered descriptively representative of the student body or scholarly community. The analysis of reading lists found empirical basis for concerns that university curricula are dominated by white, male and Eurocentric authors, with some exceptions. The reading lists did not represent the diverse local student body but came closer to representing the demographic profile of academic staff. To interpret these findings, the paper argues that reading lists have a role to play in decolonising our universities, and offer opportunities to critique and deconstruct disciplinary boundaries. Further research is required to explore student and staff views of reading lists and the meaning of diversity, to evaluate existing tools, and address barriers to decolonising our curricula on a global scale.

Keywords Reading lists · Inclusion · Diversity · Representation · Decolonizing the curriculum

Introduction: diversifying reading lists, decolonising the curriculum

Across the world, the impetus to develop diverse and inclusive reading lists in our universities is growing, but the drivers have varied. In former colonies in the Global South, such as South

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Africa, reading lists have been reviewed as part of a wider effort to decolonise the university (Heleta 2016; Luckett and Shay 2017; Le Grange 2016). In this context, the university curriculum constitutes a fruitful site, but not the only one (Pillay 2018), for challenging entrenched colonial structures. Calls for decolonisation highlight the dominance of Eurocentric curricula which ‘reinforce white and Western dominance and privilege while at the same time being full of stereotypes, prejudices and patronising views about Africa and its people’ (Heleta 2016: 2). Whilst these demands have a long history, it is recent student protests, such as #RhodesMustFall, that have reignited these debates (Le Grange 2016; Mngomezulu and Hadebe 2018). In this setting, the university curriculum represents a necessary opportunity to deliver change in higher education and beyond, as ‘a microcosm of and impetus for broader societal transformation’ (Le Grange 2016: 3. See also Heleta 2016; Luckett and Shay 2017).

In the UK, calls for an inclusive curriculum were initially driven by the growing internationalisation of the university body (Hubble and Bolton 2018) and the widening participation agenda. Initiatives seeking to increase the numbers of UK domiciled students from under-represented groups have been expansive (Donnelly and Evans 2018) and have had some, albeit uneven, success (Whitty et al. 2015; Equality Challenge Unit 2017b). Within this context, an inclusive curriculum was considered central to delivering equality for, and representation of, a diverse and international student body (HEA/ECU 2008; Hockings 2010). A diverse curriculum has also been aligned with attempts to address the attainment gap between Black, Asian and Minority Ethnic (BAME) students and their white peers (Stevenson 2012) (BAME students are less likely to attain a ‘good’, first or upper second-class, degree compared to their white peers. See Equality Challenge Unit 2017b). It is only more recently that the interrogation of curricula in the UK has been linked to the broader movement to decolonise the university and transform the knowledge base, rather than adding token diversity (Andrews 2019). Student protests, inspired by campaigns in other parts of the world, have questioned the whiteness of the curriculum and dominance of Eurocentric, Western thought, e.g. Rhodes must fall Oxford; ‘Why is my curriculum white?’, #LiberateMyDegree (Bhambra et al. 2018). Based on such movements, students have developed their own tools to broaden the range of perspectives on their reading lists (see the Alternative Reading List Project <https://thealternativereadinglistproject.wordpress.com/>).

Situated within these debates, UK universities are beginning to recognise that ‘the content of university knowledge remains principally governed by the West for the West’ (Bhambra et al. 2018: 6) with reading materials constituting a pertinent focus for reform (Stevenson 2012: 18). Yet, the sector does not have data about the authors included on programme/module reading lists as such empirical analysis is extremely rare. This article aims to ascertain whether there is empirical evidence to support claims that UK universities need to diversify their reading lists. In doing so, the article considers the meaning of diversification by reflecting on who and/or what requires better representation in our reading lists. Two core subject areas, one in the sciences and one in the social sciences, in a leading UK university, will be interrogated in an attempt to establish whether white, male and Eurocentric authors dominate university reading lists. This type of enquiry represents a crucial step towards developing and transforming our curricula in response to the global decolonisation agenda.

Reading lists and/as representation

Reading lists in higher education are representation devices, serving to reflect particular perspectives and knowledge. Pitkin’s (1967) concept of descriptive representation is helpful

for unpacking this representative function and the normative justifications for an inclusive and diverse reading list. Descriptive representation refers to the premise that a representational artefact should resemble the community from which it is drawn. The representational function ‘must be intentional’ (Pitkin 1967: 68), although not necessarily accurate, where the representative ‘stands for’ the wider community.

Descriptive representation of the student body

Within both Global South and North settings, critiques of the curriculum have highlighted the failure of reading lists to reflect or resemble the student body. The colonial curriculum in Africa, for example, is considered ‘disconnected from African realities’ (Heleta 2016: 4) and BAME students in the UK feel ‘under-represented’ as ‘their histories and ancestral narrative [are] omitted from mainstream discourse’ (Abou El Magd 2016). Seen through a lens of descriptive representation, the reading list becomes a tool to represent student perspectives, histories and interests. This would respond to concerns identified above (Abou El Magd 2016; Heleta 2016; Wolff 2016) and facilitate student belonging and engagement (Burke 2018; Hoffman et al. 2002). More broadly, a reading list that directly connects with student histories and experiences could be aligned with pedagogical shifts towards student-centred education where ‘learning dwells within the student’ (Neumann 2013: 164). As learning contexts become centred in students, reading lists could arguably serve to instil and represent the perspectives of the student body.

Defining which student body should be reflected in our reading lists, however, is challenging. Representation of specific local student profiles would require each course to resemble the student cohort. The growing body of female students in STEM subjects in the US/UK, for example, would require collections that ‘adequately reflect the needs and populations of their campuses’ (Blackburn 2017). A reading list that responds to local students could challenge the colonial curriculum and enable indigenous voices to be represented (Phillips and Archer-Lean 2018; Le Grange 2016). However, student intake of ‘home’ students at elite universities (such as the ‘Russell Group’ in the UK) and particular courses (such as Physical sciences) are relatively homogenous (Equality Challenge Unit 2017b) and so the reading lists in these contexts would remain unchallenged. This could exacerbate differences between elite and non-elite universities at a national level and mark the knowledge divide between centre and peripheral academic systems globally (Altbach 2016; Tickner 2013). An alternative form of descriptive representation could use indicators of the national or international student body of a given discipline to inform reading lists (e.g. in UK see Equality Challenge Unit 2017b; HESA 2019). However, comparing reading lists to international or national student cohorts would reiterate concerns about recognising regional and local perspectives in a global education system (Cheung 2012). The case for descriptively representing the student body in the reading list is complex and justifiable primarily within student-centred education. It is in such settings that students have autonomy and choice in their curricula (O’Neill and McMahon 2005). However, disciplinary differences remain as student-centred learning is more common in ‘soft’ disciplines (such as social science) compared to those described as ‘hard’ (such as physical science) (Lueddeke 2003; Lindblom-Ylänne et al. 2006), and there are debates about the transferability of the concept to diverse international contexts (Jordan et al. 2013). There is a dissonance between the extensive rhetoric of student-centred learning and its implementation in higher education, where there are various barriers to student-staff co-creation of the curriculum (Bovill et al. 2016; O’Neill and McMahon 2005).

Descriptive representation of the scholarly community

Research on reading lists, although scarce (Stokes and Martin 2008; Piscioneri and Hlavac 2013), suggests that staff identify the list as ‘a device, a tool and an unproblematic given’ (Stokes and Martin 2008: 124) that offers ‘students a “sense of direction” in relation to writing on a given field’ (Stokes and Martin 2008: 116). Students view the reading list as an important instrument for learning, providing them with the ‘key’ or ‘main’ texts in the subject area (Siddall 2016; Siddall and Rose 2014; Brewerton 2014; Stokes and Martin 2008). The reading list is intended to represent the subject content, discipline and scholarly community from which it is drawn. There are standard collections of works, i.e. the canon, which have historically shaped our disciplines and populated reading lists. Moreover, there are regulations that direct the nature of study and academic standards expected in our disciplines (e.g. Subject Benchmark Statements as part of the UK Quality Code for Higher Education). Yet, existing research highlights that published or highly cited works do not necessarily reflect the discipline as a whole (Schucan Bird 2011; Dickersin 2015) and curricula can present a distorted view of a field with a more pronounced tendency to list particular publications, for example, by male, white scholars (Colgan 2017; Haggmann and Biersteker 2014; Romero 2017; Sumner 2018). On a global scale, curricula templates are often exported from North to South (Altbach 2016: 94; Shahjahan et al. 2015) and the pool of research from which reading lists are drawn favours the Global North. The global economy of knowledge marginalizes peripheral voices/perspectives often situated in the Global South (Altbach 2016; Connell 2018; Tickner 2013).

Shifts towards inclusive curricula therefore offer transformative potential (Lockett and Shay 2017) that ‘re-conceptualizes the field in light of new knowledge, scholarship, and new ways of knowing’ (Kitano cited in Cohn and Mullenix 2007: 16). The development of a diverse reading list would necessarily build on and critique the canon (Wolff 2016). In post-colonial contexts, this requires greater representation of perspectives, histories and approaches of scholars of the country (Le Grange 2016; Mngomezulu and Hadebe 2018) to ‘build a knowledge base that takes learners and teachers beyond colonialist habit’ (Phillips and Archer-Lean 2018). In other settings, calls for an inclusive reading list seek to recognise the contributions of historically marginalised groups by granting, for example, ‘access to historic and contemporary narratives about women in STEM’ (Blackburn 2017).

Seeking to develop a reading list that is descriptively representative of the scholarly community, however, is challenging. On the one hand, curricula could aspire to resemble the scholarly profile of each discipline as represented through professional disciplinary associations e.g. American Sociological Association (Bonilla-Silva 2017) or teaching departments in universities (e.g. Colgan 2017). Yet, disciplines vary according to how homogenous they have become (Altbach 2016) so descriptive representation may not be desirable in subfields with low diversity or female representation (Sumner 2018). On the other hand, drawing the reading list from the global scholarly community may provide a more holistic picture of the discipline but lack relevance to local scholars and their specialisms.

Methodology

Two small projects were undertaken to examine whether there is empirical evidence that white, male and Eurocentric/Western authors dominate reading lists in the UK context. This provides a lens through which to reflect on the meaning of a diverse curriculum and examine whether

reading lists are descriptively representative of staff or students. The projects aimed to develop a method for auditing the authors on reading lists and apply this to two case studies.

The case studies

Each of the two projects undertook a case study so that, altogether, two module reading lists were analysed. Whilst work to decolonise reading lists has focused predominantly on the humanities and social sciences, the readings in science have remained almost entirely unexamined, and their perceived neutrality is less likely to be challenged (Last 2018). Therefore, an undergraduate science module on genetics methodology and a postgraduate social science module on research methods were selected for analysis. The setting of the work was a research intensive university in the UK, with the projects constituting part of, and funded by, the local ‘Liberating the Curriculum’ initiative (a staff and student group working to advance the inclusive curriculum). The two case studies were carried out separately, each by project teams comprising one British member of staff and one international student. As white women, the staff members were mindful of their own and others’ racialized, gendered and ranked positionality in order to anticipate dangers that may emerge in the research process. In practice, this meant engaging in open reflection with colleagues and students to explore different interpretations of the data during its collection and analysis (Milner 2007).

The projects were undertaken in two inter-related stages. The first stage involved searching for literature to identify existing approaches for analysing reading lists. The second stage drew upon this literature, where possible, to develop a method of data collection and analysis.

Stage 1

Literature reviews were undertaken to identify existing studies, in any discipline, that have analysed authorship of academic research publications and/or university reading lists. The separate studies were identified and integrated across the projects. The search strategy included Google Scholar, pearl growing techniques (using key words drawn from relevant publications to search for further references), and citation checking (identifying references that cite, of have been cited by, key publications).

Stage 2

Informed by the literature identified in stage 1, methods were developed to examine the reading lists. The process of data collection for each project began with the creation of a spreadsheet that contained all of the references from each reading list. Each author was given an individual ID and for each multi-authored item, their place in the order was noted. The gender, ethnicity and geographical/institutional affiliation of each author was identified using information available about the author on institutional Web sites, profiles on other online platforms (such as LinkedIn) and biographical details included on the publication/journal article itself. Authors were grouped according to the categories listed in Table 1. In line with previous studies (Schucan Bird 2011; Dickersin et al. 1998; Eigenberg and Whalley 2015), the gender of the author was categorised as female, male or unclear and deduced from the first name, pronouns or photos. To identify the ethnicity/race of the author, the case studies experimented with different methods. The social science project used broad categories, based on the UK Institute of Race Relations definition of Black or Minority Ethnic (BME):

Table 1 Categories used for data collection

Gender	Ethnicity/race		Geography (institutional affiliation)		Country of origin
	Social science	Science	Social science	Science	Science
Female	BME	Asian	North American	North American	India
Male	Not BME	White	Europe	Europe	Japan
Unclear	Unclear		Middle East	Australasia	Australia
			South America	Asia	UK
					Sweden
					Russia
					Philippines
					China
					South Korea
					USA
					Canada

‘terminology normally used in the UK to describe people of non-white descent’. The science case recorded the information as used in the data source and then grouped according to the categories afterwards. To assign a geographical area to each author, the institutional affiliation was identified by examining the details reported on the publication or the institutional Web site of the author. Although all data was from publicly accessible sources, the completed spreadsheets included assumptions about named individuals and were therefore held securely according to data protection principles.

Data analysis was undertaken in multiple stages. First, a descriptive overview of the gender, ethnicity/ race and geographical affiliation of all authors was created for each reading list. Second, single and multiple authored publications were analysed separately. The position of authors, and their demographic characteristics, in multiple authored papers was examined. Whilst there are different approaches to attributing credit to authors on publications, typically the most significant contributor is the author listed first in social science (Endersby 1996) and last in science (Tschamtkete et al. 2007). Third, the findings were compared to local, national and international data on the student and staff bodies of the disciplines. This served to consider whether the reading lists were descriptively representative.

Findings

Stage 1

The review found that most research on authorship of published works focused on disciplines/set of journals, in a range of fields, rather than reading lists in higher education. The vast majority of the studies examined the gender of the authors (Schucan Bird 2011; Boschini and Sjögren 2007; Crow and Smykla 2015; Dickersin et al. 1998; Eigenberg and Whalley 2015; Karimi et al. 2016; Mauleón and Bordons 2006; West et al. 2013), with few studies focusing on ethnicity (Freeman and Huang 2015) and/or institutional affiliation (Crow and Smykla 2015; Hinnant et al. 2012). The methods used in these studies were diverse, ranging from manually reviewing publications to inferring an author’s sex from their name/photograph (Schucan Bird 2011; Dickersin et al. 1998; Eigenberg and Whalley 2015) to using software to assign demographic categories on the basis of authors’ names (Freeman and Huang 2015; West et al. 2013). One study evaluated the precision of

different gender detection approaches reporting that mixed methods are optimal, with name-based approaches performing particularly weakly in emerging countries (Karimi et al. 2016). On this basis, the projects used image-based gender detection methods to supplement name-focused approaches although, as considered in the discussion below, this is still problematic.

Stage 2

Social science

The reading list comprised 57 journal articles, book chapters or online reports specified for required and further reading. There were 144 different authors (see Table 2) with the number of authors ranging from one to 15 per publication. Teams of two or more authors wrote the majority (83%) of the publications on the reading list.

Gender

There were an equal proportion of female and male authors. The majority of co-authored papers (75%) included teams of men and women but the lead author was more likely to be male (55% led by men compared to 43% led by women). Further, teams of male authors were three times as common as female collaborations. Only one of the single author publications (10%) was written by a woman.

The reading list provides descriptive representation of female academic staff at levels greater than their proportion in the field of social science. The percentage of female authors listed on the reading list (50%) is higher than local (38%, University Staff statistics 2018) and national levels of female academic staff (46%, Equality Challenge Unit 2017a). The postgraduate student population, however, is not as well represented in terms of the national level population of 'social studies' at 66% (HESA 2019) or the local department of social sciences, at 73%.

Table 2 Author demographics for social science and science

		Social science number (% of total)	Science number (% of total)
Total authors		144	146
Gender	Female authors	71 (~ 50%)	41 (28%)
	Male authors	72 (~ 50%)	102 (70%)
	Unclear	1	3 (2%)
Ethnicity	BME/Asian	10 (7%)	26 (17%)
	Non-BME/White	130 (90%)	95 (65%)
	Unclear	4 (3%)	25 (21%)
Geography (affiliation)	North America	17 (12%)	91 (62%)
	South America	1 (~1%)	0
	Europe	121 (84%)	35(24%)
	Australasia	4 (3%)	4 (3%)
	Asia	0	10 (7%)
	Middle East	1 (~1%)	0
	Unclear	0	6 (4%)

Ethnicity

The majority of authors (90%) were identified as non-BME with four authors coded as unclear. None of the single author publications were written by a BME author. Of the co-authored publications, only 2% ($n = 1$) had a BAME lead author. A small proportion of the co-authored reports, 13%, included a BME author so the majority were written by teams of non-BME authors. Three percent of the total authors were BME and female, writing four publications (2%) on the reading list.

Compared to the proportion of BME academic staff in the social sciences, the reading list is descriptively representative. With 7% of authors coded as BME, the list mirrors levels of staff in these disciplines both locally (9% University Staff Statistics 2018) and nationally (10%, Equality Challenge Unit 2017a). Based on university wide statistics (2018/19), rather than specific social sciences data (which is not available), the proportion of BAME students ranges from 39% (UK domiciled) to 75% (non-UK domiciled) suggesting that the reading list fails to represent this student body.

Geography

The vast majority of the authors, 99%, were affiliated to universities in Europe, North American or Australasia. There were only two authors affiliated to institutions outside of these geographical areas, representing Brazil and Lebanon. These were listed in co-authored articles, as fourth author on a list of six (Brazil) and 13th on a publication with 14 authors (Lebanon). This meant that only 4% of all publications on the reading list included an author from the Global South.

There is no known data on the geographical affiliations of social science scholars around the world. Although limited in scope, there is some data on the nationalities of academics where 14% of staff in the UK report as non-EU nationals (UUK report). With 16% of authors affiliated to non-European universities, the reading list would arguably be descriptively representative of academic staff. The postgraduate student body in social science, however, is composed of 67% of 'overseas' (i.e. non-UK), of which 69% are from non-European countries (University Student Statistics 2018/19).

Science

The reading list comprised 68 individual articles, book chapters and Web-based data sets, with 146 authors. The number of authors per publication ranged from one to 23. The majority of the publications, 65% ($n = 44$), were written by teams of two or more authors. This meant that just over a third of the reading list (35%, $n = 24$) was written by a single author.

Gender

The majority of the authors on the reading list, 70%, were male. The gender of the authors of single-author publications ($n = 24$) broadly reflected this ratio (62% male and 21% female). However, of the co-authored publications ($n = 44$), 89% were led by male authors ($n = 39$). This included 12 publications written by the same team of male biologists.

In terms of descriptive representation, the proportion of female authors on the reading list (30%) fell short of the female student population at institutional level which is 67% for the

biosciences. Nationally the proportion of female students is almost as high (Universities UK 2018). The reading list more accurately reflects the gender balance of staff in the local department, where women constitute 40%. There is a lack of data on the gender of academic staff in the biosciences nationally and internationally, but there is evidence of a steep decline in the number of women between researcher level and principal investigator in the life sciences (Lerchenmueller and Sorenson 2018).

Ethnicity

The majority of authors, 65%, were classified as white. Of the remaining authors, 18% were identified as Asian and 17% were unclear. Similarly, white authors (75%) wrote the majority of single author publications. Of the co-authored papers, 55% of the teams included at least one Asian author and 39% were led by an Asian author.

The high proportion of unclear information about ethnicity means that it is difficult to examine whether the list is descriptively representative.

Geography

The majority of authors, 90%, were from European, Australian or North American universities. Many of these authors were affiliated to universities in North America ($n = 91$) or Europe ($n = 35$), with the latter group representing ten different European countries. Three countries in Asia (China, Singapore and The Philippines) were represented by ten authors who constituted 7% of authors. Of the publications on the reading list, 24% included an author from the Global South.

As with social science, there is no known data about the geographical affiliations of scholars. 32% of students at the local university are from outside the European Union.

Science and social science compared

The number of authors in both Social Science and Science reading lists was similar ($N = 144$; $N = 146$). Science had a lower proportion of female authors than social science with mixed findings regarding women's role in authorship. There were a higher proportion of female authors of single publications in science yet there were fewer female led co-authored papers compared to social science. Across both case studies, the majority of authors were identified as non-BAME/white and few authors were from Global South contexts (ranging from 4 to 7%). The number of individual authors on the science list for whom it was not possible to find gender and/or ethnicity data was significantly higher than for the social science list. Both lists were more representative of the local academic community than they were of the student body, which is much more diverse ethnically and more predominantly female.

Discussion

The findings suggest that there is empirical basis for claims that university reading lists in the UK context are dominated by white, male and Eurocentric authors. These conclusions are qualified by a couple of findings: the equal proportion of male/female authors on the social science reading list, and almost a third of authors on the science list identified as Asian.

Analysis indicates that whilst these authors are descriptively representative of the local/national scholarly community, as far as we can know it, the demographic characteristics of the authors diverge from those of the student body. This discussion will consider how to interpret these findings. Firstly, reflections will be made on why descriptively representative reading lists matter. Secondly, the discussion will consider the conceptual and methodological challenges that hinder and potentially undermine the interrogation of reading lists. Thirdly, a set of recommendations for future research will be identified.

Descriptively representative reading lists: why do they matter?

Should we applaud the reading lists from the case studies for descriptively representing the scholarly community, at a local/national level? These lists arguably reflect the changing composition of the disciplines and provide recognition of some of the historically under-represented groups, such as women. Such authors/lists can also provide a symbolic function to inspire under-represented groups to engage with the field (Bettinger and Long 2005). The transformative potential of descriptive representation, however, arguably rests on the view that scholars' identities influence their approach to research (Mügge et al. 2018). This would suggest that particular groups of authors, e.g. women, bring distinctive skills, values and knowledge to the field of study. Situated within Pitkin's (1967) framework, this links descriptive representation to substantive representation and the idea that representatives' actions reflect their demographic profile. The historical development and critical analyses of our disciplines provide some support for this claim. Women/feminist authors within social science (and to some extent science) have sought to challenge the male and masculinist agendas/perspectives of traditional research, and question definitions and practices of knowledge itself (Pearse et al. 2018; Roberts 1981; Schiebinger 2000). Such efforts continue today, as scholars recognise the contribution of women to the fields of science/social science (Dickersin 2015; Harding 2008). Similar efforts have been undertaken to recognise the contributions of scholars of colour and from the Global South (Bhambra 2014; Connell 2018; Harding 2008). The geographical affiliation of the author is seen to determine the nature and relevance of research, presenting 'local knowledge' tied to the communities and their needs (Connell 2018). Such knowledge is useful for generating 'actionable' inferences whether in health research (Goyet et al. 2015) or climate science (Borland et al. 2018). Framed in these arguments, there is some evidence to support a descriptively representative reading list, locally, on the basis of claims for substantive representation.

Descriptive representation of local scholars, however, arguably remains problematic. The homogeneity of particular disciplines remains unchallenged and may not be compatible with local efforts to diversify the curriculum. Further, within the wider decolonisation agenda, descriptively representative lists need to acknowledge the global reach of the discipline which, due to lack of data, currently remains unknowable. Going forward, reading lists, as representational artefacts, can serve to highlight the constructed and partial nature of our disciplines. The boundaries of disciplines are, after all, contested and/ or fluid at national and international levels (e.g. see Leftwich 2004 for a discussion of political science). The creation of a reading list therefore enables lecturers to 'imprint and construct their values and identity and beliefs into a given programme' (Stokes and Martin 2008: 121). In this sense, aspiring to be descriptively representative will inevitably entail a device that 'presents a part of the world as being or looking a certain way' (Pitkin 1967: 70). This should serve to acknowledge inequalities in global knowledge production (Altbach 2016) and offer opportunities for staff

and students to critique and deconstruct disciplinary boundaries (Lockett and Shay 2017). This would serve to counter the distinctively unrepresentative nature of the reading lists in relation to the student body. Whilst reading lists do not necessarily need to mirror student experiences to be legitimate (Wolff 2016), representation and recognition of student perspectives are essential for genuine parity of participation in higher education (Burke 2018; Lockett and Shay 2017).

Conceptual and methodological challenges

In the process of developing and applying a method for interrogating reading lists, this project unearthed a range of potential conceptual and methodological pitfalls for such an endeavour. These are considered below.

Categories of diversity

This project principally used three dimensions, gender, ethnicity, and geographical affiliation, to assess diversity within the readings lists for two subjects. These dimensions of difference seem to be most highly considered in the literature, i.e. ‘decolonizing’ or ‘gendering’ the curriculum. Whilst this represents a useful starting point, there remains a range of other categories that could be potentially interrogated. The Equality Act (2010) in England and Wales identified eight characteristics that warrant protection from discrimination and harassment in higher education (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation). Should the diversity of a curriculum/ reading list be assessed against all eight characteristics? Would it be possible to access such data? There are examples within the literature that suggest that perspectives of these groups require particular attention too. Critical disability studies (Goodley 2013) and queer theorists argue for a more inclusive framing of our disciplines (e.g. Smith and Lee 2015). There could be further characteristics, such as social class, that also warrant exploration. A robust theoretical framework, drawing on social and educational theory, is needed to justify the selection of particular characteristics. Such considerations seem lacking in the current moves to decolonize the curriculum.

Even with a strong rationale for selecting particular categories of difference, there are difficulties relating to their operationalization within the research process. The classification of ethnicity, for example, was distinguished in two different ways: common groupings (such as ‘white’ or ‘Asian’ in science) and broad categories (‘non-BME’ and ‘BME’ in social science). Both approaches suffer drawbacks, as there is no consensus on the appropriate terms to use for the scientific study of ethnicity and race (see Bhopal 2004). On the one hand, the use of ‘BME’ is seen as a somewhat ‘blunt’ instrument that attempts to be inclusive without taking into consideration the nuanced, locally defined populations (Bhopal 2004; Song 2018). On the other, large categories such as ‘white’ conceal heterogeneity, shifting demographic patterns and growing numbers of multiracial people (Song 2018). Further, there is virulent debate about whether a terminology of ‘race’ should also be used to meaningfully measure difference (Roth 2016; Song 2018). Similar debates about identity and classification continue to take place with regard to other variables such as gender and sexuality (e.g. Hines 2006). Again, deeper reflection is encouraged to create a framework for analysing reading lists that can be meaningful and theoretically justified.

In focusing on author demographics as static characteristics, projects to decolonize the curriculum arguably re-inscribe categories of difference. Concurrently, sociological theories recognize that, for example, ‘ethnicity is imprecise and fluid’ (Bhopal 2004; Roth 2016) that changes over time and context. Whilst seeking to incorporate fluid understandings of identity categories, these projects inadvertently re-affirm rigid and static categories of difference.

Data collection

This project used information available in the publications together with internet sources to collect data about authors on the reading lists. This presented a number of challenges including an absence of information and implicit/hidden forms of data. Researchers were required to extrapolate and draw inferences about author demographics, often based on photographic images. Whilst extrapolating demographics from photographs is relatively unproblematized in other studies (e.g. Eigenberg and Whalley 2015), this approach meant that the findings were mainly based on demographic proxies, with limited possibilities for ensuring accuracy (Sloan 2017; Mügge et al. 2018). The intersection of such proxies can generate further uncertainty unless, for example, gender detection methods are tailored to geographic and ethnic contexts (Karimi et al. 2016). Triangulating proxies with other methods may serve to validate the data by asking the individuals themselves (Sloan 2017) or asking scholars in the same field (Dickersin et al. 1998). Some familiarity with the scholars in the fields of study was helpful but validation of data was not systematically carried out and the accuracy of the data remains problematic.

Data analysis

The nature of the data collection presented a number of opportunities and challenges for the data analysis. First, data was collected at two different levels: for each author and per publication. The analysis needed to interrogate and draw inferences from both metrics. Whilst there are examples of studies that have integrated both levels of data (e.g. Crow and Smykla 2015), greater consideration is required to recognize the relative contribution of each level of analysis to the overall conclusions. Second, the analysis aimed to acknowledge and explore demographic characteristics and how they related to sole/multiple authorship. This meant, for example, examining whether women were evenly represented across the author positions (as sole or co-authors) (West et al. 2013). The practice of authoring papers and attributing authorship, however, varies across disciplines and so comparison remains difficult (Helgesson and Eriksson 2018). Further, in multiple author publications, authorship and author order remains a ‘vexed issue’ (McCann and Polacsek 2018) with no consensus on how scientific merit is attributed to individuals (Helgesson and Eriksson 2018). Therefore, without clear guidance on how to interpret authorship order, it remains difficult to draw inferences on the intersection of author contribution and demographics. Third, data was collected on a number of demographic factors which provided an opportunity to analyse intersectionality and authorship. The intersectional analysis, however, was limited by the small numbers of authors for each category of difference and an inability to address the normative underpinnings of such analysis (Hancock 2007). Fourth, attempts to compare the demographic characteristics of the authors on the reading lists with wider student and staff bodies, i.e. analyse descriptive

representation, were hampered by difficulties in identifying and accessing data on these populations.

Ethical issues and data protection

Collecting personal data from online sources generates a number of ethical and legal concerns pertaining to informed consent, privacy and anonymity (Wilkinson and Thelwall 2011). Informed consent for research participants is a fundamental element of science/social science research but is this necessary when interrogating author demographics from module reading lists? On the one hand, the researcher is collecting personal data and making judgments about individuals. On the other hand, there are conditions in which informed consent may not be necessary for documents, text or observations taking place in *public* online space (Hudson and Bruckman 2004; Wilkinson and Thelwall 2011). As Convery and Cox (2012) propose, a form of ‘negotiated ethics’ may be necessary which means that particular types of data collection, such as author’s geographical affiliation, may not require informed consent because such information is intentionally public (Willis 2017). Categories of gender and ethnicity, however, are not explicitly presented as public data and so may arguably require consent from the participants for research use and analysis.

The issues of privacy and anonymity are complex in this project given the central role played by identity in the data collection and analysis. Nonintrusive research may not raise privacy concerns but the collection and analysis of implicit data requires further consideration. As Wilkinson and Thelwall (2011) suggest, revealing the identity of an individual may simply involve the transference of identity from one public space (online) to another (academic publication). This may, or may not, be potentially sensitive so good practice procedures for data protection should be followed to ensure that data about individuals remained confidential. The legal framework in the UK changed after the research was carried out, and the GDPR needs to apply to all future work (UKRI 2018). This may influence requirements for consent and anonymity.

Recommendations for future research

The paucity of research examining authorship and reading lists (Piscioneri and Hlavac 2013) suggest that there are key strands of work that need to be progressed in order to understand and develop inclusive reading lists in universities. First, there is a lack of research examining student views of reading lists. Qualitative research is required to uncover student expectations of reading lists and their reactions to diversity in the curriculum (Wolff 2016). This should necessarily consider students from different disciplines, where expectations and views are likely to differ. Second, more research is needed to identify staff views of reading lists and to re-examine the role of reading lists in higher education (Stokes and Martin 2008). Third, normative and empirical work is required to fully unpack the conceptual and methodological issues involved in reviewing the diversity of reading lists. With the university sector prompting their staff to develop more ‘inclusive’ reading lists (Stevenson 2012), further work is needed to reflect on the challenges of doing so and then provide ethical and rigorous tools to perform such a task. Fourth, further research needs to explore reading lists as artefacts of substantive representation: do author identities influence the type and content of their research? Finally, more extensive and global data is required to detail the number and characteristics of staff and students in our disciplines. Current knowledge is incomplete.

Conclusions

This article provides empirical support for diversification of reading lists in higher education but also highlights a number of challenges that need careful consideration so as not to undermine the endeavour. There are a range of implications.

First, universities need to engage in a transparent and informed discussion about what a ‘diverse/inclusive/decolonised’ reading list actually looks like. This process needs to engage with a range of stakeholders, including staff and students, to ensure clarity and commitment to the agenda (Whitsed and Green 2016). These discussions should be context-sensitive (Wolff 2016) and be founded on an understanding of the relevant theoretical, methodological and ethical debates (such as those discussions raised in this article).

Second, higher education institutions and agencies (such as Advance HE in the UK) need to develop coherent and consistent strategies that can move the sector towards more inclusive and diverse programmes of study. Current approaches focus on individual responses in a single classroom or module (Sleeter 2016) but a strategic, sector-wide response is required. To meet the aims of the global decolonisation agenda and strive for genuine inclusivity of students, these approaches need to be ‘transformative’ (Luckett and Shay 2017; Kitano cited in Cohn and Mullenix 2007; Sleeter 2016) where ‘universities must completely rethink, reframe and reconstruct the curriculum’ (Heleta 2016: 5).

Third, academics and lecturers should not wait for institutional responses but engage with the debates raised here and begin to critically reflect on their own reading lists (Heleta 2016). However, further analytical and methodological work needs to be undertaken to develop a toolkit for teachers to review their own curriculums. Universities need to invest in research to develop and trial methods for interrogating diversity in module reading lists. Some tools are beginning to emerge (e.g. UCL Inclusive Curriculum Healthcheck 2018; Sumner 2018), but there is a lack of research evaluating their relevance, implementation or outcome. More detailed, step-by-step instruction, based on evidence, would help to support teachers in higher education to start the process of analysing their modules through a critical, ‘transformative’ lens (see Cohn and Mullenix 2007).

Fourth, sector-wide strategies should recognise the structural challenges that face the global agenda to decolonise/diversify reading lists. The nature of academic publishing, for example, means that the dominance of the Global North necessarily shapes the landscape for research and knowledge production (Collyer 2016). The development of more diverse reading lists will therefore need to be accompanied by a range of initiatives to challenge inequalities in knowledge production and bring marginalised perspectives into the centre (Altbach 2016; Tickner 2013).

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References

- Abou El Magd, N. (2016). Why is my curriculum white? - Decolonising the academy. *NUS Connect*. <https://www.nusconnect.org.uk/articles/why-is-my-curriculum-white-decolonising-the-academy>. Accessed 29 Oct 2018.
- Altbach, P. G. (2016). *Global perspectives on higher education*. JHU Press.
- Andrews, K. (2019). Blackness, empire and migration: how black studies transforms the curriculum. *Area*. <https://doi.org/10.1111/area.12528>.
- Bettinger, E. P., & Long, B. T. (2005). Do faculty serve as role models? The impact of instructor gender on female students. *American Economic Review*. <https://doi.org/10.1257/000282805774670149>.
- Bhambra, G. K. (2014). A sociological dilemma: Race, segregation and US sociology. *Current Sociology*. <https://doi.org/10.1177/0011392114524506>.
- Bhambra, G. K., Gebrial, D., & Nişancıoğlu, K. (2018). Introduction: Decolonising the University? In G. K. Bhambra, D. Gebrial, & K. Nişancıoğlu (Eds.), *Decolonising the university*. Chicago: Pluto Press.
- Bhopal, R. (2004). Glossary of terms relating to ethnicity and race: For reflection and debate. *Journal of Epidemiology and Community Health*. <https://doi.org/10.1136/jech.2003.013466>.
- Blackburn, H. (2017). The status of women in STEM in higher education: a review of the literature 2007–2017. *Science & Technology Libraries*. <https://doi.org/10.1080/0194262X.2017.1371658>.
- Bonilla-Silva, E. (2017). What we were, what we are, and what we should be: The racial problem of American sociology. *Social Problems*, 64(2), 179–187.
- Borland, R., Morrell, R., & Watson, V. (2018). Southern agency: Navigating local and global imperatives in climate research. *Global Environmental Politics*. https://doi.org/10.1162/glep_a_00468.
- Boschini, A., & Sjögren, A. (2007). Is team formation gender neutral? Evidence from coauthorship patterns. *Journal of Labor Economics*. <https://doi.org/10.1086/510764>.
- Bovill, C., Cook-Sather, A., Felten, P., Millard, L., Moore-Cherry, N. (2016). Addressing potential challenges in co-creating learning and teaching: Overcoming resistance, navigating institutional norms and ensuring inclusivity in student–staff partnerships. *Higher Education*, 71(2), 195–208.
- Brewerton, G. (2014). Implications of student and lecturer qualitative views on reading lists: a case study at Loughborough University, UK. *New Review of Academic Librarianship*. <https://doi.org/10.1080/13614533.2013.864688>.
- Burke, P. (2018). Trans/forming pedagogical spaces: Race, belonging and recognition in higher education. In J. Arday & H. S. Mirza (Eds.), *Dismantling race in higher education: Racism, whiteness and decolonising the academy* (p. 2018). Springer.
- Cheung, B. L. A. (2012). How Hong Kong universities balance the global and the regional. In *The reorientation of higher education: Challenging the east-west dichotomy* (pp. 95–112). Comparative Education Research Centre, The University of Hong Kong.
- Cohn, E., & Mullenix, J. (2007). Diversity as an integral component of college curriculum. In J. Branche, E. Cohn, & J. Mullenix (Eds.), *Diversity across the curriculum: A guide for faculty in higher education* (pp. 11–17). Bolton: Anker.
- Colgan, J. (2017). Gender bias in international relations graduate education? New evidence from syllabi. *PS: Political Science & Politics*. <https://doi.org/10.1017/S1049096516002997>.
- Collyer, F. M. (2016). Global patterns in the publishing of academic knowledge: Global north, global south. *Current Sociology*. <https://doi.org/10.1177/0011392116680020>.
- Connell, R. (2018). Decolonizing sociology. *Contemporary Sociology: A Journal of Reviews*. <https://doi.org/10.1177/0094306118779811>.
- Convery, I., & Cox, D. (2012). A review of research ethics in internet-based research. *Practitioner Research in Higher Education*, 6(1), 50–57.
- Crow, M. S., & Smykla, J. O. (2015). An examination of author characteristics in national and regional criminology and criminal justice journals, 2008–2010: are female scholars changing the nature of publishing in criminology and criminal justice? *American Journal of Criminal Justice*. <https://doi.org/10.1007/s12103-014-9250-x>.
- Dickersin, K. (2015). Innovation and cross-fertilization in systematic reviews and meta-analysis: the influence of women investigators. *Research Synthesis Methods*. <https://doi.org/10.1002/jrsm.1147>.
- Dickersin, K., Fredman, L., Flegal, K. M., Scott, J. D., & Crawley, B. (1998). Is there a sex bias in choosing editors? Epidemiology journals as an example. *Journal of the American Medical Association*. <https://doi.org/10.1001/jama.280.3.260>.
- Donnelly, M., & Evans, C. (2018). A “home-international” comparative analysis of widening participation in UK higher education. *Higher Education*. <https://doi.org/10.1007/s10734-018-0260-3>.
- Eigenberg, H. M., & Whalley, E. (2015). Gender and publication patterns: Female authorship is increasing, but is there gender parity? *Women and Criminal Justice*. <https://doi.org/10.1080/08974454.2015.1023882>.

- Endersby, J. W. (1996). Collaborative research in the social sciences: Multiple authorship and publication credit. *Social Science Quarterly*, 77(2), 375–392.
- Equality Challenge Unit (2017a). *Equality in higher education: Staff statistical report 2017*.
- Equality Challenge Unit (2017b). *Equality in higher education: Students statistical report 2017*. <https://www.ecu.ac.uk/publications/equality-in-higher-education-statistical-report-2017/>. Accessed 30 Dec 2018.
- Equality Challenge Unit & Higher Education Academy (2008). *Ethnicity, gender and degree attainment project: final report*. <https://www.ecu.ac.uk/wp-content/uploads/external/ethnicity-gender-and-degree-attainment-project-final-report.pdf>. Accessed 30 Dec 2018.
- Freeman, R. B., & Huang, W. (2015). Collaborating with people like me: ethnic coauthorship within the United States. *Journal of Labor Economics*. <https://doi.org/10.1086/678973>.
- Goodley, D. (2013). Dis/entangling critical disability studies. *Disability & Society*. <https://doi.org/10.1080/09687599.2012.717884>.
- Goyet, S., Touch, S., Ir, P., SamAn, S., Fassier, T., Frutos, R., Tarantola, A., & Barennes, H. (2015). Gaps between research and public health priorities in low income countries: Evidence from a systematic literature review focused on Cambodia. *Implementation Science*. <https://doi.org/10.1186/s13012-015-0217-1>.
- Hagmann, J., & Biersteker, T. J. (2014). Beyond the published discipline: toward a critical pedagogy of international studies. *European Journal of International Relations*. <https://doi.org/10.1177/1354066112449879>.
- Hancock, A.-M. (2007). Intersectionality as a normative and empirical paradigm. *Politics & Gender*. <https://doi.org/10.1017/S1743923X07000062>.
- Harding, S. (2008). *Sciences from below: Feminisms, postcolonialities, and modernities*. Duke University Press.
- Heleta, S. (2016). Decolonisation of higher education: dismantling epistemic violence and eurocentrism in South Africa. *Transformation in Higher Education*. <https://doi.org/10.4102/the.v1i1.9>.
- Helgesson, G., & Eriksson, S. (2018). Authorship order. *Learned Publishing*. <https://doi.org/10.1002/leap.1191>.
- HESA (2019) Higher Education Student Statistics: UK, 2017/18 <https://www.hesa.ac.uk/news/17-01-2019/sb252-higher-education-student-statistics> Last accessed 6 June 2019.
- Hines, S. (2006). What's the difference? Bringing particularity to queer studies of transgender. *Journal of Gender Studies*. <https://doi.org/10.1080/09589230500486918>.
- Hinnant, C., Stvilia, B., Wu, S., Worrall, A., Burnett, G., Burnett, K., Kazmer, M. M., & Marty, P. F. (2012). Author team diversity and the impact of scientific publications: evidence from physics research at a national science lab. *Library & Information Science Research*. <https://doi.org/10.1016/j.lisr.2012.03.001>.
- Hockings, C. (2010). Inclusive learning and teaching in higher education: A synthesis of research. *Evidence Net*. Higher Education Academy. https://www.heacademy.ac.uk/system/files/inclusive_teaching_and_learning_in_he_synthesis_200410_0.pdf. Accessed 30 Dec 2018.
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating “sense of belonging” in first-year college students. *Journal of College Student Retention: Research, Theory & Practice*. <https://doi.org/10.2190/DRYC-CXQ9-JQ8V-HT4V>.
- Hubble, S. & Bolton, P. (2018). International and EU students in higher education in the UK FAQs. *House of Commons Library*, (CBP 7976). <https://researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-7976#fullreport>. Accessed 30 Dec 2018.
- Hudson, J. M., & Bruckman, A. (2004). “Go away”: participant objections to being studied and the ethics of chatroom research. *The Information Society*. <https://doi.org/10.1080/01972240490423030>.
- Jordan, L., Bovill, C., Othman, S. M., Saleh, A. M., Shabila, N. P., & Watters, N. (2013). Is student-centred learning a Western concept? Lessons from an academic development programme to support student-centred learning in Iraq. *Teaching in Higher Education*, 19(1), 13–25. <https://doi.org/10.1080/13562517.2013.827649>.
- Karimi, F., Wagner, C., Lemmerich, F., Jadidi, M. & Strohmaier, M. (2016). Inferring gender from names on the web: a comparative evaluation of gender detection methods. <https://doi.org/10.1145/2872518.2889385>.
- Last, A. (2018). Internationalisation and interdisciplinarity: Sharing across boundaries. In G. K. Bhambra, D. Gebrial, & K. Nişancioğlu (Eds.), *Decolonising the university* (pp. 208–230). London: Pluto Press.
- Leftwich, A. (2004). Thinking politically: On the politics of politics. In A. Leftwich (Ed.), *What is politics: The activity and its study* (pp. 1–22). Cambridge: Polity Press.
- Le Grange, L. (2016). Decolonising the university curriculum. *South African Journal of Higher Education*. <https://doi.org/10.20853/30-2-709>.
- Lerchenmueller, M., & Sorenson, O. (2018). The gender gap in early career transitions in the life sciences. *Research Policy*. <https://doi.org/10.1016/j.respol.2018.02.009>.
- Lindblom-Ylänne, S., Trigwell, K., Nevgi, A., & Ashwin, P. (2006). How approaches to teaching are affected by discipline and teaching context. *Studies in Higher Education*. <https://doi.org/10.1080/03075070600680539>.
- Luckett, K., & Shay, S. (2017). Reframing the curriculum: a transformative approach. *Critical Studies in Education*. <https://doi.org/10.1080/17508487.2017.1356341>.

- Lueddeke, G. (2003). Professionalising teaching practice in higher education: a study of disciplinary variation and ‘teaching-scholarship’. *Studies in Higher Education*, 28, 213–228.
- Mauleón, E., & Bordons, M. (2006). Productivity, impact and publication habits by gender in the area of materials science. *Scientometrics*. <https://doi.org/10.1007/s11192-006-0014-3>.
- McCann, T. V., & Polacek, M. (2018). Addressing the vexed issue of authorship and author order: A discussion paper. *Journal of Advanced Nursing*. <https://doi.org/10.1111/jan.13720>.
- Milner, H. R. (2007). Race, culture, and researcher positionality: Working through dangers seen, unseen, and unforeseen. *Educational Researcher*. <https://doi.org/10.3102/0013189x07309471>.
- Mngomezulu, B. R., & Hadebe, S. (2018). What would the decolonisation of a political science curriculum entail? Lessons to be learnt from the East African experience at the Federal University of East Africa. *Politikon*. <https://doi.org/10.1080/02589346.2018.1418205>.
- Mügge, L., Montoya, C., Emejulu, A., & Weldon, S. L. (2018). Intersectionality and the politics of knowledge production. *European Journal of Politics and Gender*. <https://doi.org/10.1332/251510818X15272520831166>.
- Neumann, J. W. (2013). Developing a new framework for conceptualizing “Student-Centered Learning”. *The Educational Forum*, 77(2), 161–175.
- O’Neill, G., & McMahon, T. (2005). Student-centred learning: What does it mean for students and lecturers? In G. O’Neill, S. Moore, & B. McMullin (Eds.), *Emerging issues in the practice of university learning and teaching* (pp. 27–36). Dublin: AISHE.
- Pearse, R., Hitchcock, J. N., & Keane, H. (2018). Gender, inter/disciplinarity and marginality in the social sciences and humanities: a comparison of six disciplines. *Women’s Studies International Forum*. <https://doi.org/10.1016/j.wsif.2018.05.007>.
- Phillips, S. R., & Archer-Lean, C. (2018). Decolonising the reading of Aboriginal and Torres Strait Islander writing: reflection as transformative practice. *Higher Education Research & Development*, 38(1), 24–37. <https://doi.org/10.1080/07294360.2018.1539956>.
- Pillay, S. (2018). Thinking the state from Africa: political theory, eurocentrism and concrete politics. *Politikon*. <https://doi.org/10.1080/02589346.2018.1418203>.
- Piscioneri, M., & Hlavac, J. (2013). The minimalist reading model: rethinking reading lists in arts and education subjects. *Arts and Humanities in Higher Education*. <https://doi.org/10.1177/1474022212459035>.
- Pitkin, H. (1967). *The concept of representation*. Berkeley: University of California Press.
- Roberts, H. (1981). *Doing feminist research*. London: Routledge.
- Romero, M. (2017). Reflections on “The department is very male, very white, very old, and very conservative”: the functioning of the hidden curriculum in graduate sociology departments. *Social Problems*. <https://doi.org/10.1093/socpro/spx004>.
- Roth, W. D. (2016). The multiple dimensions of race. *Ethnic and Racial Studies*. <https://doi.org/10.1080/01419870.2016.1140793>.
- Schiebinger, L. (2000). Has feminism changed science? *Signs: Journal of Women in Culture and Society*. <https://doi.org/10.1086/495540>.
- Schucan Bird, K. (2011). Do women publish fewer journal articles than men? Sex differences in publication productivity in the social sciences. *British Journal of Sociology of Education*. <https://doi.org/10.1080/01425692.2011.596387>.
- Shahjahan, R. A., Morgan, C. (2015). Global competition, coloniality, and the geopolitics of knowledge in higher education. *British Journal of Sociology of Education*, 37(1), 92–109.
- Siddall, G. (2016). University academics’ perceptions of reading list labels. *New Library World*. <https://doi.org/10.1108/NLW-02-2016-0012>.
- Siddall, G., & Rose, H. (2014). Reading lists – Time for a reality check? An investigation into the use of reading lists as a pedagogical tool to support the development of information skills amongst Foundation Degree students. *Library and Information Research*. <https://doi.org/10.29173/lirg605>.
- Sleeter, C. E. (2016). Ethnicity and the curriculum. In *The SAGE handbook of curriculum, pedagogy, and assessment* (pp. 231–246).
- Sloan, L. (2017). Social science “lite”? Deriving demographic proxies. In *The SAGE handbook of social media research methods* (p. 90).
- Smith, N. J., & Lee, D. (2015). What’s queer about political science? *British Journal of Politics and International Relations*. <https://doi.org/10.1111/1467-856X.12037>.
- Song, M. (2018). Why we still need to talk about race. *Ethnic and Racial Studies*. Routledge. <https://doi.org/10.1080/01419870.2018.1410200>.
- Stevenson, J. (2012). Black and minority ethnic student degree retention and attainment introduction: the BME degree attainment learning and teaching summit. *Higher Education Academy*. <https://www.heacademy.ac.uk/knowledge-hub/black-and-minority-ethnic-student-degree-retention-and-attainment>. Accessed 30 Dec 2018.

- Stokes, P., & Martin, L. (2008). Reading lists: a study of tutor and student perceptions, expectations and realities. *Studies in Higher Education*. <https://doi.org/10.1080/03075070801915874>.
- Sumner, J. L. (2018). The Gender Balance Assessment Tool (GBAT): a web-based tool for estimating gender balance in syllabi and bibliographies. *PS: Political Science & Politics*. <https://doi.org/10.1017/S1049096517002074>.
- Tickner, A. B. (2013). Core, periphery and (neo)imperialist international relations. *European Journal of International Relations*. <https://doi.org/10.1177/1354066113494323>.
- Tschamtko, T., Hochberg, M. E., Rand, T. A., Resh, V. H., & Krauss, J. (2007). Author sequence and credit for contributions in multiauthored publications. *PLoS Biology*. <https://doi.org/10.1371/journal.pbio.0050018>.
- UCL Inclusive Curriculum Healthcheck (2018). https://www.ucl.ac.uk/teaching-learning/sites/teaching-learning/files/ucl_inclusive_curriculum_healthcheck_2018.pdf. Accessed 30 Dec 2018.
- UKRI (2018). GDPR and research – an overview for researchers. <https://www.ukri.org/files/about/policy/ukri-gdpr-faqs-pdf/>. Accessed 30 Dec 2018.
- Universities UK (2018). *Patterns and trends in UK higher education 2018*. <https://www.universitiesuk.ac.uk/facts-and-stats/data-and-analysis/Documents/patterns-and-trends-in-uk-higher-education-2018.pdf> Last accessed 6 June 2019.
- West, J. D., Jacquet, J., King, M. M., Correll, S. J., & Bergstrom, C. T. (2013). The role of gender in scholarly authorship. *PLoS One*. <https://doi.org/10.1371/journal.pone.0066212>.
- Whitsed, C., & Green, W. (2016). Lessons from Star Trek: engaging academic staff in the internationalisation of the curriculum. *International Journal for Academic Development*. <https://doi.org/10.1080/1360144X.2016.1170019>.
- Whitty, G., Hayton, A., & Tang, S. (2015). Who you know, what you know and knowing the ropes: a review of evidence about access to higher education institutions in England. *Review of Education*. <https://doi.org/10.1002/rev3.3038>.
- Wilkinson, D., & Thelwall, M. (2011). Researching personal information on the public web: methods and ethics. *Social Science Computer Review*. <https://doi.org/10.1177/0894439310378979>.
- Willis, R. (2017). Observations online: Finding the ethical boundaries of Facebook research. *Research Ethics*, 1747016117740176.
- Wolff, E. (2016). Four questions on curriculum development in contemporary South Africa. *South African Journal of Philosophy*, 35(4), 444–459.

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