An investigation into the comparative learning gain and ‘value added’ for students from widening participation and non-widening participation groups: a case study from sports degrees

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ABSTRACT
Increasingly universities are expected to demonstrate the impact of students’ higher education experiences; learning gain is one of the metrics that can evidence this. The Scottish Funding Council (SFC) agrees Widening Participation (WP) objectives with the universities with an implicit expectation that Scottish higher education institutions (HEIs) work within their communities to enable those who could benefit from a university education to enrol. The Abertay sport programmes have historically supported students from diverse backgrounds. This case study focuses specifically on the graduate outcomes of WP and non-WP students graduating from these programmes in the years 2000–2015. An e-mail survey and departmental database of graduate destinations were linked with the student record. Analysis confirmed that those from WP backgrounds were equally as likely to gain a good degree as their non-WP counterparts and to be in graduate and/or sports employment. Longitudinal graduate outcomes are considered in the context of pedagogic strategy.

Introduction
Employment in a graduate job has been linked to social mobility and as a means of students from working class backgrounds enhancing their life chances and earning power (Byrom & Lightfoot, 2013; Macmillan & Vignoles, 2013; Universities UK [UUK], 2015). The former UK Minister for Universities, Science, Research and Innovation, Jo Johnson, described universities as ‘catalysts’ for social mobility (Johnson, 2016) yet others suggest that social mobility is in decline (Goldthorpe, 2012). Those with disadvantage are less likely to gain professional employment (Higher Education Funding Council for England [HEFCE], 2015; Institute for Fiscal Studies [IFS], 2016a, 2016b, 2016c) (Table 1) and widening participation (WP) graduates when compared to their non-WP peers earn less and are less likely to be promoted (Social Mobility Commission, 2017).

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Ebdon (2014) states that:

disadvantage can follow you like a shadow down the years, affecting the degree you end up with and your ensuing postgraduate study or search for a job.

Widening participation (WP) and unlocking future potential (Hillman, 2017) are core tenets of many higher education institutions’ (HEIs) strategic objectives, driven by government and funding body directives. Indeed, the Dearing Report (1997) noted that in order to grow the UK knowledge economy HEIs needed to provide greater access to those from WP backgrounds. Increasing investment in HE from a range of stakeholders has resulted in the desire for heightened accountability and for visible evidence of impact. One of the metrics on which HEIs are judged within the Teaching Excellence Framework (TEF) is widening participation, and learning gain can indicate the influence of curriculum activity. Houreau McGrath, Guerin, Harte, Frearson, and Manville (2015) consider ‘value-added’ and ‘distance travelled’ as contextualised and decontextualised aspects of learning gain. The latter concept encapsulates personal development as well as the enhancement of knowledge, skills and competencies. The ‘value added’ aspect of learning gain is based on an ‘exceeding expectation’ ethos. Graduate employment is considered by some to be a proxy measure for learning gain. For example, WP groups are less likely to complete their studies and if they do, then their background may still be a hurdle to graduate employment (Higher Education Funding Council for England, 2015) and WP graduates are less likely to pursue postgraduate studies (Higher Education Funding Council for England [HEFCE], 2016). In the context of ‘value added/exceeding expectation’ it could be posited that statistics to the contrary would evidence learning gain.

While Houreau McGrath et al. (2015) consider ‘work-readiness’ a core component, others would argue that this is not the purpose of higher education (Cranmer, 2006). This viewpoint is increasingly perceived as ‘snobbish’ and ‘outdated’ as students are known to enrol in HE as a means of advancing their labour market prospects (Ansell, 2016); almost 60% of students believe that having a degree confers an advantage when looking for work (Audit Scotland, 2016). Nicoll (2016) reports graduate employment as the prime influencing factor in choice of university for more than 50% of students; and WP students are more likely than their non-WP counterparts to articulate that a good degree and the prospect of a graduate job are the main reasons for applying to university (Hunt et al., 2017). However, those with advantage are noted to be more selective in their university choice, aware of the benefit that this can confer in the graduate labour market (Russell, 2017; Universities UK [UUK], 2016).

The under-representation of particular sections of society in HE has driven the widening participation agenda. The Scottish Government has an ambition that ‘by 2030 students

Table 1. Comparative graduate outcomes.

| Demographic/Graduate Outcome | Proportion in postgraduate study (%) | Proportion in employment 3 years after graduation (%) | Proportion in graduate employment 3 years after graduation (%) |
|------------------------------|--------------------------------------|-----------------------------------------------------|---------------------------------------------------------------|
| UK                           | 73                                   | 96.4                                                | 77.8                                                          |
| Scotland                     | 74                                   | 97.4                                                | 82.6                                                          |
| Physical Science graduates   | 54.8                                 | 96.8                                                | 79.4                                                          |
| Widening participation graduates | 40–66                                | 95.5                                                | 74.7                                                          |

Source: Higher Education Funding Council for England [HEFCE], 2016; Higher Education Statistics Agency [HESA], 2015.
from the 20 per cent most deprived backgrounds should represent 20 per cent of entrants to higher education’ (Commission on Widening Access [COWA], 2016). Currently, 14% of university student enrolments come from this target group (Scottish Funding Council [SFC], 2016b). Universities Scotland (2013) report that all of the Scottish HEIs support the ‘Robbins principle’ that is, university enrolment should be based on the potential to gain benefit from this experience independent of socioeconomic factors. The Scottish Index of Multiple Deprivation (SIMD) is used as a national marker to indicate poverty. The lower two quintiles (SIMD20/40) are those most associated with deprivation and postcode is used to identify students entering HE from this background. There are though some inadequacies associated with using postcode as the main determinant of deprivation as it does not consider individual households nor does it take due regard of rural poverty, of particular relevance in the Scottish context (Weedon, 2014). However, it is the measure against which Scottish HEIs are benchmarked in relation to the Scottish Government’s widening participation ambitions. The Higher Education Funding Council for England (HEFCE) uses Polar 3 quintile 1 as its marker for poverty and evidencing WP, though it should be noted that this only considers young people from low participation neighbourhoods. The Polar 3 quintile 1 enrolment in HE currently stands at 19.5% and HEFCE would like to see this grow to 27% (HEFCE, 2014) in recognition that the proportion of people living in low income households is not mirrored in university enrolments.

There are three times as many students from ‘professional’ parent households in comparison to those enrolling from a ‘routine occupation’ parent household (Little, 2011). Universities UK (UUK, 2016) report that school leavers from advantaged backgrounds are 2.4 times more likely to enrol at university than those coming from disadvantaged homes. Disappointingly much of the focus with regard to HEI targets focuses on WP enrolment rather than WP graduate outcomes and associated learning gain.

Household income inequalities and the intergenerational impact on economic mobility is not a challenge unique to the United Kingdom. Cruz and Haycock (2012) report that the United Kingdom and the United States (US) have particularly poor track records in closing higher education attainment gaps for those from low-income households. However, they also report some evident success stories in the US where there have been pro-active campus interventions. Thomas (2014) notes that the widening participation agenda being implemented in Australian higher education mirrors policy directives in many parts of the Western world. He acknowledges the positive impact of work being conducted to reduce barriers for those with WP characteristics entering HE – for example, transition from school, mentoring and academic skills programmes. However, comments that some HE pedagogic strategies can exacerbate students sense of a lack of belonging. He views inclusive curricula and pedagogies that build confidence as enablers to WP student success if partnered with staff development.

First-generation students are more likely to come from disadvantaged backgrounds (Wylie, 2015) and their completion rates are notably lower – 73% in contrast with an 88% in second generation students. Developing a ‘sense of belonging’ and being sensitised to the university environment is a key factor in the success of first-generation students (Thomas, 2012) but Pike and Kuh’s work in the US (2005) notes that they are more likely to be commuter students who live off-campus, spend less time within the university environs, have lower aspirations and fewer connections with other students – all contributory factors for learning gain. Therefore, it is maybe unsurprising to note that commuter students have been
found to have poorer academic outcomes (Thomas & Jones, 2017). WP students are felt to be less prepared, spending less time on independent study and consequently underperforming within the HE context (Crawford, Dearden, Micklewright, & Vignoles, 2016) though others have had contrary findings with WP students doing as well, if not better, than their non-WP peers (Croxford, Docherty, Gaukroger, & Hood, 2013; Hunt et al., 2017; Lasselle, McDougall-Bagnall, & Smith, 2014). Those from lower socioeconomic backgrounds are also less likely to participate in study abroad opportunities – something which has been attributed to better degree results, being in graduate employment and increased likelihood of undertaking postgraduate study (Allinson, 2017; Little, 2011). Exploiting social networks can facilitate the building of social capital (Hunt et al., 2017), a concept tied to social mobility, and provide access to graduate employment (Hawkes, Cagliesi, DeVita, & Sarabi, 2016; Universities UK [UUK], 2016). Waller and Bradley (2016) report that ‘unequal playing fields’ are evident in relation to class and the transition to graduate employment. The key influence on a graduate’s future, regardless of the university attended, is socioeconomic background (Universities UK [UUK], 2016). Awareness of the challenges that some students may experience, increases responsibility on those programme teams working with a diverse student body, to invest in pedagogic initiatives that promote good graduate outcomes. For example, curricula that adopt the Universal Design for Learning approach promoted in the US (Bowe, 2000) and gaining international significance (Thomas, 2014); or to facilitate strategies that can positively impact on graduate employment and/or create the conditions which have been attributed to high levels of learning gain.

This article presents the findings of an investigation into learning gain from the perspective of Abertay sport graduates’ employment outcomes contextualised to route of study and demography. Reporting on longitudinal educational outcomes (LEOs) is a recent phenomenon in the UK. Uniquely, this work considers the employment journey of the sports graduates, reflecting on the impact of classroom initiatives in developing skillsets for the workplace.

The Abertay context

Abertay University comprises 4025 students 42% of whom come from the local areas of Dundee and Fife. The university defines its purpose as:-

- To offer transformational opportunities to everyone who has the ability to benefit from Abertay’s approach to university education;
- To inspire and enable our students, staff and graduates to achieve their full potential.

According to Scottish government figures, Abertay is one of Scotland’s leading HE centres for wider access (SFC 2016b). In the 2014–15 academic session, the university achieved the SFC outcome agreement target of 27% of undergraduate entrants articulating from college with advanced standing and had 15.7% of its enrolments come from a SIMD20 postcode. Most recently, stage three of the Abertay sport programmes constituted 72% articulating students in 2015–2016, and 65% in 2016–2017, figures credited to the work of the SFC-supported Dundee Academy of Sport (DAoS). The DAoS mission is to raise aspirations and educational goals in children attending schools with low FE/HE progression rates and to increase the proportion of students making the transition from further to higher education. Further Education (FE) has noticeably higher levels of WP students (National
Union of Students Scotland [NUSS], 2013; Scottish Funding Council [SFC], 2016a) and the Abertay sport programmes, which launched in 1999, have had a long history of supporting widening participation. The first four cohorts of sport degree students all articulated from FE into stage 3 of study. In 2001, the range of degree programmes expanded from two to three, offering a range of entry points. Provision in this subject area was further expanded in 2007 when six new programmes were added to the portfolio. Figure 1 demonstrates the influence of this expansion in portfolio at the point of graduation.

Overall, the proportion of graduates who entered under articulation arrangements fell, but in terms of actual numbers this remained relatively stable in the period 2005–2015. However, more recent enrolment data indicates that considerably more articulating students will continue to form part of future graduating cohorts. Consequently, and being cognisant of Abertay University’s stated purpose, the research team were awarded internal grant monies at the start of 2015 to investigate transition into employment and the influence of an Abertay sport degree on graduates’ career pathways taking account of their background and route of entry. The central focus of the initial investigation was graduate outcomes and longitudinal patterns in this, but when linked to specific aspects of the students’ demographic data this presented an opportunity to explore the ‘value added/graduate outcome’ aspect of learning gain. The very small BME enrolment within the study cohort meant that there were too few numbers for meaningful data analysis. Previously presented data pertaining to gender and disability had determined non-significant graduate outcomes (Cameron, Wharton, & Scally, 2016) resulting in other widening participation characteristics becoming the focus of this paper.

In relation to learning gain and widening participation the authors gained ethics approval to explore the following questions with regard to the Abertay sports graduate data:-

- When compared to students entering the Abertay sports programme from non-widening participation …

Figure 1. The changing demographic of students graduating from Abertay sport degrees.
• Are there differences in degree outcomes for those graduates from a widening participation background (specifically, SIMD20/40, articulating student, ‘first in family’)?
• Are there differences in graduate outcomes (graduate employment, postgraduate study) for those from a widening participation background (SIMD20/40, articulating student, ‘first in family’)?
• What do students perceive as the curriculum factors influencing their graduate outcome and does this vary when student background (SIMD20/40, articulating student, ‘first in family’) is considered?

Methodology

Interrogation of the student record system revealed that 924 students had graduated from an Abertay sport programme in the period 2000–2015 (596 males, 328 females; 0.9% BME; 74 graduates with a declared disability). (Annually, approximately 7% of students withdrew from their sport programme, mainly for personal reasons. However, the demographics of this cohort, while of evident importance in relation to widening participation, will not be considered as part of this paper).

Following university ethics approval, a personalised message was sent to each of the 452 students who had been identified as having a valid e-mail address from a long-serving member of the subject team. The e-mail contained a short 4-item visible questionnaire exploring preparedness for employment, additional qualifications and career pathway after graduating and detailed that responding to the survey meant that the graduate was giving consent to link their responses to demographic data held in the student record system. Students were stratified by their WP characteristic, and graduate outcome was linked to entry point and degree award, categorisation of the data enabled Chi square analysis to be performed to determine any statistical trends. The e-mail responses were supplemented with graduate destination information held in a departmental database that students had consented to being recorded. The Standard Occupational Classification system (Office for National Statistics [ONS], 2010) was used to determine whether respondents were in graduate level roles. The final data-set was categorised by widening participation characteristic and degree and graduate outcome, enabling Chi square statistical analysis to be performed. Commentary from the open questions was exposed to thematic analysis.

Results

Approximately a third of the students (n = 135) responded to the e-mail questions, and this together with the departmental records enabled employment and/or further study outcomes for 360 students to be examined (216 males, 144 female; 1.1% BME, 81 graduates with a declared disability) . The characteristics of the respondents are illustrated in Figure 2.

Graduates from SIMD20/40 homes

Across the study period just under a quarter of all student enrolments (23%) came from an SIMD20/40 postcode (Figure 3). This ranged from just under 14% of students
graduating from an SIMD20/40 postcode in the 2007–2008 cohort to 34% in the subsequent session.

Significantly more articulating graduates came from SIMD20/40 postcodes (Figure 4) (29.5% vs. 20% of non-articulating entry students, $\chi^2 = 6.9, p < 0.01$).

A third of graduates from SIMD20/40 postcodes were awarded an unclassified degree – the same proportion as students from a non-SIMD20/40 postcode. While slightly lower proportions of SIMD20/40 graduates gained a good degree (2:1 or better) (36% vs. 44%) this was a non-significant difference ($\chi^2 = 2.61, p > 0.05$).

Figure 2. The demographic characteristics of the sports graduates from 2000 to 2015.

Figure 3. Abertay sport graduates from SIMD20/40 backgrounds by study session.
Articulating students (47% of the sample group from 2000–2015) were significantly more likely to exit with an unclassified degree ($\chi^2 = 84.7, p < 0.01$) and this trend for significance continued even when the degree programmes changed. The 2000–2004 graduating cohorts could only enrol on the sports’ courses directly from college; cohorts graduating after 2010–2011 had access to a broader range of programmes but while the trend weakened, articulating students remained significantly more likely to exit with an unclassified degree (post-2003–2004, $\chi^2 = 50.1, p < 0.01$; post-2010–2011, $\chi^2 = 16.9, p < 0.01$). Figure 5 illustrates the changing pattern of point of graduation for articulating students. In the early years, approximately half of the students stayed to 4th year. However, since 2003–2004 there has been a degree of variation in the volume of articulating students choosing to complete the Honours stage, ranging from 11% in 2003–2004 to 81% in 2012–2013. While a greater proportion of the graduating cohort was dominated by students enrolled from first year it was evident that from 2007–2008 an increasing number of articulating students were exiting with an Honours award. Indeed, consideration of the latter three sessions revealed that almost two-thirds of articulating students were staying to 4th year. This still reflected a significantly lower proportion of students from FE graduating with Honours ($\chi^2 = 8.9, p < 0.01$) – though this was not the case for the 2012–2013 cohort ($\chi^2 = 0.13, p > 0.05$). Figure 6 outlines the patterns of degree classification relative to the route of entry.

While across the study period the total number of degrees classified as 2:1 or better was smaller for articulating students (29% vs. 48%), in more recent academic sessions there has been a general trend, regardless of route of entry, of higher percentages of students gaining ‘good’ degrees overall.
Figure 5. Abertay sport graduates exit point in relation to route of entry. Note: DE = articulating graduate; non-DE = graduate enrolled from first year.

Figure 6. Number of Abertay sport graduates gaining >/=2:1 by route of entry. Note: DE = articulating graduate; non-DE = graduate enrolled from first year.
‘First in family’ to graduate from university

Data in relation to parental experiences of HE were not routinely recorded until 2009–2010. Examination of the data subsequent to this (Figure 7) revealed an increasing number of students disclosing that they were ‘first in family’ to attend university.

‘First in family’ students were significantly more likely to come from an SIMD20/40 postcode ($\chi^2 = 10.5, p < 0.01$) but there were no significant differences in the proportion of ‘first in family’ students relative to the year of entry (non-articulating students 47% ‘first in family’, articulating students 42% ($\chi^2 = 1.66, p > 0.05$)). There was also no significant difference ($\chi^2 = 0.2, p > 0.05$) in the percentage of ‘good degrees’ awarded when comparing those who had a parent with a higher education qualification with those whose parent did not.

Graduate outcomes

Abertay sports graduates’ outcomes when benchmarked against sector destination data for graduates in this field revealed similar proportions in work and further study but higher proportions specifically in the survey respondents (Figure 8). Applying the Standard Occupational Classification system to define graduate level roles revealed that Abertay data aligned with national trends for graduate employment however, more were employed in the sports industry than the sector average for those with sport degrees. There were also higher volumes of Abertay graduates with post-graduate qualifications.

Graduates from SIMD20/40 homes

Examination of the data for the whole study period revealed that Abertay sports graduates from deprived backgrounds were as likely to complete postgraduate study as other graduates (35% of SIMD20/40 graduates vs. 38% for other SIMD categories, $\chi^2 = 0.75, p > 0.05$). They were also equally likely to be in a sports-related job (75% of SIMD20/40 graduates vs. 79% for other SIMD categories, $\chi^2 = 0.31, p > 0.05$) and in a graduate job (68% of SIMD20/40 graduates vs. 68% for other SIMD categories, $\chi^2 = 0.8, p > 0.05$).

Figure 7. Abertay sports graduates and parents with a university qualification (2009–2010 to 2014–2015 cohorts).
Graduates who articulated from FE college
Analyzing the destination data for those who had come from college revealed that the number gaining a postgraduate qualification was significantly lower when compared to those who had enrolled on their programme in year 1 (27% for those from FE vs. 41%, $\chi^2 = 6.35$, $p < 0.05$). There was almost a significantly higher proportion of those who had come from FE working in the sports industry (86% of those from FE vs. 75%, $\chi^2 = 3.65$, $p > 0.05$) but there were no differences in respect of gaining a graduate level job (64% of those from FE vs. 68%, $\chi^2 = 0.3$, $p > 0.05$).

Graduates from ‘first in family’ homes
Examination of the destination data in relation to ‘first in family’ revealed that the number gaining a postgraduate qualification was not significantly different when compared to those who had at least one parent attend university (42% for those with parents with prior experience of HE vs. 29%, $\chi^2 = 1.27$, $p > 0.05$). There were also no significant differences in respect of whether someone who was ‘first in family’ was in a sports industry job (51% of those ‘first in family’ vs. 47%, $\chi^2 = 0.04$, $p > 0.05$) or in a graduate level job (48% of those ‘first in family’ vs. 56%, $\chi^2 = 0.35$, $p > 0.05$).

Preparedness for employment
Graduates were asked: Did your Abertay degree equip you for your first job post-graduation?. Three quarters (77%) responded ‘yes’ that they had felt prepared for their first job. Examining the responses by entry route and background characteristics (SIMD 20/40; ‘coming from FE’, ‘first in family’) demonstrated that while there was variation in the level of agreement about preparedness these were not significantly different (Table 2). Further exploration of
the data revealed that those who had not felt prepared were either in a non-graduate or non-sports job (noting that they now needed knowledge not specific to their degree), or cited that they already had the necessary skillset as their role within a sports organisation had been extended after graduation.

The graduates had been asked to explain their responses in relation to what specifically they felt had or had not prepared them for their first job. Respondents gave brief answers but spoke of experience with children, placement, knowledge gained (either in the context of further study:- Degree equipped me for further qualifications; or the workplace:- Able to do job due to knowledge gained in degree). Placement was the most cited response. Participants also referenced skill development (for example, through placement, coaching practicals, teamwork, IT skills gained through degree, leadership and management skills gained through course. Academic writing and critical thinking, Communication. Presentation skills and studying research methods). Many made reference to the acquisition of confidence being key to their preparedness for employment, but answers tended to be brief.

Eighty seven percent felt prepared for working life in general; again, entry route and background characteristics (SIMD 20/40; ‘coming from FE’, ‘first in family’) had no significant impact on this (Table 3).

Knowledge, skills (Meeting deadlines. Knowledge on health. Report writing. Time management) and the time spent at Abertay on their degree studies were the key contributory factors to preparation for working life. With regard to the latter, a number made reference to learning the value of hard work, (for example, My degree installed a work ethic that allowed me to be successful in my working life (current role, Golf Development Officer), personal development, ‘confidence’ and personal responsibility were frequently cited. Many also made mention of the social side of university as being a contributing factor in preparing them for working life in general.

When invited to comment on what aspect of their programme had been of most benefit, placement and research methods were the most cited responses. For example,

The hands on experience of placement. At university and job interviews the first thing I have been asked is, ‘what is your experience?’ I have been able to draw upon four years of placement experience at Abertay which has opened doors for me to progress forward into a career in teaching. I also think modules such as growth & development, coaching pedagogy and sports psychology have made a valuable contribution to my understanding of children and the art of teaching. This has allowed me to make informed decisions about my own teaching practice. (current role, Primary Teacher).

However, many also stated that growth in confidence and the developmental maturation that had occurred during their years of study were key aspects of preparing them for the workplace for the short and longer term. For example,
Coaching: Both coaching groups and individuals throughout the 4 year programme developed my ability to lead and manage in various environments and circumstances, and helped me to build self-confidence that has assisted me throughout my career so far. (current role, Armed Services Manager)

The degree taught me more as I grew, on reflection I can see that there were some aspects which I applied myself to and others where I definitely should have spent more time. (current role, Development Manager 1)

It isn’t necessarily the skills that I learned in the class room that help me the most but the life skills and people skills that I learned most from my time at University. (current role, Development Manager 2)

Four years’ worth of placement modules … I learnt essential skills in organisation, time management, people management, working with the public (children and adults). … I feel that most of all the skills I have acquired have come from Placements and that this is a valuable part of the sport courses. In addition, the presentations that were used for assessment purposes (as much as I hated them at the time) were very useful in building essential public speaking skills, and finding ways to manage nerves in an environment where everyone is supporting you. Without this yearly experience at Abertay I couldn’t stand up in front of a class of students today. (current role, University Graduate Assistant)

Employment destinations

Pictorial representation of the current roles of all Abertay sports graduates (Figure 9) gives an overview of the predominant occupations. Collectively, 18% were in sports manager positions and 27% of the sports graduates were in teaching posts (typically 18.6% of all graduates pursue a career in teaching (Higher Education Funding Council for England, 2016)).

Summary of findings in respect of learning gain:–

- Abertay sport graduates from SIMD20/40, ‘first in family’ homes, and from FE were equally likely to exit with a good degree as their counterparts
- Fewer students from FE are now exiting with an unclassified award
- A higher proportion of Abertay sports graduates who responded to the survey, when compared to the sector relevant to this discipline, were in work or further study.
- SIMD20/40 and ‘first in family’ graduates were equally likely to complete postgraduate study.
- There were no differences in graduate and/or sports employment rates for those from SIMD20/40, ‘first in family’ homes, and from FE; and they were equally likely to have felt prepared for their first job and for working life in general.
- Placement and research methods were the most cited aspects of the graduates’ studies that had helped them make the transition to employment.
Many acknowledge the challenge that students entering HE from a position of disadvantage will face in relation to graduate outcomes (Hawkes et al., 2016; Higher Education Funding Council for England, 2015; IFS, 2016a; Universities UK [UUK], 2016; Waller & Bradley, 2016). Unsurprisingly, there was evident intersectionality in a number of the WP factors in that graduates who came from FE or were ‘first in family’ to attend HE were significantly more likely to come from an SIMD20/40 postcode. It is notable, therefore, that this study has revealed non-differentiated outcomes for Abertay sports graduates coming from FE, SIMD20/40 or ‘first in family’ homes in respect of degree awarded, graduate employment and preparedness for the workplace. Data from one of the more recent graduate surveys reveal that 76% of respondents agreed with the statement ‘HE prepared me well for my career or helped me progress my career aspirations’ (Higher Education Statistics Agency [HESA], 2015). A similar proportion (77%) of respondents in this study, drawn from all cohorts, felt that their Abertay sport degree programme had prepared them for their first post following graduation and this was independent of entry route or individual background. Work-readiness is viewed by some as a core component of learning gain (Houreau McGrath et al., 2015). When the sport degree programmes were revised in 2007, and employability was gaining higher profile within HE, a number of specific initiatives were embedded in the Abertay undergraduate sports curriculum (mandatory placement at every stage of study, careers talks from former graduates, skills and client-based assessments, assessed coaching practicals, assessed class presentations, LinkedIn webfolios, personal development planning). It is acknowledged that the survey questions did not specifically ask about the impact of these interventions however many of the graduates’ responses clearly signpost placement as a key factor in preparedness for the workplace. In this regard, confidence in working with, managing and leading groups (particularly children), time management and presenting to a group were frequently referenced. Many comments were also made about personal development and responsibility. While these may have been broader consequences of time

Figure 9. The current occupations of Abertay sports’ graduates from the period 2000–2015.
spent at university, students on the sport programmes undertake their first placement six weeks into term one in year one and with children aged 10–12. Students receive an intense period of preparation which includes receiving developmental feedback subsequent to being assessed coaching their peers. The assessments that accompany placement include completion of reflective logs relating to their personal development, giving presentations to peers and placement mentors about their placement experiences, and creation of a ‘LinkedIn’ style webpage to showcase to future employers the knowledge, skills, achievements and experiences they are gaining. Thomas (2014) notes the significance of pedagogic strategy, particularly those that build confidence, in enabling graduate success for those from WP backgrounds. It may be that the Abertay sports programmes’ employability interventions have influenced how the graduates responded in relation to preparedness for work and the significance of placement in this.

Respondents often referenced skill development, particularly transferable skills such as, leadership, time management, teamwork, managing deadlines, presentation skills, communication skills and report writing. Research methods were specifically identified as a subject area which more readily developed some of these transferable skills. The lack of preparedness of graduates for the workplace has been the source of much criticism aimed at the higher education sector (British Chambers of Commerce [BCC], 2016) and universities are being challenged about their capacity to develop workforce-related skills (Universities UK [UUK], 2013). While employers were not questioned about Abertay sports’ graduates work readiness it is heartening to note that the students could identify skills which employers increasingly value (Cohn & Johnson, 2006).

Social networks are considered a contributory factor to graduate employment, but it is acknowledged that those from wider access backgrounds may have fewer connections (Universities UK [UUK], 2016; Waller & Bradley, 2016). Linking students to employers can enable these professional networks to be developed (Bathmaker et al., 2016; Hawkes et al., 2016). Doing this within a reflective academic context can also increase confidence and further raise aspirations about future directions (Moore, Sanders, & Higham, 2013) potentially all connected to building social capital (Hunt et al., 2017). There was no differentiation in employment destination for the Abertay sport graduates in relation to their background, but work placement (a mandatory part of the curriculum) was reported as one of the key influences in relation to transition to employment. Placement can help to foster some of these key social networks but a number of students also referred to the value of the ‘social side’ of university and it may be that useful social networks are also being built extra-curricularly.

Some argue that what now defines a graduate job has markedly altered in more recent years (Green & Zhu, 2012) driven by more graduates and more employers seeking their skillsets. Therefore, it is of note that those from WP backgrounds within this study are being able to access these roles. Historically, graduates are more likely to be in work and with significantly higher earning capacity than their non-graduate counterparts. Post-graduate study is noted to further increase earning power (Department for Business, Innovation and Skills [BIS], 2015). It is these aspects that can enable social mobility – however, during the study period those who accessed the Abertay sport programmes from FE were significantly less likely to progress to postgraduate study. One of the drivers for completing this piece of work was to have a better understanding of graduate destination in this disciplinary area, particularly given the diversity of the student population. The study revealed that in the
more recent cohorts an increasing number of articulating students were completing the Honours stage – often a pre-requisite for postgraduate (PG) study. A good degree (2:1 or better) is often necessary to enrol for PG study. There were no significant differences in the proportion of SIMD20/40 and ‘first in family’ Abertay sports degree graduates receiving this level of award, and in more recent years the gap relating to number of FE students gaining a good degree was reducing. A competitive graduate market has led to an increase in number of postgraduate enrolments within the sector potentially as a means of accessing professional career routes (Hoffman & Julie, 2012; Masterman & Shuyska, 2012). It may be that with further passage of time the differentiation observed regarding FE entry route and postgraduate study will dissipate in Abertay sport graduates.

While some studies have reported poorer levels of attainment within the HE setting for WP students, others have reported students from deprived backgrounds doing better or at least the equivalent of their non-WP peers (Lasselle et al., 2014; Switzer et al., 2017). In this study, there was negligible difference in the proportion of students from ‘first in family’ homes gaining good degrees when compared with their peers, and a non-significant difference in the proportion of good degrees gained by those from SIMD20/40 households. Of note, was the ‘growth in confidence’ and ‘developmental maturation’ that the graduates articulated as things that they had acquired while at Abertay and which had prepared them for work. The mandatory placement activities that the students engage in requires them to lead sport sessions for children with an inherent level of responsibility. It may be this exposure that has positively contributed to increases in confidence and personal development, referencing Houreau McGrath et al’s (2015) ‘distance travelled’ aspect of learning gain. ‘Reconceiving habitus’ (Clarke, 2017) may also underlie some of the ‘time spent at Abertay’ graduate responses with regard to enablers for working life – that is, exposure to wider social circles and expanded knowledge, skills and expectations.

**Limitations**

It is acknowledged that by focussing on graduate outcomes there has been no examination of completion, progression or retention rates relative to the diversity of the Abertay sport degree programme population, which are all important aspects of the widening participation and social mobility agenda. Protected characteristics for example, gender, disability, BME and sexual orientation are also important to consider when exploring graduate outcomes in the context of widening participation. These were not explored in this study for reasons previously stated (sexual orientation has only recently been recorded in the student record).

The research team were also conscious that it was a self-selecting population that opted to respond to the e-mail questionnaire, and that this may be skewed by those who felt that they had a ‘good news’ graduate story to tell. In addition, the research questions did not enquire about graduate salary or probe in detail the features of the Abertay Sport programmes which were perceived to be most effective in facilitating progress to highly skilled employment, and these could be the focus of a further studies. Study abroad opportunities heighten graduate outcomes, particularly for those from WP groups (Allinson, 2017). Currently, this is not an integral part of the Abertay sports curriculum though students are signposted to extracurricular opportunities to work abroad and a number of students do participate in this but this was not explored as part of this study.
Conclusion

Learning gain can be considered from the dual perspectives of ‘distance travelled’ and ‘value-added’ (Hourou McGrath et al., 2015). In relation to the Abertay sport programmes there was evidence that students from WP backgrounds were equally likely to gain good degrees and graduate level employment as their non-WP peers, in spite of data suggesting that they would not be expected to do so. This is strong evidence that Abertay’s sport programmes offer the ‘value added’ aspect of learning gain. However, the curriculum needs to keep providing relevant opportunities for students to develop skill sets and networks that enable graduate employment, particularly as the shape of the student body changes and WP students represent a greater proportion of this population. The Dundee Academy of Sport project is still in its infancy – nevertheless, the connections that it will enhance between schools, colleges, the university and the sport and exercise industry, exemplifies the partnership activity that is viewed as critical to facilitating social mobility (Universities UK [UUK], 2016). This work provides WP students with access to opportunities that enable learning gain. One initial key factor is getting WP students to university (Institute for Fiscal Studies [IFS], 2016b). Then programme deliverers need to ensure that there are sustained curriculum employability interventions, with no barriers preventing fair access to these activities, so that WP students feel that they belong, they build social capital, and have knowledge, skills and experiences and the capacity to articulate these to future graduate employers.

Note

1. The SFC defines articulation as: Students gaining entry into second year of a degree with a Higher National Certification (HNC) or to third year of a degree using a Higher National Diploma (HND) obtained in a college as an entry qualification. (Scottish Funding Council [SFC], 2011, 7).

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