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Failing to deliver? Exploring the current status of career education provision in England

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ABSTRACT

Currently, in England, there is widespread concern that careers education (information, advice and guidance) is relatively poorly resourced in schools and there is much debate about its current effectiveness. In this paper, we investigate students' views on careers education provision and their satisfaction with this provision. The work draws on data collected via a national survey of over 13,000 Year 11 students aged 15/16 years and in-depth longitudinal interviews conducted with 70 students from this cohort (aged from 10 to 16 years). Our findings show that there is clear student demand for 'more and better' careers education and we conclude that some schools may not be meeting the statutory requirement to provide impartial careers support for *all* students. Moreover, our quantitative analyses indicate that provision of careers education in England is currently patterned in ways that may be working to promote inequalities relating to gender, ethnicity and social class. Findings from our interview data offer insight into possible influencing factors and suggest that the majority of careers support is provided via a 'self-referral' system, which disadvantages those who, arguably, might benefit most. We conclude by discussing the implications of these patterns and suggest some potential, more equitable, ways forward for schools and teachers. Specifically, we recommend that targeted resourcing is needed for schools and teachers to engage and support disadvantaged students, and suggest greater monitoring of participation (not just provision).

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Careers education; inequalities; secondary school

Introduction

Careers education in England – what, who, why and when?

'Careers education' has long meant different things to different people. Indeed, across policy and educational research, there remains a diversity of understandings as to what careers education might comprise, both conceptually and in practice. The terminology of careers education has been variously used and interpreted (Andrews 2011; Hutchinson 2012; Sultana 2013). For example, Hooley, Watts, and Andrews (2015) use the term 'career and employability learning' to describe a wide range of activities which support young people to think about their futures, build the skills they need and make successful transitions. In this paper, we adopt Hutchinson's (2013) conceptualisation of career-related learning, which comprises three parts: careers education (including self-development, exploration and management); work-related learning (about types of work, developing skills *for* and *through* work); and careers information, advice and guidance (CIAG). This paper will focus on the CIAG aspect of

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career-related learning, documenting current perceptions held of CIAG provision (across a range subjects) at school among students in England.

Currently, securing independent careers advice for *all* pupils remains a statutory requirement for all secondary schools in England. However, recent years have seen substantive changes to the funding and provision available to deliver this duty. In 2010, the government decided to terminate the annual £200 million funding allocation for the national network of Connexions centres (a dedicated careers guidance service for young people), shifting the statutory duty from local authorities to individual schools to secure independent careers guidance for *all* students in Years 8 through 13 (Department for Business, Innovation & Skills 2014; Department for Education 2013, 2014; House of Commons Education Committee 2013). This was arguably the biggest change in policy in 40 years and was intensely debated (CDI 2015). Since then, widespread concern has been voiced (e.g. from Ofsted, the National Careers Council and the Education Select Committee) regarding the consistency of provision as schools have struggled to meet the new requirements without additional funding.

It has been argued that the skills necessary to navigate transitions from education into work have never been so daunting or more valuable (Hooley, Watts, and Andrews 2015; National Careers Council 2013). Indeed, it could be contended that young people have to navigate highly complex pathways through post-compulsory education, work and training, with a proliferation of choices and options offered by the 14–19 education system (Acquah, Limmer, and Malpass 2016) and as rapid technological advancements and social change are drastically transforming the labour market (Hooley, Watts, and Andrews 2015; Independent Skills Taskforce 2014). Careers education has been proposed as a key mechanism for preparing and equipping young people to make successful transitions through these complex and shifting terrains. For instance, careers education has been identified as a means for developing the requisite knowledge and skills in young people to enable them to plan and manage their lifelong career journey (e.g. Andrews 2011; Hooley, Marriott, and Sampson 2011; House of Commons Education Committee 2013; Moon et al. 2004; Porfeli and Lee 2012). Careers education has also been proposed as a means for improving the efficiency of education and helping to ensure an appropriately matched supply of young people to meet labour market needs (Herr and Cramer 1996; OECD 2004; Palladino Schultheiss 2005).

It has also been argued that careers education can result in a range of wider positive outcomes, such as promoting motivation and positive attitudes towards school learning (e.g. Harkins 2001), and enhanced self-awareness (e.g. Palladino Schultheiss 2005). Indeed, it has been suggested that careers education might be a useful tool for promoting social equity (Archer et al. 2014) and is key for social mobility (Hutchinson 2012; OECD 2004). For instance, research evidence suggests that when students have been exposed to substantial careers education from a young age, they are more likely to express broader career expectations and aspirations and are less likely to be constrained by societal and/or familial pressures to make early career compromises (Welde et al. 2016).

However, despite the widespread hopes and promises regarding the potential of careers education, evidence suggests that, in practice, the benefits of careers education may be under-realised and failing to reach those most in need. For instance, research suggests that students in England from disadvantaged backgrounds may be getting 'lost' in the system from as young as 13 (Department for Education 2015). Moreover, recent figures suggest that over 900,000 young people in the UK were Not in Education, Employment or Training (NEET) between April and June 2015 (ONS 2015), despite the current generation being more highly skilled than any previous generation (Mann and Huddleston 2015; UKCES 2014).

In particular, concerns have focused on how the termination of careers funding and transferal of responsibility to schools and teachers to deliver careers education has led to a decline in the quantity *and* quality of career guidance for young people (Acquah, Limmer, and Malpass 2016; Beck, Fuller, and Unwin 2006; Haynes, McCrone, and Wade 2013; Moon et al. 2004). For instance, a survey of 1,500 careers advisors in English secondary schools conducted in 2012 documented reduced careers advice provision in 80% of schools, with one school dramatically switching from 65 days of careers advice to just 16 days following the closure of Connexions (Careers England 2012). Beyond the provision of

careers advice, one report also found that many young people, parents and teachers were not receiving appropriate guidance about labour market trends (National Careers Council 2013). These concerns have been articulated by several politicians, such as the former Business Secretary, Vince Cable saying, 'For too long, careers advice in schools has been patchy and too dependent on individual teachers having the right knowledge and expertise, with employers often finding that school leavers don't have the necessary skills or training'. Likewise, the current Chair of the Education Select Committee, Neil Carmichael MP, has expressed concern that 'Good quality careers advice is exceptionally important, but current provision often seems patchy and complex, falling short in providing young people with comprehensive advice about the range of career opportunities available'. Such concerns may be well founded, as international evidence suggests that providing schools with sole responsibility for careers provision without appropriate levels of resource and support may lead to a decline in careers provision (Hutchinson 2013). Moreover, evidence suggests that inaccurate or incomplete support can lead to students making misinformed choices, potentially leading to lower course satisfaction and increased dropout rates (Haynes, McCrone, and Wade 2013; Local Government Association 2015; Moon et al. 2004). A review of the recent policy documents highlights an absence of the student voice, with data collected mainly from school management and staff (cf. Hutchinson 2011; Ofsted 2013).

While, in December 2014, the government announced £5 million funding for a new careers and enterprise company, overseeing the provision of careers education and advice for young people between the ages of 12 and 18 (Department for Education 2014), some remain sceptical that this body will be able to 'fill the gap' in careers education provision for all schools, particularly given its role is largely advisory and at a coordination level (e.g. the new careers body is charged with advising schools and colleges on their careers provision, increasing the level of employer input into careers advice, mapping the extent of engagement between schools and employers and reporting back to the government on how well young people are being prepared for work). As we discuss in this paper, the task is a daunting one, given that our findings indicate a landscape in which young people's engagement with careers information is patchy and patterned by social injustices.

Equality and diversity and careers education

A wealth of evidence exists showing that young people's aspirations and educational and occupational choices tend to be patterned by ethnicity, gender and social class (e.g. Archer et al. 2010; Gottfredson 1981, 2005; Hutchinson et al. 2011). For example, research has documented how young people from Black and minority ethnic backgrounds are more likely to express aspirations for particular career routes (Archer et al. 2015; Hutchinson et al. 2011), often following 'safe', pragmatic routes into 'known' areas of employment as a way to mitigate wider inequalities (e.g. Archer and Francis 2007). According to the UK equal opportunities commission, 41% of pay gap differences can also be attributed to gendered patterns of career choice – although research also shows the complex mixture of factors that combine together to produce particular stereotypical patterns of aspiration (Francis 2000). For instance, biases have been noted within career guidance practices and materials in relation to gender (Correll 2004; Eccles, Wigfield, and Schiefele 1998; Lufkin et al. 2007) and within teachers' and careers advisors' expectations for different communities of students, by ethnicity, class and gender (e.g. Archer and Francis, 2007; Archer et al. 2010).

While students' educational and occupational choices may be broadly patterned according to social demographics, they are not fixed or determined by young people's backgrounds (Hutchinson 2012; Millward et al. 2006). For instance, students' aspirations and decisions can be influenced by their experiences at home and school, exposure to employment through work experiences, encouragement from significant adults or through planned career support activities (Archer et al. 2012; Blenkinsop et al. 2006; Millward et al. 2006; Mujtaba and Reiss 2014).

As Richardson (1993) discusses, equality and diversity issues have not always been sufficiently acknowledged within the careers development literature. Since then, understanding has increased regarding how social identities and inequalities shape students' educational school experiences and

perceptions of access to socially valued career opportunities (Darling-Hammond 2010; Lufkin et al. 2007). Some researchers have argued that education and policy literature does not consider the 'dark side' of career education and its potential for reinforcing and reproducing social inequalities and/or encouraging young people to simply accept and/or cope with the world of work as it is instead of being drivers of social change and reform (e.g. Sultana 2013). Moreover, relatively few studies have investigated students' experiences of and perspectives on careers education (cf. Hutchinson 2011), with several of the high-profile surveys and reports discussed earlier drawing solely on school leaders' and professionals' perceptions of provision (The Gatsby Charitable Foundation 2014; CDI 2015). Hence, in this paper, we examine perceptions of the provision of CIAG held by Year 11 (aged 15/16) students and their parents, with a particular focus on how these experiences and views are shaped by social class, ethnicity and gender. In particular, we ask: (1) What types/sorts of careers support is being provided to Year 11 students in England? (2) Which groups of students are reporting careers advice? and (3) How satisfied are students with the current provision?

Methods

The ASPIRES 2 project is a five-year longitudinal study funded by the UK's Economic and Social Research Council.[1] It follows on from the previous ASPIRES study, which investigated children's science and career aspirations from ages 10 to 14, with the present study extending the tracking of this cohort from 14 to 19 years old. The overall project employs a mixed methods approach in order to generate both a breadth and depth of data. The ASPIRES 2 study involves a quantitative online survey of the cohort and repeat (longitudinal) interviews with a selected subsample of students and their parents. This paper reports on the first phase of the ASPIRES 2 study, which includes a survey and interviews with students aged 15/16 years old (Year 11) collected in Autumn 2014. However, the focus of the current paper is on a subset of quantitative survey data gathered during the first phase of this five-year study. The interview data generated provide contextual information that will be used to frame the quantitative survey results and provide a deeper understanding of the issues at hand. Specifically, the interview data help us to understand what students perceived as careers information when answering the survey questions and to explore possible reasons for the patterned provision reported in this paper.

Survey overview and recruitment

A questionnaire exploring students' aspirations and science attitudes (Archer et al. 2010; Dewitt 2011) was revised, validated and piloted with 532 students before being administered to a national sample of over 14,000 15-year-old students. The piloting process involved adapting items to reflect educational changes for Year 11 students (e.g. science lessons separated by subject) and conducting principal components analyses to ensure that appropriate factor loadings were retained. Following data cleansing (which involved removal of duplicate or incomplete responses, as well as any participants with missing ethnicity and gender data), 13,421 students remained in the sample for analysis. Schools were invited to arrange for one or more mixed attainment classes, science sets or tutor groups of Year 11 pupils (aged 15/16 years) to complete the 30-min online questionnaire in Autumn 2014. Schools were also encouraged to invite additional classes (e.g. a spread of top, middle and bottom sets, or entire cohorts) to participate in order to receive a more comprehensive picture of their students' attitudes towards science and their career aspirations.

Students from 340 schools completed the survey (296 state-maintained schools; 44 independent schools). This sample was roughly proportional to the overall national distribution of schools in England by region, school type, attainment and free school meals (as a measure of socio-economic status). Table 1 presents a summary of these distributions compared to national data.

Of the 13,421 students, 46.7% were boys and 53.3% were girls. Among these students, 1488 (11.1%) attended independent schools and 11,933 (88.9%) attended state schools. Ethnicities included: 75.9% White students, 9.7% South Asian (Indian, Pakistani and/or Bangladeshi heritage), 3.7% Black

Table 1. A comparison of the study sample and national distributions based on school region, type, attainment and free school meal eligibility.

Stratifier	Study sample (%)	National sample (%)
School region		
North-east	4.1	4.4
North-west	12.4	13.5
Yorkshire and The Humber	7.1	8.6
East Midlands	7.1	7.9
West Midlands	12.4	11.7
Eastern	11.2	11.1
London	12.9	16.0
South-east	21.8	16.8
South-west	11.2	10.2
School type		
Grammar	12.1	4.1
Independent	12.9	21.4
Academies	37.9	43.5
Non-Selective	37.1	31.0
School attainment		
Lowest 20%	17.9	21.0
2nd Lowest 20%	19.7	17.0
Middle 20%	17.6	17.1
2nd Highest 20%	15.6	17.6
Highest 20%	26.5	17.9
Data not available	2.6	9.4
Free school meals eligibility		
Lowest 20%	22.9	12.2
2nd Lowest 20%	19.7	17.0
Middle 20%	17.6	17.5
2nd Highest 20%	16.2	16.7
Highest 20%	10.3	11.4
Data not available	13.2	25.1

Notes: Non-selective schools include middle deemed secondary, secondary modern, comprehensive to 16, comprehensive to 18 and schools listed as 'other'. School attainment is indicated by 2013 GCSE performance band data. Free school meals eligibility is indicated by 2012/2013 five-point scale data.

(Black African, Black Caribbean heritage), 1.5% Chinese or East Asian, .9% Middle Eastern, 4.8% mixed or other and 3.4% preferred not to say.

Parental occupation data were gathered on the survey as a broad indicator of social class and students were assigned to the highest social class indicated by occupation (of either parent). Students came from a range of social class backgrounds, with 49.0% of students reporting having a parent in a professional or managerial occupation, 28.1% in a skilled occupation, 11.2% in a semi-skilled or unskilled occupation and 6.1% in some other job. Additionally, 5.7% of students had parents who were homemakers, unemployed or had an unknown occupation. The survey also contained a measure of cultural capital (e.g. Bourdieu 1984) with a scale of −4 through 9, calculated based on responses to items about parental education, approximate number of books in the home and frequency of museum visitation. For simplicity, the scores were grouped into categories, with 5.7% of students indicating very low levels of cultural capital (−4 through −1.5), 32.1% with low levels (−1 to 1), 28.3% medium (1.5–3.5), 17.7% high levels (4–6) and 16.0% very high levels (6.5–9) of cultural capital. For further justification for this scoring methodology, please refer to Archer et al. (2015).

The survey covered topics such as: aspirations (including a focus on science); subject preferences; participation in science activities in and out of school; parental and peer attitudes towards school and science; and post-16 choices. It builds on previous surveys, the development and validation of which have been described elsewhere (e.g. Dewitt et al. 2011), as have the findings from the first three surveys, conducted when the cohort was aged 10/11, 12/13 and 13/14 (anonymised references). Archer et al. 2007 and Dewitt et al. 2011 also provide further detail on the reliability and validity of the survey instrument, as well as the specific items. On the survey, students were also asked questions

about whether they had received any careers education relevant to their aspirations and how satisfied (or not) they were with the careers education they have received.

Participants and recruitment

While this article primarily draws on our quantitative survey data described above, qualitative data from 132 interviews (in this project phase) with 70 15/16-year-old students (30 male, 40 female) and 66 of their parents (16 male, 50 female) will be used to contextualise the results. All these respondents had been previously tracked since students were aged 10/11 (when they had been invited to choose their own pseudonyms). The recruited interview subjects came from a broad range of socio-economic classes and ethnic backgrounds (White British [15 boys and 26 girls], White European [2 boys, 3 girls], British Asian [3 boys, 1 girl], Asian [1 boy, 2 girls] and Black African/Caribbean [3 boys and 3 girls] and Mixed [6 boys, 5 girls]).

Interview participants were originally recruited from 11 schools in England (one in the Midlands, two in the eastern region, two in the south-east, four in London and two in the south). These schools were sampled from the 279 schools that responded to the Phase 1 survey as part of the wider study (see Archer et al. 2012 for details). A sampling frame was developed to represent six target categories of schools ('multiethnic urban/inner city schools', 'working-class suburban', 'predominantly White, middle-class suburban schools' and 'independent single sex') to ensure a range of school contexts and populations. The prospective schools for interviews were purposively sampled using these target categories. Over the course of the project, students were tracked as they moved from primary to secondary school.

Semi-structured interviews lasting approximately 45 minutes were conducted by four of the project team, with the majority of the interviews conducted by the first author. Of the interviewers, three are White middle-class women (with English and Canadian national backgrounds) and one is a British Ph.D. student. The interviews took place in a private room at school or in an alternative private location chosen by the students and their parents (e.g. the home, work office and/or via telephone). Interviewers communicated to students that their responses would not be shared with their teachers or parents and that they would remain anonymous in any reporting of the data (pseudonyms were chosen by the students themselves and are used here when reporting individual quotes). Consent was obtained following the guidelines set out by [King's College London] and the British Educational Research Association. Predetermined interview schedules broadly mirrored the survey in order to explore students' meanings, understandings, experiences and identities in more depth. We also asked students and parents for their reflections and opinions on the careers education they had received in school, aiming to obtain a more qualitative picture of these experiences, building on our survey data. Interviewers probed responses to encourage participants to explain their views and to reflect on the potential sources or influences on their views. Brief field notes were taken after each interview. A complete copy of the survey and/or interview questions is available on request.

All interviews were fully transcribed and thematically organised via NVivo. Initial coding and sorting of the data (on key topic areas, themes and by responses to particular questions) was undertaken by the first author using the NVivo software package, with the second author and the wider project team providing checks on reliability of coded extracts in relation to the specified codes. The lead author searched the coded extracts to identify key themes in relation to students' perceptions of careers education provision, applying the data-driven inductive approach set out by Boyatzis (1998). Constant comparative analysis techniques (Boeije 2002) were also employed to identify similarities and differences between groups, with themes clustered differently based on student background factors. These themes were then tested and refined through successive phases of coding and analysis, iteratively testing out emergent themes across the data-set to establish 'strength' and prevalence (Miles and Huberman 1994). Alongside these survey analyses, we also performed a multiple case study looking at two students' journey through careers education, allowing us to analyse across and within cases to exemplify the quantitative survey analyses, promoting data credibility or 'truth value'. (Baxter and

Jack 2008; Yin 2003). In addition, throughout the paper, we compare our qualitative findings to the quantitative data, aiming to explore the phenomena investigated from multiple perspectives, enhancing data quality (Baxter and Jack 2008; Knafl and Breitmayer 1989).

Analyses

This paper reports on students' responses to the following survey question, 'Have you been provided with any information from school or career services relating to the jobs you are interested in?', with discreet answer options (yes, no and don't know). As all variables are essentially categorical data, descriptive cross-tabulation (chi-squared) analyses were conducted to explore the data-set and find basic relationships. Regarding the cross-tabulations, as the contingency tables produced were larger than 2 × 2, the *source* of any statistical results needed to be investigated. While it is common practice in educational literature to do nothing further, ignoring Beasley and Schumacker's (1995) assertion that 'no chi-square test should stop with the computation of an omnibus chi-square statistic' (80), the analyses presented in this paper move beyond just subjective inspection of the data. We therefore empirically evaluate the statistical contribution of each cell to any statistically significant chi-sq test through performing a residual analysis (identifying specific cells making particularly strong contributions to the relationships described in the tables). While the adjusted residuals could have been interpreted based on the universal cut-off point of two (i.e. any adjusted residual with an absolute value greater than two would be considered significant), as the chi-squared analyses reported in this study involved multiple tests (with some cross-tabulations involving 15 cells), the significance values were Bonferroni corrected appropriately (Beasley and Schumacker 1995; Sharpe 2015). For an overview and justification of this procedure, see García-Pérez and Núñez-Antón (2003). In this paper, Cramer's V (a measure of association independent of sample size and appropriate for larger than 2 × 2 tables) will be presented, and ϕ where appropriate (for 2 × 2 associations). It is important to be clear that in this paper, we do not assume that the set of background factors investigated *fully* explains the variation in careers information reporting, but simply that they may be among the reasons for different patterns of response. We also acknowledge the potential for interaction between the background factors investigated, i.e. the possibility of individual factors working together with, or being mediated by, other background factors (e.g. Collins 1999).

Results

Being mindful of Hutchinson's conceptualisation of CAIG as comprising multiple elements, we begin by outlining the range of careers education experiences that students in our interview sample reported in order to help us to contextualise and understand how students may have interpreted the survey questions. We then present the survey analyses, showing the patterned nature of students' self-reported experiences of careers provision before moving on to discuss what insights the qualitative data provide regarding the factors that might contribute to shaping these patterns. We conclude by pulling together the emergent themes from the qualitative and quantitative data via two illustrative case studies. For ease of interpretation, Table 2 presents a summary of the results sections and the data used in each of the analyses conducted.

What sorts of CIAG provision did students experience?

On the whole, most students reported experiencing one-to-one advice and guidance and/or group careers talks and events. For instance, among the 70 students we interviewed, 41 (59%) reported attending a one-to-one careers session at school. Students reported meetings with both internal (permanent members of teaching staff with no specific careers guidance qualifications) and external advisors. Some students also reported that these sessions involved completing online questionnaires aimed at helping them narrow down their career options.

Table 2. An overview of results sections.

Description of results section	Analyses conducted
What sorts of CIAG provision did students experience?	Qualitative analyses of interview data
Who received careers information?	Chi-square tests for independence using survey data Frequency reports of interview data
What factors contribute to producing these patterns?	Qualitative analyses of interview data
Too little, too late	
The self-referral nature of provision	
Lack of personalisation/relevance	
Too biased/partisan	
Two illustrative cases: Vanessa and Neb	Qualitative analyses of interview data

> There was some careers advice lady I think it was, and she, yeah she, there was a website and then you just like take a test or whatever to see what kind of careers you wanted. (Kelsey, Black African girl, social class 5)

In our interview sample, 30[2] students also mentioned having careers talks, events and fairs at school. These larger group events often involved a year-group session where an individual would come in and speak to the students about a particular job (as both an organised assembly or as part of a timetabled PSHE careers session), or took the form of a careers fairs with booths available for students to speak with professionals.

> We've had a couple of speakers come in about like their career. We had a man that worked in IT and made it quite big like in the IT world. So we've had a couple of them, like people coming in to talk to us in like PSHE lessons or whatever, so it's quite interesting. (Roger, White British boy, social class 3)

Only eight students in our sample reported having a careers lesson as part of timetabled curriculum.

> Well we have PSHE which is like, they help us about our careers, our future and stuff like that … But it's citizenship and basically stuff like that … (Kaka, British Asian boy, social class 2)

A few students seemed either confused or unsure what careers provision they had experienced. For instance, a couple of students mentioned that they had met a 'Connexions' advisor, despite the programme having been shut down in 2010.

As discussed next, on the survey, we used generic terminology to capture a wide range of activities, that is students were asked if they had received 'careers information' of any kind at school. From the qualitative findings, we therefore suggest that students most likely interpreted this question as relating to their experiences of one-to-one careers advice and guidance sessions and as relating to participation in group careers talks and events.

Who received careers information?

The relationships between the student background factors investigated and career information provision are reported in Tables 3 and 4. As detailed in Table 3, less than two-thirds of all students, 3794 (62.5%), reported receiving careers information at secondary school. This is mirrored in the qualitative results, with 59% of Year 11 students reportedly having met with a careers advisor. Our quantitative results also showed that students who reported receiving careers education were significantly more likely to report being happy with the provision, while students who did not report careers education were significantly more likely to be dissatisfied ($x^2(8, n = 13{,}404) = 2122.785$, $p < .001$, Cramer's $V = .281$). A closer look at the cross-tabulation results for the background factors investigated shows several important differences in careers information reporting, which are discussed in turn.

Gender

A chi-square test for independence indicated a significant association between gender and careers information provision, $x^2(2, n = 13{,}415) = 35.886$, $p < .001$, with ϕ indicating a small effect (.052). In other words, the difference observed in students' reporting careers information between males and females was found to be statistically significant, with female students significantly less likely to report

Table 3. Careers information reporting among students by background characteristics.

	Careers information provision			
	Yes	No	Don't know	
	n (%)	*n* (%)	*n* (%)	Total
Characteristic	Adj. Res.	Adj. Res.	Adj. Res.	*N*
Overall Sample	8383 (62.5)	3794 (28.3)	1238 (9.2)	13,415
Gender				
Male	4071 (65.0)	1621 (25.9)	572 (9.1)	6264
	5.60*	−5.79*	−.36	
Female	4312 (60.3)	2173 (30.4)	666 (9.3)	7151
		$x^2(2, n = 13{,}415) = 35.886, p < .001, \phi = .052$		
Ethnicity				
White	6492 (63.8)	2832 (27.8)	854 (8.4)	10,178
	5.49*	−2.08	5.95*	
Black	299 (59.7)	148 (29.5)	54 (10.8)	501
	−1.32	.64	1.22	
Asian	798 (61.1)	382 (29.3)	126 (9.7)	1306
	−1.09	.82	.55	
Chinese	115 (56.1)	58 (28.3)	32 (15.6)	205
	−1.90	.00	3.18*	
Middle Eastern	71 (58.2)	30 (24.6)	21 (17.2)	122
	−.98	−.91	3.06*	
Other/mixed	376 (58.1)	209 (32.3)	62 (9.6)	647
	−2.36	2.33	.32	
Prefer not	232 (50.9)	135 (29.6)	89 (19.5)	456
	−5.21*	.64	7.72*	
		$x^2(12, n = 13{,}415) = 102.490, p < .001$, Cramer's $V = .062$		
Cultural capital				
Very low	407 (52.9)	244 (31.7)	118 (15.3)	769
	−5.64*	2.19	6.04*	
Low	2646 (61.4)	1194 (27.7)	470 (10.9)	4310
	−1.81	−1.02	−2.63	
Medium	2408 (63.4)	1082 (28.5)	311 (8.2)	3801
	1.30	.30	−2.63	
High	1481 (62.2)	713 (29.9)	187 (7.9)	2381
	−.32	1.99	−2.56	
Very high	1441 (66.9)	561 (26.0)	152 (7.1)	2154
	4.61*	−2.52	−3.80*	
		$x^2(8, n = 13{,}415) = 93.893, p < .001$, Cramer's $V = .059$		

Notes: The ARs are only presented for one gender as this cross-tabulation was 2 × 3 (i.e. female ARs are the same absolute values, but reversed).
*Significance at the Bonferroni-corrected alpha level to control for multiple tests.

careers information provision at school (females = 60.3%; males = 65.0%). This finding is also reflected in the interview data with 66% of boys reporting that they met with a careers advisor while only 62% of girls reported similar meetings. The survey results also showed that boys were significantly more likely to report satisfaction with the careers support they had received ($x^2(4, n = 13{,}407) = 42.764$, $p < .001$, $\phi = .056$).

Figure 1 shows a summary of the gender breakdown in terms of students' aspirations, using the quantitative survey results. From Figure 1, we can see that teaching is a female 'heavy' aspiration; however, our careers information data suggest that boys and girls are reporting similar (66%) levels of provision. Even aspirations with proportionately more female students (arts, law and design) had female students reporting less careers advice. These trends are somewhat reflected in the qualitative data, with female arts students reporting having received less careers information. From Figure 1, we can also see that those students aspiring to manual trades are more likely to be male. However, of those girls strongly agreeing they want to pursue a manual trade, only 44.1% reported receiving careers information, compared to 65.5% of their male peers. Similar trends by gender were also noted

Table 4. Careers information reporting among students by background characteristics.

Characteristic	Careers information provision: Yes *n* (%) Adj. Res.	No *n* (%) Adj. Res.	Don't know *n* (%) Adj. Res.	Total *N*
Science option				
Double	3111 (62.2) −.66	1430 (28.6) .60	464 (9.3) .16	5005
Triple	4051 (65.1) 5.84*	1731 (27.8) −1.03	437 (7.0) −8.16*	6219
Applied	417 (60.6) −1.06	189 (27.5) −.48	82 (11.9) 2.51	688
Other (BTEC)	327 (55.5) −3.59*	172 (29.2) .52	90 (15.3) 5.20*	589
Don't Know	476 (52.5) −6.47*	268 (29.6) .89	163 (17.9) 9.44*	163
	x^2 (8, n = 13,408) = 164.728, p < .001, Cramer's V = .078			
Science setting				
Bottom	615 (55.9) −4.76*	320 (29.1) .60	166 (15.1) 7.02*	1101
Middle	3059 (61.5) −1.79	1402 (28.2) −.15	510 (10.3) 3.22*	4971
Top	3479 (63.6) 2.12	1583 (28.9) 1.39	410 (7.5) −5.72*	5472
No Set School	1227 (65.9) 3.25*	486 (26.1) −2.25	149 (8.0) −1.95	1862
	x^2 (6, n = 13,406) = 84.705, p < .001, Cramer's V = .056			
Post-16 plans				
Full-time work	263 (51.8) −5.10*	170 (33.5) 2.65	75 (14.8) 4.41*	508
Part-time work	751 (58.4) −3.17*	402 (31.3) 2.52	132 (10.3) 1.37	1285
Apprenticeship	945 (65.1) 2.14	366 (25.2) −2.75	141 (9.7) .69	1452
A levels	5926 (64.4) 6.56*	2574 (28.0) −1.20	707 (7.7) −9.12*	9207
Don't know	497 (51.9) −7.01*	279 (29.2) .62	181 (18.9) 10.76*	957
	x^2(8, n = 13,409) = 191.01, p < .001, Cramer's V = .084			

*Significance at the Bonferroni-corrected alpha level to control for multiple tests.

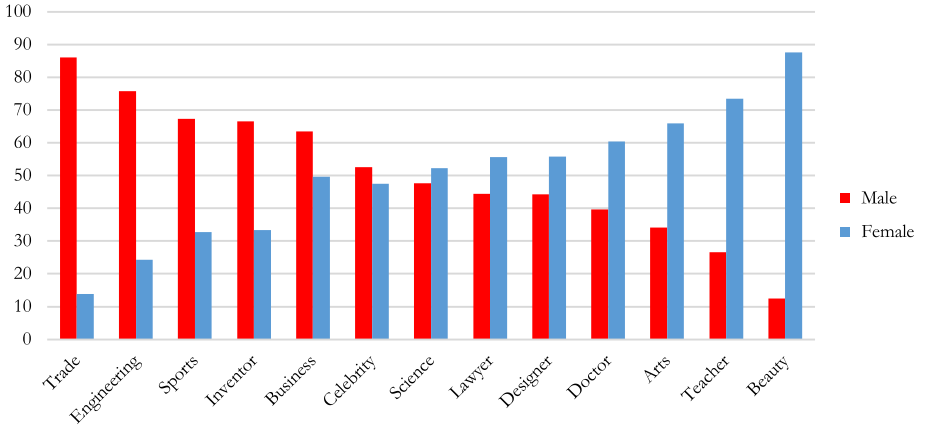

Figure 1. A summary of student aspirations by gender.

for other aspirations (e.g. inventor; 54.9% females, 60.0% males; engineer; females 65%, males 69%; and business, females 61.7%, males, 64.4%).

Ethnicity

As Table 3 shows, the chi-square test for independence indicated a significant association between ethnicity and careers information provision, $x^2(12, n = 13{,}415) = 102.490$, $p < .001$, with Cramer's V indicating a small effect (.062).[3] White students were significantly more likely to report 'yes' (63.8%) and significantly less likely to report that they were unsure whether they had been given careers information at school (8.4%). In contrast, Chinese, East Asian and Middle Eastern students were significantly more likely to report that they were unsure whether careers information had been provided. Drawing from our interview data, 65% of White students reported having met with a careers advisor, while only 33% of Asian students reported similar meetings.

Cultural capital

Survey results showed a statistically significant relationship between careers information reporting and cultural capital, $x^2(8, n = 13{,}415) = 93.893$, $p < .001$, Cramer's $V = .059$ (indicating a small effect for a large table). Post hoc analysis investigating adjusted residuals showed that students from advantaged social backgrounds (with very high levels of cultural capital) reported receiving career education significantly more than expected (cultural capital very high = 66.9%, cultural capital high = 62.2%), while students from less advantaged backgrounds (with very low cultural capital) reported receiving careers education significantly less (52.9%). Looking at the adjusted residuals suggests that the very low cultural capital group makes a particularly strong contribution to the relationship depicted in Table 3. Students in the very low cultural capital group were also significantly more likely to report being dissatisfied with the provision of career support ($x^2(16, n = 13{,}407) = 98.113$, $p < .001$, Cramer's $V = .043$). It is also worth pointing out that students from less advantaged backgrounds reported that they were unsure whether or not they had received career support significantly more than expected, with the reverse being true for students from more advantaged backgrounds. These findings are replicated in our qualitative data; however, as we do not have a direct measure of cultural capital corresponding to our interview participants, we draw on our social class data to support these quantitative results.

Science option and setting

In England, students are enrolled in several science options or tracks: triple, double or more applied routes and are also often set based on attainment: top, middle, bottom and no set. While this paper does not have a particular science focus, we also included science option and setting in these analyses and use these as proxies to investigate the role that being in higher status/higher achieving courses/sets vs. lower might play in terms of careers education provision (see Archer et al. 2012 and Ireson and Hallam 2009 for detailed analyses of how selective practices create and perpetuate social inequalities, producing different patterns of student identity, aspiration and attainment). Survey results showed a statistically significant relationship between careers information reporting and science option ($x^2(8, n = 13{,}408) = 164.728$, $p < .001$, with Cramer's V indicating a small effect (.078) for a large table). As shown in Table 4, triple science students were significantly more likely to report careers information than expected (65.1%). In addition, students reporting 'some other/BTEC' and 'don't know' for their science options were significantly less likely to report careers information (other/BTEC = 55.5%; don't know = 52.5%). A separate chi-square test for independence also indicated a significant association between science set and careers information provision, $x^2(6, n = 13{,}406) = 84.705$, $p < .001$, with Cramer's V (.056) indicating a small effect. From Table 4, it can be seen that bottom set students were significantly less likely to report yes to careers information provision (55.9%) while 'no set' students were significantly more likely (65.9%). Top set students were also significantly less likely to be unsure of whether or not they had been provided with careers information. These results are mirrored in the qualitative analyses, with relatively more (68%) top set students reporting careers information

compared to those in the middle sets (55%). However, our Year 11 data contain a large amount of un-coded setting information so these results should be interpreted with caution.

Post-16 plans

The chi-square results also showed a significant association between post-16 plans and careers information receipt ($x^2(8, n = 13{,}409) = 191.01$, $p < .001$, Cramer's $V = .084$). Survey results indicated that students planning to enrol in A levels were significantly more likely to report receiving careers (64.4%) while students planning to pursue part-time work significantly less likely (58.4%), as indicated in Table 4**.** Students who were planning to enter full-time work or who were unsure of their post-16 plans were also significantly less likely to report receiving careers advice (full-time = 51.8%; don't know = 51.9%).

What factors contribute to producing these patterns?

'Too Little, Too Late'

In the interviews, only 20% of students reported that career support was obligatory ('… she meets with every student, like she has a one-to-one thing with every student every term …', Connie, White British girl, social class 4/5), with some students responding that careers education had only really been offered in Year 11. As one student put it, careers provision had 'mainly *literally* just been pushed on us this year'. (Louise, White British girl, social class 3). This questions current policy documents detailing the statutory requirement for schools to provide careers education for all students. Indeed, more than half of the students reported that they felt the careers advice they had received was 'too late' and they would have preferred to have this support available before Year 11. As several young people explained, they had already made their subject choices by the time careers support was offered ('I think at that point I had already handed in my sheet', Dave, White British boy, social class 4). Other students discussed timing issues relating to exam pressures and university applications.

> … Maybe like if they'd started towards the end of Year 10, I think that might have taken some of the stress out of this year … If we'd known more about [colleges], um, like in the first half of the year and then now like most people have applied and got places … So like before October half term … [when] you start getting stressed because you're trying to do your college applications and then worry about the mocks that go to the colleges. (Louise, White British girl, social class 3)

In addition to showing that less than two-thirds of students were reporting careers support, within our interview sample, only four students mentioned that they had met with a careers advisor more than once. Among the students reporting multiple meetings, positive views were held.

> Oh yeah, she meets with every student, like she has a one-to-one thing with every student every term I think it is to talk to us to see if we've changed our mind about what we want to do. (Connie, White British girl, social class 4/5)

Students talked about previous careers lessons now being replaced with core subjects, which reflects the concerns documented in the literature of schools being over-burdened in an already packed curriculum with a large teaching focus on exam performance.

> Um, yeah she used to take them [careers lessons], but now they've been changed into extra subjects. So say if we had a careers lesson on a Monday it would have been changed to say English or Maths now. (Bethany2, White British girl, social class 3)

Students also talked about their desire for more, earlier and longer term careers education ('Yeah, I think you should have it over time, instead of just one meeting, I think you should meet several times', LemonOnion, White British girl, social class 3). Another student commented '… it was only for 20 min, I think it was just to update my details, I'm not sure. She just like asked me what colleges I've applied to and stuff'. (Celina, White British girl, social class 4). Several students also reported a desire to have more frequent, follow-up appointments.

> I would hope … I would prefer it more often because you're always thinking about … you always have that thing where you say 'Yeah I want to do this'. But then there's always things that you see that make you realise 'Maybe I wouldn't want to do this'. You always change your mind as you grow older. So I'd really want like someone there

> to basically tell me that 'This has this, this has this …' and then a few weeks later or a few months later say 'Oh but I've heard about this as well' – so it can just really give you a good idea. (Kaka, British Asian boy, social class 2)

Differences in access by social class and gender

It has been argued that providing students with career support early on in their education allows them to engage in self- and career exploration before transition-related pressures come into play for graduate students (Porfeli and Lee 2012). From our data, we suggest that a proportion of students seem not to be accessing careers support early enough, and that there is an appetite among young people for more, earlier and more sustained provision.

Among the interview participants, students categorised in the highest social class tended to report more careers information than their peers from more disadvantaged backgrounds and were also more likely to say that this provision was organised by the school. A possible explanatory factor for these results relating to cultural capital could be due to differently resourced schools. Drawing from what we know in the literature about students from more deprived social backgrounds tending to attend under-resourced schools (Hirsch 2007; The Sutton Trust 2009), it is possible that students from more disadvantaged backgrounds attended schools with fewer career support resources. For instance, Tom3 attended an independent school and lived with his parents, who owned a successful family business in Central London. We spoke with Tom3 in a designated careers interview room at his school which had several copies of the 'Careers News' brochure available for students and parents, which included advertisements about careers information throughout the school, including helpful websites and future events (e.g. university interview training and feedback, careers interviews, career exploration test opportunities, non-Oxbridge applications and work shadowing schemes). The back of the questionnaire also had some information relating to new university and summer courses around the world. Every student at Tom3's school completes a career exploration test and discusses the results with a careers advisor. When we asked Tom3 how he found out information relating to his law and finance aspirations, he mentioned career talks at school (given by practising Lawyers and Bankers) and the online resources his designated advisor had directed him to on several different occasions. He was one of few students who responded that he had spoken to careers advisors when deciding on which A level subjects to take. When asked whose opinion matters most in making these decisions, he responded, 'I kind of listen to the careers advisor, cos it's her job, she's probably quite good at it. And you kind of listen to yourself, like what your enjoyments are … and then teachers. I'd say I listen to my parents quite far behind on that one, because like they're not the ones studying …'.

In contrast, Jake attended a non-selective state school in a deprived London borough. He had not met with a careers advisor when we spoke with him; however, he mentioned that there was an external advisor who comes into the school, but that provision was limited.

> Um, there is like, because there's one careers advisor like, but then he does it for every class. Like he picks like every week he'll pick like ten students from every class, so then because our class is one of the last ones, so he hasn't come to our class yet … Then like he'll give them a meeting like during the school day one by one. Then he'll talk to them about what they want to do in the future … What's good for them. Then he'll look at the results in secondary school thinking then he will like advise you on the courses you should do. (Jake, Black African boy, social class 4)

Several students mentioned being 'picked' by the school advisor for one-to-one meetings. Jake was among these students and as reported above, he mentioned that the advisor had not yet made it to his class. Another student, Lucy (White British girl, social class 4) had not met with a careers advisor and said, 'I am aware of some students who have [met with an advisor], but not all of us have, it seems like a select thing'. She continued to explain that they had completed an exercise as part of their Personal Development coursework, but felt that this was 'more about writing down what you *have* to write down rather than actually discovering things'.

Moreover, our analyses suggest that issues relating to the timing of provision seemed to be voiced more by girls compared to boys, with 14 girls mentioning that the provision was provided 'too late', compared to only 7 boys.

> And it was basically just discussing my grades that I've got at the minute and what I'd do when I went to college, but I already knew what I was doing anyway before I had that interview, so it wasn't that helpful to me. (Celina2, White British girl, social class 3)

> She came late, so she never got to work with everyone. So it was a bit like 'What's the point?' – she came like literally just before revision started so no one could really be in school because most people were at home revising. And then when we were in school she would just kind of grab you for like 45 minutes, but then not everyone … I never got a chance to speak to her. (Vanessa, Black African girl, social class 5)

In other words, we suggest that the tendency for careers provision to be 'too little, too late' was a factor that amplified patterns by gender and social class.

The self-referral nature of provision

Findings from our interview data indicate that the majority of careers support is provided via a 'self-referral' system, in which the onus of responsibility is placed on students themselves to have to choose to access provision.

> I think you just sort of arrange it like with the school or something like that and I think it's specific days when the careers advisor comes into school and you have an appointment with him as well. (Colin, White Asian boy, social class 2/3)

Our findings suggest that this model disadvantages those who, arguably, might benefit most. For instance, within our interview sample, even motivated students reported anxieties in navigating this self-referral support:

> Um, we have a careers advisor, but like to try and find her during break times is so difficult because she's either in that room over there or she's in the [other wing] and then it's like really difficult because they shut. Then you're not allowed anywhere in school apart from the hub during break time or lunchtime, so trying to get through one set of doors to go find her and then finally you're in through, not having her there and having to go back to go a different way and then break time's over and you're just like well that was … So I kind of gave up on that one. (Charlie, White British girl, social class 2/3)

> … I also think they should try and publicise themselves a bit more, because I think it's an incredibly underused department really, the careers advice department, and I think they've got so many resources down there, but people are afraid to just kind of pop in … I don't use it nearly as much as I should. (Buddy, White British boy, social class 1)

Our interview data also suggest that the self-referral nature of the provision may contribute particularly to gender trends. For instance, among our interview participants, proportionately more girls reported that the provision was optional (11 girls, while only 6 boys) and boys were more likely to report having met with an external careers advisor (7 boys vs. 2 girls). Moreover, our data suggest that girls may be doing more 'self-led research' around their careers choices outside of school and through discussions with their families, rather than accessing school provision. For instance, we found that, compared with boys, girls more often reported that they discussed their career interests and options with their parents (a finding that was also corroborated by the parents we interviewed).

The self-referral nature of the provision was also discussed among Black students in our sample and may also help to explain the lower levels of access to careers provision reported among these students. This self-referral model expects students who lack confidence to approach teachers and identify that they need support and also assumes responsibility on the students to recognise that they need the support.

> … Yeah, or sometimes you just get given it if you don't feel confident with what you're doing in the future. You just tell the teacher and then they'll just book you an appointment. (Gemma, Seychelloise girl, social class 3)

Drawing from both what we know in the literature about student confidence levels (e.g. Skelton, Francis, and Read 2010) and from our own data, it is possible that girls and some minority ethnic students are not displaying the confidence necessary to seek the career support they need at school.

However, as discussed next, it could also be that these students are not self-referring because they feel the provision on offer is not meeting their needs.

Lack of personalisation/relevance

Students also voiced concern that the support was not personalised and hence lacked relevance for them personally. For instance, Finch described being aware of his school's desire to hold a range of careers talks, but he felt these also contained the challenge of specificity, i.e. how to make these talks relevant for all students.

> We've had a lot of careers talks. People come out of lessons and they have these talks, but I don't think they've actually helped me at all. I wouldn't expect them to I don't think, because it is quite a specialist thing, so I wouldn't expect them to get someone in just for that, but yeah they are quite concerned about everyone getting careers talks. (Finch, White British boy with Indian and Italian heritage, social class 2/3)

Other students mentioned the unhelpful nature of these large group sessions, and expressed a desire for more tailored, one-to-one support.

> If it was like kind of a smaller group, like kind of a one on one meeting. Cos the way we did it was like everyone in the hall, and sat on tables and stuff, and it was just noisy, you couldn't really hear anything. (Gemma, Seychelloise girl, social class 3)

The desire for more personalised support also extended to individual sessions with the school careers advisors. For example, when asked if she'd met with a careers advisor or had career talks, Carol responded: '… they've been very vague and not very helpful … They just gave us a website and you had to just Google like what job you want to do…It's not like oh sit down one-to-one. Like "what do you think you'll do in the future?"' (Carol, White European girl, social class 3).

Analysis of our qualitative data suggests that perceived relevance of the provision might contribute to gendered patterns, as proportionately more female students reported that they found meetings with careers advisors (8 girls verses 4 boys) and career talks (9 girls, 5 boys) unhelpful. For example, Lucy (White British girl, social class 4) commented that her career support meeting '… could have definitely been a bit more personal than just tick boxes'. In contrast, 81% of boys who reported having met with a careers advisor expressed that they felt the meeting was useful. Our interview data also showed that girls were reporting relevance issues more frequently than boys (14 girls, 8 boys), with girls voicing concerns that the focus of the provision was targeted solely at post-16 subject choices.

> … we've been to a careers convention which just shows the different sixth forms and universities and then some local businesses. But nothing really in depth … just them coming and talking about the sixth form, not like doctors or dentists or vets coming in and … you know having a taster day at the school … I don't find that useful … it's just sixth forms and universities and there's not a lot about career people like doctors or … (Mienie, Asian girl, social class 2)

Too biased/partisan

Over half of the students in our qualitative sample who reported having met with a careers advisor felt that the support was overly focused on A level choices:

> I wouldn't say we've had much on careers, it's more choices for sixth form …. So cos we've had like sixth form open evening and parents evening where they spoke … whether you're able to do it or not … and yeah it's been useful. (Poppy, White British girl, social class 1).

Some students found this helpful ('… It was good because he showed me that … because I used to think that you had to get like quite specific A Levels in order to get a uni course for a job …' Tom4, British Asian boy, social class unknown). However, almost half of the students who reported attending one of these events reported negative experiences, with the majority of complaints being that these events were more often targeted towards subject choices and sixth form college entries. For example, as one student explained:

> At our school we have a careers man and I spoke to him once, and he just asked me 'Oh what would you like to do at A Levels?' and then I told my A Levels. And then he said 'Which university would you like to go to?'… I think maybe … even in the school maybe just once a week having like teachers or cooks or nurses coming

> and talking about their experience of how to become a nurse and what interests them, and whether you are … maybe you might be interested in nursing and how you can become one, and which is the path … because a lot of people, like even myself, don't really know how to take that path, and we haven't been told as well how to take that … Maybe [it would be good to do these sessions in] groups because then you hear other people's ideas, and that might you know start one of your ideas, and you might even get more ideas of how they are thinking and maybe you might want to go into their path. (Mienie, Asian girl, social class 2)

> She could have like talked about what I wanted to be I guess. I mean she just talked about what A Levels I want to do. And then that was it, she just updated my details and that was it. So I think there's going to be like a second part of it hopefully. (Celina, White British girl, social class 4, who had yet to receive this 'second part' when we followed-up with her before Year 13.)

In other words, it seems that some students were put off when they did not think that they would get impartial advice and guidance. In particular, concerns were expressed that schools or colleges would be 'biased' and would predominantly just want to channel students into their own routes (e.g. A levels), rather than supporting the student to explore other options. Students also reported an awareness of the 'push' that schools are experiencing regarding A level entries. For example, when asked if they had any career talks, Louise (White British girl, social class 3) responded 'We had … mmm, not really. We've only had the colleges come in, because that's where there's a massive push at the moment …. to get us into college or apprenticeships'. Students who were interested in potentially pursuing non-A level routes expressed particular frustration. For instance, one student who planned on going to catering school to become a chef lamented:

> They went on a lot about going to sixth form and then going on, so I'd have to get my A Levels … or doing an apprenticeship I'd do it, and I'd still learn the skills and get paid. But I wasn't really looking at an apprenticeship to be honest, cos um … for the section that I wanted in being a chef, an apprenticeship only teach a certain amount of skills and then they stop there – you can't really improve from that. (Cheeky Monkey, White British boy, social class 3)

We suggest that concerns about partiality may have impacted particularly on social class and school set patterns, given that working-class and lower set students are more likely than their peers to follow non-A level routes.

Prefer to use other sources of information

The qualitative data suggested that girls and students from South Asian communities may be more likely to discuss their career aspirations and plans with family, specifically their parents, rather than with careers advisors. For example, Isabel (Sri Lankan girl, social class 1) has repeatedly communicated to us that she discusses her career interests in medicine and her subject choices (GCSEs, A levels, etc.) with her parents. She also reported conducting a lot of 'self-led research' on the Internet as well. She mentioned that there was a careers advisor at her school, but preferred talking to her father, who works as an anaesthetist, about her medical aspirations.

> Um, well in my school we have a careers advisor, so I could go to her. Um, but I could just go to my dad and if he doesn't know he can just ask around. Um, if not I can look on the internet, so the other day I actually looked to see what kind of jobs there are in paediatrics and surgery and what you can specialise in, so … (Isabel, Sri Lankan girl, social class 1)

Colin, also South Asian, similarly mentioned that he mostly speaks to his mother about his aspirations to pursue sports medicine. In addition, he highlights the self-referral nature of the provision, which could be another explanatory factor among Asian students.

> I think you just sort of arrange it like with the school or something like that and I think it's specific days when the careers advisor comes into school and you have an appointment with him as well … I think only a couple of people had meetings with the careers advisor and that, not everyone. Like if there was more like … there's more service like available to people here. (Colin, Sri Lankan boy, social class 3)

Two illustrative cases: Vanessa and Neb

Drawing on our survey and interview data, the findings reported in this paper contribute to a picture of the student at the age of 15 most likely to report careers education (in terms of the background

variables investigated) being: a White boy, with very high levels of cultural capital, planning to study A levels or enter full-time education. We now conclude our results section by presenting two illustrative case studies to 'embody' the findings presented so far, bringing together the intersection of the contributory structural factors investigated.

Vanessa is a Black British girl (social class 3) who lives with her parents. Her father works as a school science technician; mother as a carer in an economically deprived borough of London. She attends a non-selective state school in a region identified with a high deprivation factor. Vanessa has aspired for a career in forensic science since we first met her at the age of 10 and is strongly supported by her father to go to university. However, Vanessa communicates an anticipatory feeling that economic barriers may prevent her from going to university (e.g. 'if I don't have the money to pay for it in the future then that would probably stop me from going'). In Year 11, Vanessa was enrolled in middle sets and described herself as a 'middling' student. She recounted that her school provided differentiated careers resources in Year 9, depending on which set a student was in: 'Yeah, it depends on … I think it's a booklet and it depends on how your levels [grades] are. If your levels are really low, you get the lowest booklet, if you're middle, like alright, then you get another booklet that's a bit higher with more opportunities. And if you're exceeding, like really, really … then you get a booklet of like loads and loads of opportunities'. Vanessa went on to explain that she expected to be given the 'middle' booklet, reinforcing her 'middling' views presented above.

In Year 9, Vanessa received some whole class careers talks at school, but complained that it was hard to focus in these because students 'get distracted and they're not listening'. In her Year 11 interview, Vanessa reported that she had not been provided with careers information or met with an advisor but mentioned that she anticipated that she will get a meeting with a careers advisor in sixth form. She mentions:

> We had one [an advisor in Year 11], but she came late, so she never got to work with everyone. So it was a bit like 'What's the point?' – she came like literally just before revision started so no one could really be in school because most people were at home revising. And then when we were in school she would just kind of grab you for like 45 minutes, but then not everyone … I never got a chance to speak to her … It was like … I don't know, it's maybe about 15, 20 students out of 240 of us that actually got to talk to her.

Throughout interviews, Vanessa has mentioned that she conducts a lot of independent research relating to her job aspiration as well as discussing her aspirations with her father.

We suggest that Vanessa exemplifies a confluence of factors, which disadvantages her with respect to receiving quality careers education and support. As a Black, working-class girl attending an under-resourced urban school, she suffers from careers provision being 'too little, too late' and not sufficiently personalised/relevant to her own situation. Consequently, she chooses to access other sources of information and support.

In contrast, Neb (White British, Jewish boy, social class 1) aspires to be a professor in astrophysics and lives with his parents in one of the wealthiest areas of Central London. His father works as a partner at a Law firm and his mother is a social worker. Neb is in the top set at an independent school in Central London. His school has a designated careers department, with a careers library of resources on universities and jobs, several qualified advisors and a careers secretary. In Year 9, his class had an introductory session to the careers centre as well as a one-to-one meeting with an advisor to explore career opportunities. When needing advice about his future, Neb attends one of the drop-in sessions organised by the school on Thursdays or Fridays in the careers department. In Year 11, he had a one-to-one meeting with an advisor in which they sat down and discussed the results of his career exploration test in detail and his career aspirations/post-16 plans. He also met with the advisor on several occasions when he was considering applying to American universities. The advisor organised for him to do his mock exams required for the particular American university programmes. He also mentioned, in both years, that there are several careers events throughout the year where professionals come into the school and that he attended several of those, which were targeted to his aspiration. When asked if he has found the support helpful, he replied, 'I think it's actually really good at school … Like they've got like a whole careers like library of stuff'.

We interpret Neb's experiences of careers provision as being very different to Vanessa's, in that he enjoys earlier access to a wider and richer range of careers provision. He finds the combination of generic and personalised forms of support to be useful and appropriate to his own (academic) aspirations and chooses to self-refer to access further provision.

Discussion

The findings reported here contribute to literature in this area by providing insight into current career education provision in England, from the student perspective. We first set out to understand what students understood by our survey question and aimed to gain insight into what type of support was being provided. Similar to the findings of Hutchinson (2013), who surveyed careers professionals in a range of schools across the UK, the results reported here document a variety of different forms of administration of career-related learning in England; delivery of a career education element of the curriculum (e.g. personal, social and health education); career talks and events; subject taster sessions; and one-to-one sessions with a careers advisor provided as an outside element of the curriculum. The variety of support activities reported possibly shows one of the impacts of shifting responsibility solely onto schools; this potentially leads to varied provision nationally. These findings from the students' perspectives also provide a clearer picture of the types of support being offered, building on research conducted with school leadership and career professionals (CDI 2015; Hutchinson 2013).

Provision does not meet statutory requirements

Research and discourse in the area has found a number of shortcomings with the current provision in England following the creation of the new careers body (Acquah, Limmer, and Malpass 2016; CDI 2015; Hooley, Watts, and Andrews 2015). The findings reported here provide reason for further concern showing that less than two-thirds of Year 11 students are reporting receiving careers education, despite the statutory requirement for schools to provide impartial CIAG at the time of data collection (Autumn 2014). Results also indicated that only 20% of our interview sample reported that the support was obligatory (or that it was intended to be provided to *every* student in their school). As mentioned previously, these results question current policy documents detailing the statutory requirement of schools to provide support for *all* students (Department for Education 2014). Comparing these results to one of the few studies investigating CIAG provision from the student perspective provides further support for this worrying lack of provision. In a longitudinal study of young people in England, Hutchinson et al. (2011) found that only 40% of students had met with a careers advisor for a one-to-one interview compared to virtually all school leavers pre-Connexions. Comparing these findings to similar surveys in Scotland further highlights the problem as virtually all school leavers in Scotland had received individualised sessions (Watts 2010). Our findings are also in line with previous research documenting school leaders' and career professionals' perspectives of careers support showing that young people receive very little practical information and guidance relating to occupational pathways (CDI 2015; Fuller and Unwin 2014). For example, findings from CDI (2015) (based on 319 responses, representing 10% of all secondary schools in England) showed that approximately two-thirds of schools included career education in the curriculum in both Years 10 and 11.

These findings are particularly worrying considering the wide array of positive impacts of careers education discussed earlier, such as promoting positive attitudes towards school learning and enhanced self-awareness (Harkins 2001; Palladino Schultheiss 2005). While it could be argued that there is no cause for concern and that the results presented here may simply be demonstrating that students had not yet received this support at the time of data collection, evidence from surveys of careers professionals and school leadership suggests otherwise. Through surveying careers professionals in a range of schools across the UK, Hutchinson (2013) found that most careers related learning takes place during Key stage 4 (Year 11), with very little happening earlier, during Key stage 3. The CDI 2015 survey similarly documented that provision peaks in Year 11, with 60% of school leadership reporting

that *all* Year 11 pupils received advice (Y8 (13%), Y9 (27%), Y10 (32%), Y12 (37%), Y13 (35%)). Our upcoming data collection of the Year 13 cohort will allow us to provide further confirmation of this. Moreover, our findings indicate that a large number of 15/16-year-old students in our sample had not received careers support at the time of data collection, suggesting that the majority of careers education is coming very late in compulsory schooling and the insight gained from our interviews evidences a desire from students for earlier support.

Our findings show that there is a demand from students for more, better and earlier careers support. Results of the chi-squared tests for independence showed that students who reported receiving careers education were significantly more likely to report being happy with the provision. Together with our results relating to the number of students not reporting careers support, we argue that there is a real need for schools and policy-makers to focus on improving current provision. Beyond frequency of provision, a common complaint among our interview sample was that the provision was not impartial and was focused towards streaming students into A level subject routes. Our quantitative results also showed that students planning to enter work, and those who did not know what they want to do post-16, arguably two groups that need this support most, were significantly less likely to report having careers education than their peers planning to stay in full-time education. An Ofsted survey conducted in 2013 similarly found that beyond CIAG often not being well coordinated, vocational training and apprenticeships were rarely promoted effectively. Additionally, schools with sixth forms have been found to, at times, lack impartiality by encouraging young people to stay at the sixth form post-16, without informing them of other possible routes (Blenkinsop et al. 2006; Foskett, Dyke, and Maringe 2008). These concerns have also been echoed by policy-makers, with the previous Chair of the Education Select Committee, Graham Stuart, raising concern about schools who,

> put their own interests ahead of that of their pupils, restrict access to other education providers and make the filling of their sixth form places more of a priority than their statutory duty to provide independent and impartial advice and guidance for pupils.

While a variety of factors may be contributing to this impartiality, including a lack of staff expertise or ignorance (i.e. schools not communicating with local partnerships, other schools, or local authorities to understand locally available pathways and support students in a full range of options), it may also be operating through other mechanisms. Some schools for example are being financially incentivised to channel students through different routes because the 'per pupil school funding system favours encouraging pupils down the A level route as it is a source of funding for the school, if it has a Sixth Form' (British Chamber of Commerce 2016). This impartiality may also be driven by the expansion of popular schools or creation of new ones which then generates demand to fill a surplus of places at sixth form. We thus recommend that teachers and careers professionals strive to communicate the options and benefits of routes beyond university, including vocational options and apprenticeships (Vinson 2014).

While approximately 9% of students in the present study reported uncertainty as to whether or not they had received careers information or advice, other research suggests that this uncertainty also extends to school administration and career professionals (CDI 2015; The Gatsby Charitable Foundation 2014; Hutchinson 2013). In a recent survey of 361 school leaders from English schools conducted by the Gatsby Foundation, while most leaders were aware of the expectations placed on them to provide independent and impartial CIAG (84%), many did not know the nature of the provision, or if any was even being offered at their school. Hutchinson (2013) similarly reported that a small, but significant number of respondents (careers professionals) reported that they did not know whether career-related learning took place at their school. As Hutchinson discusses, it is possible that students might identify highly visible forms of career support (like fairs or events) more often, as integrated CIAG might not feel to them like a discreet aspect of their learning and support. As discussed earlier, a number of students approached their subject teachers for advice and most of the self-referred one-to-one sessions that were documented were with external providers. Similar survey evidence (Hutchinson and Bentley 2011) suggests that young people are more likely to ask their subject teacher

for careers advice than they would their form teacher, a careers teacher or a Connexions adviser. It is therefore possible that more careers information is happening through informal classroom learning than is currently being captured here.

While subject teachers can be well placed to offer advice on what studying a subject at a higher level is like, and to offer their experiences of related employment (Hutchinson 2012), they may not feel that they have the knowledge or experience to do this well, and may be reluctant to take on any additional responsibilities (Andrews 2008; Ofsted 2010). A survey conducted by the Association of Colleges (2012) found that 44% of school teachers admit to giving a student bad or uninformed advice in the past, and that 82% of school teachers feel they have insufficient knowledge to advise pupils on career options. In a case study design, Hutchinson 2013 writes about the varying backgrounds of career co-ordinators with few having specific careers qualifications and that most of their training had been 'on the job' or through the former Connexions programme. From CDI (2015), 66% of respondents reported that the person providing impartial career guidance held a recognised professional qualification in career guidance, but in only 57% of cases was the qualification at QCF Level 6 or above the standard for providing face-to-face support now recommended in the DfE's Statutory Guidance. We therefore argue that attention needs to be paid to clarifying the role of teachers within the CIAG provision framework in English schools. Suggestions for how to achieve this might be learned from Scotland, whose efforts have been made to clarify the role of teachers in the provision of careers support (Education Scotland 2015).

The patterned nature of careers support in England

Our data also draw attention to how certain groups are marginalised within the current careers education provision in England. Gender-based inequalities were found relating to careers information reporting among our sample data with boys reporting significantly more support than girls. Our survey results also indicated that boys were significantly more satisfied with the advice that they had received. Together with our interview analyses reported above (with girls reporting a desire for more intensive, earlier support), these findings highlight the potential need to rethink the support currently on offer for girls. These findings are particularly worrying considering that survey results also showed notable differences in CIAG reporting among students with different aspirations, for example, with boys aspiring for manual trades reported more advice than their female peers with similar aspirations. Even for aspirations that were held by proportionately more female students, we found that female students reported receiving less careers advice. Considering recent concerns in literature and practice relating to participation issues in traditionally 'male' occupations, these findings are concerning. For example, in England, fewer female students study Physics and Computing subjects at A level (upper-secondary) and 85% of students enrolled in engineering degrees are male (Hutchinson 2014; WISE 2012). The gendered pattern of participation in STEM subjects also extends to other countries across Europe, suggesting that focusing efforts on reducing this occupational segregation would be beneficial to industry (EU Skills Panorama 2012; House of Commons 2014; VDI 2010). Further, as female participation in a broader range of traditionally 'male', particularly STEM, occupations and careers would open up opportunities in areas where pay and progression are better than in those occupations currently dominated by women (Hutchinson 2014), ensuring that CIAG provision reaches female students is essential.

Ensuring that CIAG reaches female students in Year 11 is also essential considering that school transitions are particularly challenging for girls' self-perceptions (Symonds, Galton, and Hargreaves 2014). Teachers and careers professionals must also be aware of potential gendered stereotypes relating to perceptions of ability as they play a role in fostering students' academic self-concepts, which can mediate career choice (e.g. Archer and Francis 2007; Carlone 2003; Upadyaya and Eccles 2014). These judgements also extend to the home environment with research suggesting that gender preferences in parental aspirations emerge in late secondary school years with parents having higher educational expectations for boys than girls as well as gendered aspiration preferences (Bask et al. 2014). In this,

beyond ensuring that provision reaches male and female students equally, CIAG should additionally focus on supporting students not to make the stereotypical self-evaluations and to work against the gendered stereotypes that might be coming from teachers and parents, which together can act as potential barriers to females in traditionally 'male' occupations and to men entering traditionally female lines of work (e.g. language and arts) (Parker et al. 2014).

Beyond the school environment, family social background is another important predictor of outcomes for students including educational expectations, which have been shown to be associated with later academic attainment (Bask et al. 2014). The literature discussed above relating to gendered expectations also applies to students from different social backgrounds. Research has shown that teachers rate the achievements of students from lower social backgrounds to be lower than those of more privileged students (Flores 2007; Jussim and Harber 2005; Kriesi and Buchmann 2014). As the results reported in the present paper showed that students from less advantaged social backgrounds (with lower levels of cultural capital) received significantly less CIAG and reported being less satisfied, we suggest that these classed expectations discussed might also extend to career educators, who may as a result invest more time and resources into students from more privileged backgrounds. Contributing further to these patterns, students from socially disadvantaged backgrounds are also more likely to attend schools that are less well-resourced and/or which have very stretched resources (e.g. Caldas and Bankston 1997; Rumberger and Palardy 2005). A deeper look into our qualitative data also showed that students from disadvantaged backgrounds seemed to be less likely to use a self-referral model, with several students from deprived backgrounds reporting difficulty in accessing services.

Our results also showed patterned careers reporting relating to ethnicity with White students being significantly more likely than minority ethnic students to report receiving careers education. In the interviews, most students indicated that they wanted and required more support to navigate the careers education system – this was especially the case for those from Black and South Asian backgrounds, who were more likely to report feeling 'scared' or 'unsure'. A deeper look into our qualitative data showed that minority ethnic students often preferred to speak with their parents about school subject choice and career decisions. This issue of provision among marginalised students seems to be not just a problem in secondary school education. A study with 1740 medical students in England found that minority ethnic students were less likely than other UK respondents to use structured career provision (e.g. speaking with senior consultants) and were more likely to discuss career decisions with family and friends (NICEC 2003). The impact of such findings is further conflated considering that minority ethnic students might also have less access to these informal routes, or possess less confidence to use them appropriately. As with students from more deprived backgrounds, research suggests that for minority ethnic students, it might be important for career support to examine students' perceptions of the amount of time necessary to complete degrees, particularly STEM degrees compared to other types of careers, and the potential limiting role of financial background (e.g. Packard and Babineau 2009). If these factors are important for these groups of students, then we need to ensure that careers education programmes are providing this kind of information and that it is accurate and up to date. We also need to acknowledge the potential for institutional racism and the present results raise questions around what might be putting certain groups of students off and why they view the provision as predominantly a 'White careers service'. Further efforts to understand the unique career education requirements of students from different ethnicity minorities are also needed, as these students by no means make up a single homogenous group.

We also discussed two exemplar cases earlier to show the intersection of the above pattern of results. Through presenting the CIAG experiences of Vanessa and Neb, our results show a complex picture of the interplay between several background factors, which contribute to a pattern of CIAG reporting that needs to be addressed. We therefore suggest that an intersectional approach to CIAG would be beneficial to help further understand the finding that access, provision and uptake are structured/shaped by intersecting identities and inequalities (e.g. ethnicity, class and gender). We now move on to discuss several recommendations for policy and practice that take these contributory intersections into account.

Recommendations for policy and practice

Disappointment has been voiced by many in terms of the pace of progress in implementing the recommendations from the numerous high-profile reports discussed at the outset of this paper, with schools crying out for more support in their duties relating to CIAG (Hutchinson 2013). Our findings further contribute to the recent debates and suggest that the current provision for English secondary schools is mostly provided in the form of one-to-one support and that this provision is not just patchy but is patterned, such that students most in need are less likely to receive CIAG by the age of 15/16. Through considering the results presented in this paper and drawing from the wider literature in this area, we provide several recommendations to policy-makers and practitioners in the hopes of strengthening equity efforts within careers education.

Careers education has been a topic of policy concern around the globe, with even countries considered to have more advanced and developed career education efforts receiving criticism. For example, a recent review of career education policies and provisions across Canada found a disjoined and fragmented approach, with some provinces enforcing mandatory careers education courses while others leave guidelines and outcomes to school boards and educators (with educators often providing CIAG without having appropriate expertise, e.g. Connelly, Blair, and Ko 2013). As a result, the recent focus in Canada has been to adopt an integrated careers education approach, which incorporates concepts and planning services into academic course content, helping relieve the strains on guidance resources, ensuring the information is relevant to students' subject matter, and fostering students' access to career planning services (Connelly, Blair, and Ko 2013). Through evaluating a series of 25 integrated programmes, Welde et al. (2016) documented significant improvements by allowing teachers to gain confidence and competence to incorporate careers education into their mainstream subjects. The embedded models of careers education (in which curriculum learning is systematically linked to a wide range of real-life careers and applications) have also been piloted in the US and been found to be effective in raising student engagement and attainment (see a randomised control trial of the CareerStart programme, Woolley et al. 2013). We suggest that embedded models of careers education have the advantage of reaching *all* students but successful implementation will require appropriate policy levers and practical support for teachers (Archer and Tomei 2014) as well as a shift away from a performance-led identity in schools towards a career support identity (Hutchinson 2013).

Addressing the issues relating to the quality and quantity of CIAG provision discussed throughout this paper necessitates some new thinking, particularly with respect to the role of teachers. As discussed at the outset of the paper, since the election of the Coalition Government Archer et al. (2010), England has moved from a partnership model, where much provision was delivered by an external service, to an internal model in which schools have sole responsibility for delivery (Hooley, Watts, and Andrews 2015). Our results also indicate that teachers are often being required to provide CIAG to students; however, to date, the role of teachers in delivering careers and employability learning has been poorly defined in England and does not involve the same level of recognition afforded in other countries, where the role is viewed as a good stepping-stone to senior leadership with its whole-school focus and extensive liaison activities with external partners (Harris 1992; Hooley, Watts, and Andrews 2015). While teachers can play a variety of roles in the provision of CIAG, including pastoral support, within-subject teaching and promoting general careers awareness, we must not place the responsibility solely on to teachers (Hooley, Watts, and Andrews 2015). Career guidance professionals also have an important role to play and effective inter-professional working is essential. In addition, providing opportunities for young people to engage with employers and working people as well as with representatives of post-secondary learning is crucially important (Mann, Lopez, and Stanley 2010). Hooley, Watts, and Andrews (2015) argues that in order for the commitment and efforts of employers and other stakeholders to have the greatest impact, schools and teachers need to be suitably trained and supported. This will ensure that the insights that employers and others can offer will be well integrated into the career building of young people. Beyond making the role of individual teachers within schools more explicit, we feel there is scope for the UK to set out the aims of careers education more clearly.

The present findings suggest that urgent attention needs to be given to acknowledging and redressing inequalities in terms of who is, and who is not, participating in careers education, for which we see policy-makers and educators as jointly accountable (Hamilton, Malin, and Hackman 2015). The analyses presented in this paper suggest that careers education is failing to reach those most in need, notably girls, minority ethnic, working-class, low-attaining students and those who plan to leave full-time education post-16. We suggest that along with monitoring and ensuring that the CIAG provision reaches *all* students, school leaders could usefully develop equity agendas through performing equity audits looking at current access and availability of opportunities, encouraging teachers to actively adopt and advance an equity agenda and then together begin to address the processes that have reinforced the inequitable practices in schools that are currently seen (Hamilton, Malin, and Hackman 2015). Policy-makers in England might look to Scotland and the US for guidance, where these equity goals are explicitly written into the quality standards for careers provision (Education Scotland 2015; No Child Left Behind Act 2001).

Throughout this paper, we have also discussed several potential impacts/limitations of the self-referral CIAG model currently adopted in the majority of schools. While we appreciate the potential value of self-selecting/self-initiated resources, our data suggest that this structure may be contributing to the fragmented system of career provision in English secondary schools. Organisations should therefore take particular care with respect to schemes and opportunities that are offered on an 'opt in' and/or 'selective' basis to ensure that these do not contribute to the further reinforcement of patterns of unequal participation in careers education and work experience. This will have particular implications for various employer and related initiatives, often targeted at smaller or selected groups of students, or are offered just to those young people (or schools) who self-identify and/or express an interest. Instead of removing this element of current provision, we suggest that these self-referral resources be developed alongside more formal provision (i.e. an embedded careers approach or web-based support materials that students can explore as a follow-up to any structured support provided at school). Building careers education more firmly into the role of teachers may also help here; however, this would require formal training initiatives to improve careers support skills among pre-service and practising teachers as discussed above. Through the recent debate about careers and employability discussed at the outset of this paper, the focus has mainly been around career guidance professionals and employer engagement with teachers' roles often being overlooked (Hooley, Watts, and Andrews 2015). Our results showed that teachers were the main providers, and as such, we agree with Hooley and colleagues who state that teachers should be at the heart of a long-term approach to improving careers support. This is especially the case as schools have primary responsibility to provide the support and considering the unique challenges of an 'overloaded curriculum'.

Limitations and future research

While the research presented here offers several contributions to knowledge, a number of limitations need to be addressed. For example, the results presented relating to our survey data do not escape the limitations of similar self-report measures (e.g. response bias, control of the sample and/or spurious responses). However, through conducting repeated in-depth interviews alongside the survey, our work covers both the breadth and depth of participants' perspectives, thus reducing any of the above threats to validity. Remembering that students were asked, 'Have you been provided with any information from school or career services relating to the jobs you are interested in?, it is possible that students are getting CIAG from other sources. Such sources may include parents, family, peers and independent research. However, while our conceptualisation of CIAG here is limited to the school context, in line with our overarching social constructivist view on the project, we acknowledge that often some of the most powerful career education happens through the socialisation students receive out of school, i.e. what they hear and see at home and with peers, and that school information about careers is filtered through these alternative sources of knowledge (Barnes, Bassot, and Chant 2011; Sultana 2013). While our results support the need for more micro-level strategies, we also appreciate the importance

of understanding the wider context that the career education system is operating within. Rigorous and exploratory research is also needed to provide further up-to-date evidence of the implications of effective CIAG on student transitions into the world of work. Such research should also include an investigation of the unique requirements of Year 11 students in terms of the support they need to help them make career decisions during their schooling as well as the best way to cater for these requirements. Our upcoming data collection phase, with a sample of Year 13 students, will also allow us to track back to whether or not students had careers education at Year 11 and the potential relationship between outcomes later on in their educational and professional careers. Future research could also usefully explore whether or not schools are offering careers education based on labour market analyses within their regions and whether or not students are selecting careers based on perceived labour needs within their local communities (Hamilton, Malin, and Hackman 2015).

From the cross-tabulation analyses reported here, we were able to identify clear patterns and marked differences; however, no strong associations were found. While we appreciate that the effect sizes presented in this paper are not large, we argue in line with findings that suggest that inequalities accumulate over time, through multiple repeating social relational contexts and small biasing effects (Ridgeway and Correll 2004). In this, any differences in provision of careers advice in secondary school may lead to much larger effects later on, contributing to the patterns of participation we are seeing today relating to several career trajectories. We also argue that Year 11 is a key stage for these young students, in which they are required to make several important and influential decisions regarding subject choice and what to do after any post-16 schooling. In this respect, secondary education is setting the scene for their futures, and we do not want to be further contributing to inequalities that are currently being reported for post-16 participation.

In addition to issues relating to internal validity, several issues regarding the external validity of the research presented in this paper also need to be addressed. While the results presented can arguably be generalised to secondary school students in England (as the sample was roughly comparable to national figures for FSM eligibility, regional distributions, performance indicators, etc.), wider cultural comparisons need to be made cautiously. Further research replicating these results from the student perspective in other countries would help to build confidence in the generalisability of the findings. Another issue relating to external validity that should be discussed at this point is the choice of students to be included in the empirical work. While schools were encouraged to invite a spread of top, middle and bottom sets, or entire cohorts to participate, it is possible that teachers self-selected certain classes and students (i.e. top set) to be involved. This would further contribute to generalisability issues relating to this work. We also appreciate that the schools themselves who consented to participating may be atypical in having higher morale, less fear of inspection and more desire for improvement and development, which may affect the external reliability of the results (Campbell and Stanley 1966).

Conclusions

Current research at the post-secondary level has shown that as students progress through education in the UK, in several domains these, career logistics remain a struggle. Careers education has the potential to be a useful tool for promoting social equity (Archer et al. 2014) and can be helpful for encouraging social mobility (Hutchinson 2012; OECD 2004). Yet, the findings presented in this paper suggest this is not the case and may – if anything – be reproducing patterns of inequality. We thus highlight a real need for policy-makers and practitioners to re-evaluate current CIAG provision and participation in England. Our survey and interview findings regarding participation rates and the patterned nature of CIAG reporting suggest that some schools may not be meeting the statutory requirement to provide impartial careers support for *all* students or at least, this provision is not *reaching* all students. We argue that schools should be provided with dedicated resourcing to target, engage and support disadvantaged students, with our findings suggesting that particular emphasis should be given to ensuring the participation of girls, minority ethnic students, working-class students, students in bottom sets and those who are unsure of their post-16 plans or who plan to leave education

post-16. We also recommend that schools and organisations involved in careers education delivery should monitor, evaluate and take steps to address inequalities in terms of which students do/do not access and participate in careers education. This is needed to ensure that careers education reaches all students – but particularly those most in need.

Building on the work of researchers in this area, the findings presented here illustrate the role of the wider social context in shaping opportunities for career development. They show that in the current socio-economic climate, young people might benefit from an extended period of more intensive support and exploration in their career choices, that is earlier and more extensive and sustained careers education.

Notes

1. The data analysed are generated by the Economic and Social Research Council-funded 'ASPIRES 2'project. The longitudinal study and its predecessor ASPIRES 2 study have been tracking and exploring children's science and career aspirations from ages 10 to 19. Methods include a quantitative online survey of the cohort and repeat interviews with a subsample of students and their parents. This paper draws on survey and interview data from students aged 15/16 years old (Year 11). The study subscribes to the ethical standards of the British Educational Research Association, and has been appraised and approved by the [anonymised] ethics committee. All project data will be made available via the UK Data Service at the end of the project. For more information about our data or data storage policy please contact us.
2. Several students reported both one-to-one sessions and career talks.
3. Cramer's *V* values for larger cross-tabulations are interpreted as follows: small (.05), medium (.13) and large (.22) effect sizes.

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