



# Understanding inequity in tertiary education in Wales

**Analysis of linked data**

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# Glossary of Terms

## Acronyms

|                  |   |
|------------------|---|
| <b>ACL</b>       | Adult Community Learning                          |
| <b>CTER</b>      | Commission for Tertiary Education and Research    |
| <b>FE</b>        | Further Education                                 |
| <b>FSM</b>       | Free School Meals                                 |
| <b>HE</b>        | Higher Education                                  |
| <b>HESA</b>      | Higher Education Statistics Authority             |
| <b>HND</b>       | Higher National Diploma                           |
| <b>LEO</b>       | Longitudinal Education Outcomes                   |
| <b>LLWR</b>      | Lifelong Learner Wales Record                     |
| <b>NDC PLASC</b> | National Data Collection PLASC                    |
| <b>NET</b>       | Not in Education or Training                      |
| <b>NEET</b>      | Not in Education, Employment or Training          |
| <b>NPD</b>       | National Pupil Database                           |
| <b>NS-SEC</b>    | National Statistics Socio-Economic Classification |
| <b>PCET</b>      | Post-Compulsory Education and Training            |
| <b>PLASC</b>     | Pupil Level Annual School Census                  |
| <b>SEC</b>       | Socio-Economic Classification                     |
| <b>SEN</b>       | Special Education Need                            |
| <b>SOC</b>       | Standard Occupational Classification              |
| <b>WBL</b>       | Work-Based Learning                               |

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# Summary

- The Tertiary Education and Research (Wales) Act 2022 established Medr, the Commission for Tertiary Education and Research, a new Welsh Government sponsored body responsible for the strategy, funding, and oversight of the tertiary education sector. This unifies previously separate governance systems for Sixth Forms, Further Education (FE) and Higher Education (HE) into a holistic tertiary governance model. Accountable to the Welsh Government, Medr has a duty to address inequalities in the tertiary education sector in Wales.
- The Welsh Government commissioned this report to provide evidence on tertiary education participation among learners with protected or supported characteristics.
- This report examines participation, progression, and non-progression in tertiary education in Wales between 2011/12 and 2018/19 focusing on the equality characteristics of learners and their households, including deprivation measures including deprivation measures and socio-economic background. It additionally considers the educational attainment of learners in tertiary settings by various characteristics.
- Analysis indicates that certain groups of learners were over- or under-represented in particular post-compulsory education and training (PCET) settings, and on particular types of programmes.
- Learners from lower socio-economic and multiple deprivation backgrounds, as well as those with limiting disabilities and learners with known Special Education Need (SEN) status had higher rates of participation in vocational and work-based learning (WBL) and lower rates of attainment.
- Inequities appeared less pronounced within HE settings, however this is likely due to choices and barriers encountered at an earlier age.
- Two key recommendations are made within the report:
  1. Socio-economic background, deprivation along with learner health, should be the focus of inequity policies going forward, rather than a focus on solely economic indicators.
  2. Medr should aim to align and enhance the potential for holistic, comparable data and governance systems to allow better integration and further analysis of the tertiary education sector in the future.

# Introduction

**This report analyses enrolment and progression through tertiary education in Wales using linked administrative data. We examined the extent and nature of participation in tertiary education in Wales prior to the COVID-19 pandemic, considering both personal and background characteristics of learners.**

Reform of tertiary education in Wales has been a focus for the Welsh Government following recommendations for improved oversight of tertiary education (Hazelkorn, 2016), and Higher Education (HE) funding (Diamond, 2016). In 2022, the Tertiary Education and Research (Wales) Act was enacted to construct the foundations for significant changes in the tertiary education sector. The Act paved the way for Medr, the new Commission for Tertiary Education and Research being established in 2024, which is responsible for overseeing post-compulsory education and training (including Sixth Forms and Further Education (FE)) and HE, by the Welsh Government.

The Welsh Government aims for Medr to be ‘proactive in ensuring more equitable entry to post-compulsory education and training’ (Welsh Government, 2020). However, examination of inequalities related to entry and progression through tertiary education in Wales in an integrated way has been challenging. Data have been intermittently collected on post-compulsory education and training (PCET) engagement, intention to study, and reasons for study through the National Survey for Wales. Administrative data from StatsWales routinely provide more frequent information on the population of learners registered in FE settings<sup>1</sup> and Sixth Form settings<sup>2</sup>. However, these measures are derived from different data collection systems and use different methodologies, making it difficult to compare the participation and outcomes of learners in a meaningful way.

These difficulties have been partially addressed by ‘Destinations’, an annual survey of school leavers undertaken by Careers Wales on behalf of the Welsh Government which collects data on the destinations of pupils from all maintained and special needs schools who are at or above the school leaving age<sup>3</sup>.

<sup>1</sup> <https://statswales.gov.wales/Catalogue/Education-and-Skills/Post-16-Education-and-Training/Further-Education-and-Work-Based-Learning/Learners/Further-Education>

<sup>2</sup> <https://statswales.gov.wales/Catalogue/Education-and-Skills/Schools-and-Teachers/Schools-Census/Pupil-Level-Annual-School-Census>

<sup>3</sup> <https://careerswales.gov.wales/education-and-teaching-professionals/pupil-destinations>



While the survey offers a more complete picture of the destinations of entire cohorts of Year 11 learners, it provides little information about what these learners go on to study or their subsequent performance. Additionally, segmentation analysis to examine variation in destinations across population sub-groups is limited to gender and ethnicity.

The importance of consistent post-16 performance measures has long been recognised by the Welsh Government (Welsh Government, 2018). Since 2018, the Welsh Government has published the Consistent Performance Measures for Post-16 Learning (Achievement) series<sup>4</sup>. This annual release presents the outcomes for those undertaking general and vocational education (including the Welsh Baccalaureate) in both Sixth Forms and FE colleges. These outcomes include both levels of attainment and completion rates, with analyses presented by gender, age, ethnicity, and deprivation. The destinations of these learners (i.e., what a learner moves on to do after leaving a learning programme) are examined in the Consistent Performance Measures for Post-16 Learning: Learner Destinations<sup>5</sup>. Based on the Longitudinal Education Outcomes (LEO) data, these analyses report the proportion of learners entering sustained employment, sustained learning, or sustained destinations (either employment or learning).

A limitation of these analyses is that post-16 learners are defined as those studying in further education institutions, school Sixth Forms, and in work-based learning (WBL; apprenticeships, training, and other employability programmes). As such, these publications do not examine how the type and level of qualification undertaken and the characteristics of learners vary between Sixth Form and FE settings. For example, do the characteristics of those enrolled for A levels within Sixth Form settings differ from those who undertake these qualifications within FE colleges? Therefore, there remains a need to gain a better holistic understanding of the pathways and trajectories of all Year 11 pupils from maintained schools who enter tertiary education.

This report combines multiple sources of administrative data on learners to examine participation in education and training in Wales across the tertiary population, revealing potential inequities in the pre-COVID era, up to 2018/19.

<sup>4</sup> <https://www.gov.wales/consistent-performance-measures-post-16-learning-achievement>

<sup>5</sup> <https://www.gov.wales/consistent-performance-measures-post-16-learning-learner-destinations>

## Review questions

In commissioning this research, the Welsh Government indicated a particular interest in four main questions:

**1** What are the proportions of pupils/students or apprentices over the age of 16 in Welsh Government funded institutions by reference to each of the following protected and supported categories? Gender, age, ethnicity, disability, Welsh language ability, sexuality, socioeconomic status, nationality, childcare responsibilities, parents' educational achievements, and parents' occupation.

**2** How do the proportions of pupils, students, or apprentices in each of these categories compare with the proportions in the relevant local and/or national comparator populations?

**3** What steps if any might best be taken to amend and/or extend the requirements placed on institutions to encourage different patterns of access, participation, progress, achievement, and outcomes? How might these activities promote a general duty or aspiration to provide fair opportunities for pupils, students, and apprentices in FE, HE, apprenticeship providers, Sixth Forms, and adult learning centres?

**4** What lessons can be learned from the other nations of the UK and Ireland about how best to support and improve the recruitment, progression, and attainment of learners from a variety of backgrounds in the Welsh tertiary education system?

In this report, we address research questions 1 and 2, using linked Welsh administrative education data and UK 2011 Census data. We examine the extent and nature of participation in tertiary education in Wales considering learners' personal and background characteristics to provide an evidence base from which Medr may inform future strategies. Additionally, we consider patterns related to progression from school to Sixth Form, FE, or HE, as well as non-progression, and consider attainment of qualifications. This provides us with greater understanding of current trajectories of learners in tertiary education settings.

# Data and Methods

## **We use Welsh administrative data on pupils and learners in Welsh maintained public schools, Sixth Forms, FE and HE up to 2018/19.**

Data from Sixth Forms and FE colleges are submitted separately to the Welsh Government. Sixth Form data is collected through the Post-16 Data Collection (formerly the Post-16 Pupil Level Annual School Census – or Post-16 PLASC). FE data, including Work-Based Learning (WBL), is recorded through the Lifelong Learner Wales Record (LLWR) data collection. LLWR data are collected on a rolling, 'live' basis, whereas Sixth Form data were provided at multiple census points in a year (Post-16 PLASC data) until 2013/14 and have been collected retrospectively at the end of the academic year in the Post-16 Data Collection since 2013/14. We refer to these Sixth Form datasets as the Post-16 data. Subsequent participation in HE is captured in data from the student records held by the Higher Education Statistics Agency (HESA).

For our analyses, we linked data on successive cohorts of Key Stage 4 learners from the Welsh National Data Collection Pupil Level Annual School Census (NDC PLASC, formerly the National Pupil Database (NPD)) with post-16 data from the Post-16 Data Collection and the LLWR. Linking these administrative records allowed us to identify learners who transitioned into PCET after the end of Key Stage 4. These transitions include those who either remain within a maintained Sixth Form or moved to FE provision, including those registered for WBL (also captured by LLWR). This dataset does not include data on private school or home-schooled learners. Data on private education is limited and not currently accessible at an individual level. There is no centralised, accessible database on home-schooled learners.

In addition to linking between educational datasets, we linked data from the 2011 Census to provide additional information on the personal and family/household characteristics of learners not captured by routinely collected educational records. Among younger learners, the availability of 2011 Census data allows us to consider patterns of entry, exit, and progression through Wales' tertiary education sector by a variety of background characteristics, such as household social class and parental educational attainment<sup>6</sup>, as well as additional personal characteristics that are not contained within the NDC PLASC. Although related to a specific point in time (the 2011 Census being conducted on 27th March 2011), the benefits of linking Census data to provide background information for understanding subsequent outcomes have been clearly established through the UK Census-based Longitudinal Studies<sup>7</sup>.

<sup>6</sup> We utilised administrative de-identified data, made available via the Secure Anonymised Information Linkage Databank (SAIL) (Jones, Ford, Thompson and Lyons, 2019). The research was undertaken with the support of Administrative Data Research Wales (ADR-W) as part of its programme of research on Skills and Employability (ESRC reference number: ES/W012227/1). This work was approved by the SAIL Information Governance Procedure (Project Number 0967). All outputs follow SAIL and HESA disclosure control guidance.

<sup>7</sup> <https://calls.ac.uk>

The analysis herein provides a detailed examination of participation in maintained, publicly funded education, by various equalities characteristics. We conducted a descriptive analysis of the extent of participation in tertiary education using two approaches: a cohort approach and a population approach. The cohort approach allows us to consider the transitions made by successive cohorts of Key Stage 4 pupils through the tertiary education system, focusing on the dynamic transitions made by younger groups of learners. The population approach allows us to examine, albeit in less detail, the characteristics of all learners within the tertiary education system.

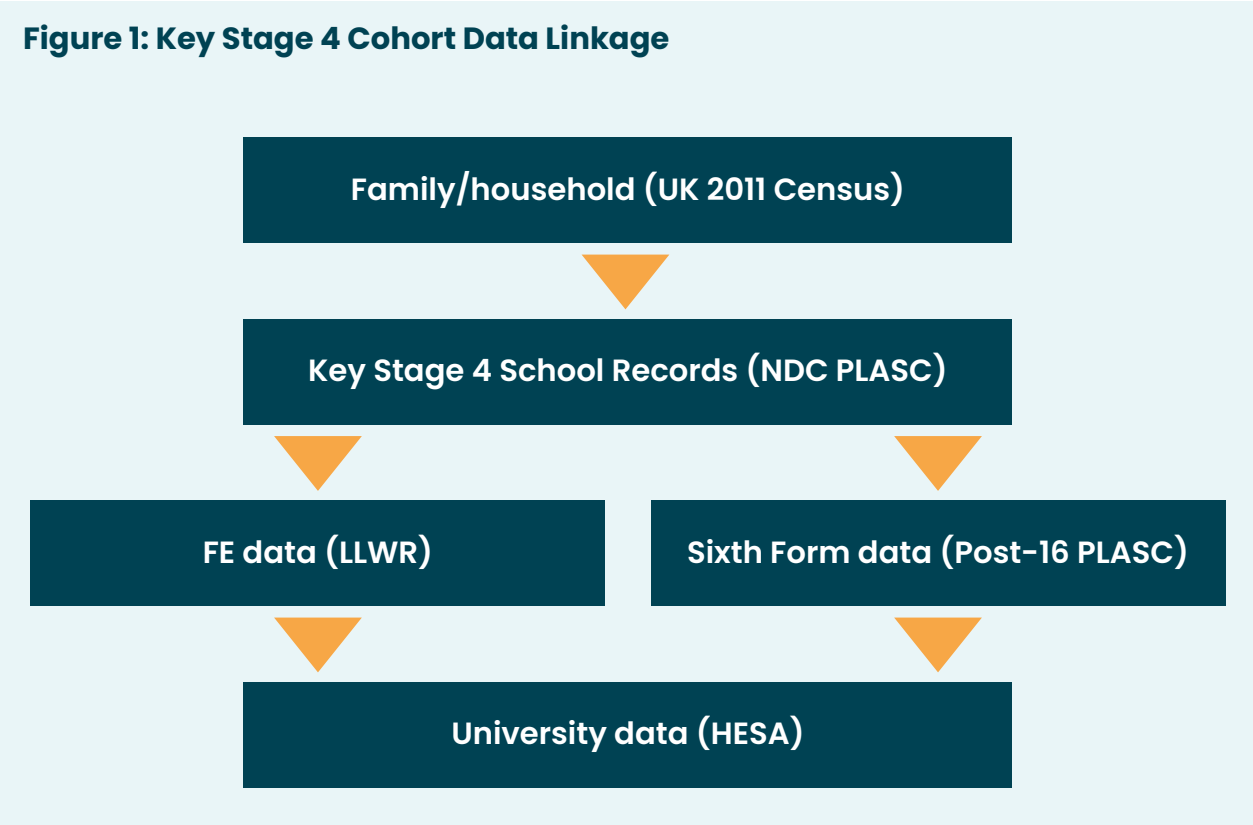
## The Cohort Approach

First, we consider progression from Key Stage 4 (the final year of compulsory schooling in Wales, Year 11) to HE using pooled cohort data. To achieve this, we created a datafile linking pupils' administrative records from Key Stage 4 to post-16 education data from Sixth Form and FE college learner records. The education data was additionally linked to the UK 2011 Census to expand the potential for examination of participation in tertiary education by additional personal, household, and family characteristics that are available for those learners who could be observed as residing in Wales at the time of the 2011 Census. This data was subsequently linked to HE data on students (see Figure 1) for those who progressed to university. We refer to this linked dataset as our 'cohort data'.

The cohort data uses information on learners who completed Key Stage 4 between 2011/12 and 2016/17 in publicly maintained schools. A simplified representation of the cohort's education pathways is displayed in Table 1<sup>8</sup>. Data are limited to Key Stage 4 learners up to 2016/17 so that we can consider longitudinal pathways for five cohorts that could progress into FE and HE within the time period covered by the available data, up to 2018/19. Our final linked dataset contained 196,240 learners across six Key Stage 4 cohorts, 5 of which we follow to HE.

<sup>8</sup> In practice, the pathways of some students may be more complex and could include gap years or additional years spent in Key Stage 5 to resit exams.

**Figure 1: Key Stage 4 Cohort Data Linkage**



**Table 1: Key Stage 4 Cohort Pathways, 2011/12–2016/17**

| Cohort   | Academic Year |         |         |           |           |           |
|----------|---------------|---------|---------|-----------|-----------|-----------|
|          | 2011/12       | 2012/13 | 2013/14 | 2014/15   | 2015/16   | 2016/17   |
| <b>A</b> | Year 11       | Year 12 | Year 13 | HE Year 1 | HE Year 2 | HE Year 3 |
| <b>B</b> | -             | Year 11 | Year 12 | Year 13   | HE Year 1 | HE Year 2 |
| <b>C</b> | -             | -       | Year 11 | Year 12   | Year 13   | HE Year 1 |
| <b>D</b> | -             | -       | -       | Year 11   | Year 12   | Year 13   |
| <b>E</b> | -             | -       | -       | -         | Year 11   | Year 12   |

Note: Year 12 and Year 13 includes both Sixth Forms and FE.

## The Population Approach

Our second approach considers the entire populations of post-16 learners in Sixth Form, FE, and HE. The population data contained records on 80,930 Sixth Form learners, 528,010 FE learners (of which 133,140 were undertaking WBL) and 255,145 HE learners, between 2014/15 and 2018/19.

These records were also linked to the UK 2011 Census to provide further personal demographic and background information. Here, we did not limit our analysis to younger learners that we can trace through the tertiary education system (as in the cohort data). Instead, the population analysis also includes adult learners and learners who have had breaks in their education journey. Other groups in the population analysis include learners who move into the post-compulsory education system from non-state funded education. This dataset is referred to as the 'population data' herein.

## Presentation of Results

We use descriptive analysis to explore progression through tertiary education by various characteristics<sup>9</sup>. In terms of progression from Key Stage 4 to Sixth Form and FE settings, the following key measures were of interest:

### a. Enrolment at Sixth Form;

### b. Enrolment at FE;

It might be assumed that enrolment in Sixth Form indicates that learners are

### c. Enrolment in both FE and Sixth Form; and

### d. Not in Sixth Form or FE.

more likely to be pursuing qualifications that lead to continued study into HE and are likely to be studying for A levels. Conversely, enrolment in FE might be taken as an indicator that a more 'vocational' pathway is being followed. However, in Wales, a large proportion of A level delivery occurs within FE colleges. This is largely due to the adoption of a model in which all 16-19-year-old education provision is delivered by the local FE college in some local areas of Wales, such as Merthyr Tydfil.

<sup>9</sup> All data must be presented in line with disclosure control agreements, as such the reported learner numbers were rounded in line with HESA requirements.

Some learners are observed in both Sixth Form and FE. This may be necessary to undertake different subjects at different institutions depending on the learning offer. Alternatively, it may be that learners have moved between institution types within a particular year. The final category, 'not in Sixth Form or FE' indicates that it has not been possible to identify a Year 11 pupil as subsequently appearing in either the Sixth Form or FE data. This group could include pupils classified as NEET ('Not in Education, Employment or training'), learners who undertake PCET in England, those who moved into independent provision, or those who left Wales altogether. We refer to this group as Not in Education or Training in the Welsh maintained tertiary sector (NET). This group of pupils could therefore be very mixed in terms of their continued engagement in education or training. Empirical analysis will reveal the predominant characteristics of this group.

The type of programmes studied by learners, usually between the ages of 16 and 19, are varied. We largely distinguish the following four main categories of programme<sup>10</sup>:

**a. Studying AS levels;**

**b. Studying A levels<sup>11</sup>;**

**c. Studying vocational programmes; and**

**d. Undertaking WBL.**

WBL encompasses training and apprenticeship qualifications at a range of levels. At the lower end of the qualification spectrum, engagement training provides entry-level programmes that are often designed to engage those with low prior attainment. At the higher end, higher apprenticeships may be at Skill Level 4 or 5, offering specialised training equivalent to a foundation degree or Higher National Diploma (HND). Due to the low number of younger learners undertaking the highest levels of apprenticeships, within the cohort analysis it was necessary to combine all apprenticeships undertaken at Level 3 or above. However, the population analysis allows us to separately examine the characteristics of those undertaking the full range of apprenticeship qualifications.

<sup>10</sup> We do not separately distinguish the Welsh Baccalaureate within our analyses. The Welsh Bac is offered to all post-16 learners in schools and further education colleges at a level which is appropriate for them and is often undertaken alongside other academic or vocational qualifications. The characteristics of learners who undertake either academic or vocational qualifications are therefore more distinctive than those who undertake the Welsh Baccalaureate. We therefore do not include grades awarded in relation to the Skills Challenge Certificate as contributing towards our measures of A-Level attainment. The treatment of the Welsh Bac in terms of the awarding of grades also changed during the period covered by our analyses, limiting the opportunity to combine data over several years.

<sup>11</sup> We have used the classifications recorded in the education data for AS and A levels separately. We have not grouped these records into one category as some learners may be registered only for an AS level.

Participation in Adult Community Learning (ACL) was not examined separately within the cohort analysis due to the age and educational trajectories of these younger learners. In the cohort approach, ACL courses are combined within a broader category of 'Other' courses undertaken at FE colleges that do not fall under the categories of academic, vocational, or WBL. ACL learners are, however, separately identified within the population analysis, which includes the complete age range of FE learners.

The analysis also examines engagement in HE. For the cohort analysis, as shown in Table 1, due to the availability of data, we could only examine progression to HE for those learners who were in their final year of compulsory education (Key Stage 4 in Year 11) during 2011/12 (referred to as Cohort A). That in itself requires that learners progress through Sixth Form or FE and onto HE without any interruptions to their learning (e.g., having to re-sit examinations or having a gap year) and to undertake a degree programme that can be completed within three years. Therefore, we did not consider outcomes from participation in HE within the cohort analysis due to the incomplete picture it would provide.

We consider the attainment of learners at Sixth Form, FE, and HE within our population analysis. For Sixth Form and FE learners, we examined the points achieved at AS and A level<sup>13</sup> and the proportion achieving vocational and other qualifications at level 3 or above. For those undertaking WBL, we looked at pass rates for engagement training, Level 1 training, foundation apprenticeships, apprenticeships, and higher apprenticeships. Among HE learners, we considered attainment of a degree at first or upper second classification at the undergraduate level and the percentage who achieved a pass rate at the post-graduate level.

For the cohort analysis, where we can draw upon data held on the characteristics within the NDC PLASC at Key Stage 4, we are able to consider variation in participation in tertiary education by gender, Free School Meal status (FSM), Welsh language skills, ethnicity, and Special Education Needs (SEN). We acknowledge that SEN is no longer the preferred terminology and has been replaced by Additional Learning Needs (ALN)<sup>12</sup>. However, we continue to use SEN in this report to accurately reflect the data used, which was collected before these changes.

<sup>12</sup> Information on the change to ALN change be found at: <https://www.gov.wales/sites/default/files/publications/2020-03/additional-learning-needs-aln-transformation-programme-v3.pdf>.

<sup>13</sup> We allocate points to A-Level grades as follows: A\*=300, A=270, B=240, C=210, D=180, E=150. We assume that AS Levels attract half the value of these points.



We also draw upon information about the characteristics of these pupils collected from the UK 2011 Census conducted on 27th March 2011. These measures include household deprivation status (a derived count of household deprivation across education, employment, housing, and health deprivation domains)<sup>14</sup>; the socio-economic position of the household as captured by the National Statistics Socio-economic Classification (NS-SEC) assigned to the head of the household<sup>15</sup>; parental occupation as captured by the Standard Occupational Classification (SOC); and parental/carer educational attainment.

Additional personal characteristics collected by the Census include age<sup>16</sup>, Welsh language ability, disability, country of origin, religion, and caring responsibilities. In relation to caring responsibilities, respondents to the Census are asked if they look after family members due to problems related to ill-health, disability, or old age. Due to the relatively small number of young learners with caring responsibilities, this issue is only examined within the population analysis.

In undertaking this report, we endeavoured to include all characteristics stipulated in the Welsh Government's research questions. One important omission is sexuality which is not collected in the education data or in the 2011 Census<sup>17</sup>.

<sup>14</sup> The UK 2011 Census contains four measures of deprivation: education, employment, housing, and health; as well as a count of these measures. These are created by the ONS Census teams. Information on these measures can be found within '2011 Census Variable and Classification Information: Part 4' here: <https://webarchive.nationalarchives.gov.uk/ukgwa/20160105160709/http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/information-by-variable/part-4--derived-variables.pdf> We use the count variable in the Cohort analysis and the separate measures for the population analysis.

<sup>15</sup> Referred to as the Household Reference Person by the ONS. This is the person who is responsible for the property. In the case of joint householders, this defaults to the person with the highest earnings. For younger learners, socio-economic status is therefore likely to reflect the employment position of their parent(s) and, predominantly, their fathers.

<sup>16</sup> The Census records age as of March 2011. We use this to derive age during the March prior to which learners are observed undertaking courses within tertiary education.

<sup>17</sup> Sexual orientation is collected by HESA data. However, in the context of this report, we would be unable to determine how sexual orientation among HE students compares to other parts of the tertiary education sector or the wider population.

# Cohort Analysis

## Progression and non-progression into Sixth Form and FE

Among the pupils in our cohorts, in the year after completing Key Stage 4:

**7%**

were not enrolled in Sixth Form and FE settings in Wales

**33%**

were enrolled in Sixth Form

**50%**

were enrolled in FE (including WBL)

**10%**

had enrolled at both Sixth Form and FE college

These estimates align with statistics for the destinations of 2014/15 Key Stage 4 learners during 2015/16 produced by the Welsh Government<sup>18</sup>. These estimates revealed that the proportion of pupils entering Sixth Form was 42%, while the proportion entering FE and/or WBL was 48% (Welsh Government, 2017). In the following sections, we consider progression and non-progression by various personal and background characteristics.

### Gender

To assess the likelihood of non-progression to PCET after Key Stage 4, we examine the proportion of pupils within certain characteristics who do not progress to Sixth Form or FE settings. Table 2 shows that a slightly higher proportion of male learners (8%) had not progressed to Sixth Form or FE in Wales compared to females (5%), categorising them as 'NET'. A higher proportion of females attended Sixth Form (37%) than males (30%). Conversely, males were more likely to progress to FE (53%) compared to females (47%).

<sup>18</sup> <https://www.gov.wales/sites/default/files/statistics-and-research/2018-12/171214-educational-destinations-key-stage-4-post-16-learners-2014-15-en.pdf>

## **FSM status**

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The difference in NET rates between non-FSM and FSM learners was relatively low (3%), with 9% of FSM pupils not observed within PCET compared to 6% of non-FSM pupils. FSM learners had lower participation rates in Sixth Form (15%) than non-FSM learners (37%). FSM learners were more likely to progress to FE (67%) compared to non-FSM learners (47%). This may reflect variation in available provision between low- and high-income areas of Wales or the types of courses undertaken by those who were eligible for FSM at Key Stage 4.

## **Welsh skills**

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Fluent Welsh speakers had the lowest proportion of learners who were NET (4%). Fluent Welsh speakers were more likely to enrol in Sixth Form (45%) compared to learners with some or no Welsh language skills (30%).

## **SEN status**

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Looking at the various SEN classifications, we see that higher proportions of SEN Statement learners (21%) and Action Plus learners (12%) did not progress into Sixth Form or FE. SEN learners (between 9% and 15%) had the lowest proportions progressing to Sixth Form settings. Learners with SEN diagnoses were more frequently found in FE colleges (between 66% and 73%) compared to learners with no known SEN (46%).

## **Ethnicity**

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Non-British White learners were most likely to be recorded as NET (10%), while Asian learners exhibited the lowest levels of NET (5%). A higher proportion of Asian learners (48%) compared to learners of other ethnicities progressed to Sixth Form. Non-British White learners were least likely to appear in Sixth Form (29%). Enrolment in both Sixth Forms and FE colleges was more prevalent among Black (15%) and Asian learners (14%).

**Table 2: Percentage of Key Stage 4 learners progressing to Sixth Form and FE by personal characteristics 2011/12–2016/17**

|                     | NET | Sixth Form | FE  | Both | N       |
|---------------------|-----|------------|-----|------|---------|
| <b>Gender</b>       |     |            |     |      |         |
| Female              | 5%  | 37%        | 47% | 11%  | 95,860  |
| Male                | 8%  | 30%        | 53% | 9%   | 100,380 |
| <b>FSM status</b>   |     |            |     |      |         |
| FSM                 | 9%  | 15%        | 67% | 9%   | 165,940 |
| Non-FSM             | 6%  | 37%        | 47% | 10%  | 30,300  |
| <b>Welsh skills</b> |     |            |     |      |         |
| Welsh fluent        | 4%  | 45%        | 40% | 11%  | 30,805  |
| Some Welsh          | 7%  | 30%        | 54% | 9%   | 76,470  |
| No Welsh            | 6%  | 30%        | 55% | 9%   | 76,400  |
| Not known           | 9%  | 51%        | 20% | 19%  | 12,565  |
| <b>Ethnicity</b>    |     |            |     |      |         |
| White British       | 7%  | 32%        | 53% | 9%   | 173,915 |
| White Other         | 10% | 29%        | 54% | 7%   | 3,490   |
| Asian               | 5%  | 48%        | 33% | 14%  | 3,555   |
| Black               | 8%  | 38%        | 40% | 15%  | 1,240   |
| Mixed               | 7%  | 36%        | 47% | 10%  | 3,730   |
| Other               | 7%  | 41%        | 39% | 13%  | 1,670   |
| Not known           | 8%  | 32%        | 52% | 8%   | 1,450   |
| <b>SEN status</b>   |     |            |     |      |         |
| No known SEN        | 5%  | 38%        | 46% | 10%  | 145,740 |
| Action              | 8%  | 15%        | 70% | 7%   | 23,325  |
| Action Plus         | 12% | 9%         | 73% | 6%   | 13,590  |
| Statemented         | 21% | 9%         | 66% | 4%   | 6,395   |
| <b>All</b>          | 7%  | 33%        | 50% | 10%  | 196,240 |

**Table 3 shows the progression of Key Stage 4 learners to PCET by socio-economic characteristics derived from the 2011 Census.**

## **Deprivation**

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The proportion of learners reported as NET was higher among those who in 2011 were living in households experiencing multiple forms of deprivation. The non-progression rate to PCET was estimated to be twice as high among learners who were living in households characterised by each of the four types of deprivation (10%) compared to those who lived in non-deprived households (5%). The most deprived learners were more likely to progress to FE (66% for three dimensions and 69% for four dimensions) rather than Sixth Form (13% and 16% for three and four dimensions respectively). Progression to Sixth Form was higher among learners who were not recorded as living in deprived households during the 2011 Census (43%) and lowest among those living in households deprived across all four dimensions (13%).

## **Socio-economic status**

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The relationship between socio-economic background and non-progression to PCET is less pronounced. However, those with parents or carers who have never worked or are long term unemployed (NS-SEC 8) had the highest NET rate at 10%. The rate of progression to FE was higher among those from lower socio-economic groups (NS-SEC 6, 7, and 8). These higher rates are likely influenced by the association between socio-economic disadvantage and lower qualification attainment at Key Stage 4. Lower attainment levels impact the ability of learners from more disadvantaged households to pursue academic qualifications within Sixth Form settings. Participation rates in Sixth Form were higher among those from higher socio-economic backgrounds.

## **Parental occupation**

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Learners from households where parents are employed in higher occupational roles, such as managers (44%), professionals (53%) and associate professionals (45%) had the highest rates of Sixth Form participation. Participation rates in Sixth Form declined among learners whose parents hold occupations associated with lower skill levels and educational attainment. Conversely, participation rates in FE were higher among learners whose parents were employed in lower-skilled occupations.

## **Educational background**

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Learners from households where parents had higher educational attainment (Level 4 and above) had higher rates of progression to Sixth Form (50%).

**Table 3: Percentage of Key Stage 4 learners progressing to Sixth Form and FE by Census derived socio-economic characteristics: 2011/12–2016/17**

|  | NET    | Sixth Form | FE     | Both   | N       |
|--|--------|------------|--------|--------|---------|
| <b>Deprivation measure</b>                   |        |            |        |        |         |
| No deprivation                               | 5%     | 43%        | 42%    | 10%    | 85,955  |
| Deprived in 1 dimension                      | 6%     | 30%        | 53%    | 10%    | 48,395  |
| Deprived in 2 dimensions                     | 7%     | 22%        | 60%    | 10%    | 23,450  |
| Deprived in 3 dimensions                     | 9%     | 16%        | 66%    | 10%    | 8,775   |
| Deprived in 4 dimensions                     | 10%    | 13%        | 69%    | 8%     | 905     |
| <b>Socio-economic status (NS-SEC)</b>        |        |            |        |        |         |
| 1.1: Higher managerial                       | 5%     | 50%        | 35%    | 9%     | 4,820   |
| 1.2: Higher professional                     | 6%     | 56%        | 29%    | 9%     | 13,070  |
| 2: Lower managerial/professional             | 5%     | 45%        | 40%    | 10%    | 36,665  |
| 3: Intermediate occupations                  | 4%     | 36%        | 49%    | 11%    | 16,720  |
| 4: Small employers/own account               | 8%     | 36%        | 46%    | 10%    | 22,445  |
| 5: Lower supervisory/technical               | 5%     | 32%        | 52%    | 10%    | 7,880   |
| 6: Semi routine occupations                  | 6%     | 25%        | 59%    | 10%    | 24,745  |
| 7: Routine occupation                        | 7%     | 23%        | 61%    | 10%    | 21,710  |
| 8: Never worked/l.t. unemployed              | 10%    | 15%        | 66%    | 9%     | 8,285   |
| 9: Students                                  | 7%     | 28%        | 54%    | 11%    | 2,360   |
| <b>Parental Occupation (SOC Major Group)</b> |        |            |        |        |         |
| 1: Managers                                  | 6%     | 44%        | 39%    | 10%    | 17,195  |
| 2: Professionals                             | 5%     | 53%        | 32%    | 9%     | 23,315  |
| 3: Assoc Professional                        | 4%     | 45%        | 40%    | 10%    | 16,085  |
| 4: Administrative                            | 4%     | 37%        | 48%    | 11%    | 12,085  |
| 5: Skilled Trades                            | 6%     | 33%        | 50%    | 10%    | 27,170  |
| 6: Personal Service                          | 6%     | 28%        | 55%    | 10%    | 15,855  |
| 7: Sales                                     | 6%     | 25%        | 59%    | 10%    | 10,270  |
| 8: Operatives                                | 6%     | 27%        | 57%    | 10%    | 18,010  |
| 9: Elementary                                | 7%     | 23%        | 60%    | 10%    | 20,485  |
| Missing                                      | 12%    | 13%        | 66%    | 9%     | 4,315   |
| <b>Parental education</b>                    |        |            |        |        |         |
| None   | 9%     | 19%        | 63%    | 9%     | 26,895  |
| Level 1                                      | 6%     | 28%        | 55%    | 10%    | 29,205  |
| Level 2                                      | 5%     | 32%        | 52%    | 10%    | 27,690  |
| Apprenticeship                               | 5%     | 35%        | 49%    | 10%    | 6,720   |
| Level 3                                      | 5%     | 37%        | 48%    | 11%    | 21,395  |
| Level 4+                                     | 5%     | 50%        | 35%    | 10%    | 46,185  |
| Other  | 6%     | 31%        | 52%    | 11%    | 6,700   |
| <b>All</b>                                   | 6%     | 35%        | 49%    | 10%    | 100%    |
| <b>N</b>                                     | 10,025 | 58,425     | 82,230 | 16,805 | 167,485 |

**Table 4 shows progression rates to PCET by other personal and background characteristics derived from the 2011 Census.**

## **Parental Welsh speaking**

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Progression to FE was highest among learners with no Welsh-speaking parents or guardians. However, learners in Welsh-speaking households were equally likely to attend FE or Sixth Form (both 43%).

## **Disability**

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Learners recorded as having a long-term disability or health problems that limited their activities a lot had higher rates of non-progression to either Sixth Form or FE (19%) compared to learners without such conditions (6%). This is driven by the lower proportion of disabled learners who subsequently attend Sixth Form (16%) following Key Stage 4, as participation rates in FE (58%) are similar to those in the cohort as a whole in FE.

## **Country of origin**

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Learners born overseas were more likely to enter Sixth Form (40%) than those born in the UK (35%). However, those born overseas were less likely to enter FE (42%) compared to those born in the UK (49%).

## **Religion**

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Learners with a Christian (39%) or other religious background (47%) were more likely to attend Sixth Form compared to those from non-religious backgrounds (28%). Learners from non-religious backgrounds were more likely to attend FE (55%) compared to those of a Christian (45%) or other religious background (32%).

**Table 4: Percentage of Key Stage 4 learners progressing to Sixth Form and FE by other personal and background characteristics: 2011/12–2016/17**

|                            | NET    | Sixth Form | FE     | Both   | N       |
|----------------------------|--------|------------|--------|--------|---------|
| <b>Household Welsh</b>     |        |            |        |        |         |
| No Welsh Speaking Parents  | 6%     | 33%        | 51%    | 10%    | 132,010 |
| One Welsh Speaking Parent  | 5%     | 45%        | 40%    | 10%    | 16,945  |
| Two Welsh Speaking Parents | 4%     | 43%        | 43%    | 10%    | 15,755  |
| <b>Disability</b>          |        |            |        |        |         |
| Limited a lot              | 19%    | 16%        | 58%    | 7%     | 2,790   |
| Limited a little           | 9%     | 22%        | 59%    | 10%    | 5,555   |
| Not limited                | 6%     | 36%        | 49%    | 10%    | 159,150 |
| <b>Country of origin</b>   |        |            |        |        |         |
| UK                         | 6%     | 35%        | 49%    | 10%    | 162,455 |
| Non-UK                     | 7%     | 40%        | 42%    | 11%    | 5,040   |
| <b>Religion</b>            |        |            |        |        |         |
| No religion                | 7%     | 28%        | 55%    | 10%    | 64,720  |
| Christian                  | 6%     | 39%        | 45%    | 10%    | 86,820  |
| Non-Christian religion     | 5%     | 47%        | 32%    | 16%    | 4,195   |
| Not stated                 | 7%     | 33%        | 50%    | 10%    | 11,755  |
| <b>All</b>                 | 6%     | 35%        | 49%    | 10%    | 100%    |
| <b>N</b>                   | 10,025 | 58,425     | 82,230 | 16,805 | 167,485 |



# Type of programme across Sixth Form and FE

This section considers variation in the type of programmes that were being studied by learners, whether in Sixth Form or in FE during Years 12 and 13.

There is huge variety in the programmes and activities that can be undertaken by learners in Sixth Form and FE. To simplify our analysis, we examine the characteristics of those undertaking AS and A levels, vocational qualifications, and WBL. Learners could be enrolled across multiple programme types.

For our cohort that progressed to Sixth Form or FE between 2011/12-2016/17:

**43%**

enrolled on AS level programmes

**30%**

enrolled on A level programmes<sup>19</sup>

**52%**

enrolled on vocational learning programmes

**20%**

enrolled on WBL programmes

**Table 5 shows patterns of progression across various personal characteristics as measured at Key Stage 4.**

## Gender

In terms of gender, enrolling in A level courses was more common for females (49%) than males (37%). Vocational qualifications and WBL were both more common among males (56% and 23%) than females (49% and 18%).

## FSM status

Analysis reveals that non-FSM learners were much more likely to progress to AS levels (47%) and A levels (34%) than FSM learners (19% and 11% respectively). Differences were also apparent in enrolment on vocational programmes, which were higher for FSM learners (65%) compared to non-FSM learners (50%). Higher participation in WBL was also noted for FSM learners (31%) compared to non-FSM learners (18%).

<sup>19</sup> The combination of enrolment on AS and/or A level courses raises the percentage studying at AS and A level to 45%. The results for this combined group bear more similarity to the AS level figures than the A level figures. However, we kept the records separate so as not to conflate those who only study for an AS level with those studying for full A levels. Learners may be double counted across these groups, and other groups within the analysis.

## Welsh skills

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In terms of Welsh language skills, patterns were broadly similar across groups, though fluent Welsh-speaking learners were more likely to progress to AS level (48%) compared to those with some Welsh skills (40%) or those who were unable to speak Welsh (41%). Participation of Key Stage 4 learners who were fluent in Welsh was lower for vocational (48%) and WBL programmes (17%) than for their non-Welsh-speaking counterparts (54% and 22% respectively).

## Ethnicity

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Across ethnicity categories, learners from White-British backgrounds were least likely to progress to AS levels (around 40%) and A levels (less than 30%). However, these learners were more likely to progress to vocational qualifications (over 50%) and WBL (21%).

## SEN status

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Learners with a known SEN status were more likely to be enrolled in vocational programmes (over 60%) and WBL (between 23 and 36% depending on the nature of SEN). SEN learners had the lowest overall participation rates.

**Table 5: Percentage of Key Stage 4 learners' PCET programme type by personal characteristics, 2011/12–2016/17**

|                     | AS level   | A level    | Vocational | WBL        | N              |
|---------------------|------------|------------|------------|------------|----------------|
| <b>Gender</b>       |            |            |            |            |                |
| Female              | 49%        | 36%        | 49%        | 18%        | 95,860         |
| Male                | 37%        | 25%        | 56%        | 23%        | 100,380        |
| <b>FSM status</b>   |            |            |            |            |                |
| FSM                 | 19%        | 11%        | 65%        | 31%        | 165,940        |
| Non-FSM             | 47%        | 34%        | 50%        | 18%        | 30,300         |
| <b>Welsh skills</b> |            |            |            |            |                |
| Welsh fluent        | 48%        | 38%        | 49%        | 17%        | 30,805         |
| Some Welsh          | 40%        | 27%        | 55%        | 21%        | 76,470         |
| No Welsh            | 41%        | 28%        | 54%        | 22%        | 76,400         |
| Not known           | 54%        | 46%        | 41%        | 17%        | 12,565         |
| <b>Ethnicity</b>    |            |            |            |            |                |
| White British       | 40%        | 28%        | 54%        | 21%        | 173,915        |
| White Other         | 41%        | 29%        | 49%        | 13%        | 3,490          |
| Asian               | 63%        | 40%        | 41%        | 8%         | 3,555          |
| Black               | 52%        | 33%        | 49%        | 10%        | 1,240          |
| Mixed               | 50%        | 34%        | 46%        | 15%        | 3,730          |
| Other               | 57%        | 38%        | 44%        | 7%         | 1,670          |
| Not known           | 44%        | 35%        | 49%        | 18%        | 1,450          |
| <b>SEN status</b>   |            |            |            |            |                |
| No known SEN status | 49%        | 35%        | 49%        | 17%        | 145,740        |
| Action              | 17%        | 11%        | 69%        | 31%        | 23,325         |
| Action Plus         | 12%        | 7%         | 65%        | 36%        | 13,590         |
| Statemented         | 9%         | 6%         | 62%        | 23%        | 6,395          |
| <b>All</b>          | <b>43%</b> | <b>30%</b> | <b>52%</b> | <b>20%</b> | <b>196,240</b> |

## Census derived socio-economic characteristics

Table 6 shows the stark patterns that exist in terms of progression to different types of learning programmes by deprivation and socio-economic status.

### Deprivation

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Learners living in households experiencing multiple forms of deprivation were more likely to be enrolled in vocational or WBL programmes. For example, among learners from non-deprived backgrounds, 16% were subsequently enrolled in WBL courses. This is approximately half the rate observed among learners living in households classified as experiencing three or four forms of deprivation.

### Socio-economic status

---

Learners from higher socio-economic backgrounds exhibit higher rates of participation in AS and A level programmes and lower rates of progression to WBL programmes. The participation gap is 40% between the least and most deprived learners studying for AS levels. Among learners residing in households where the household head was classified as Higher Managerial (NS-SEC 1.1), 62% progressed to A levels. Among those living in households where the head was long-term unemployed or had never worked, only 19% progressed to A levels.

### Parental occupation

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Learners in households where parents and guardians were employed in occupations characterised by higher levels of skills and educational attainment were more likely to undertake AS levels (56% for SOC Major Group 1 and 66% for SOC Major Group 2) and less likely to undertake vocational qualifications (42% for SOC Major Group 1 and 34% for SOC Major Group 2) or WBL (14% for SOC Major Group 1 and 10% for SOC Major Group 2).

### Parental education

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As with occupational background, learners whose parents/guardians have higher levels of educational attainment were more likely to undertake AS levels and less likely to undertake vocational qualifications or WBL. Less than one in four learners (23%) whose parents were recorded as having no qualifications progressed to AS levels, compared to 63% of those whose parents had attained a qualification at Level 4 or above.

**Table 6: Percentage of Key Stage 4 learners' PCET programme type by Census derived socio-economic characteristics, 2011/12–2016/17**

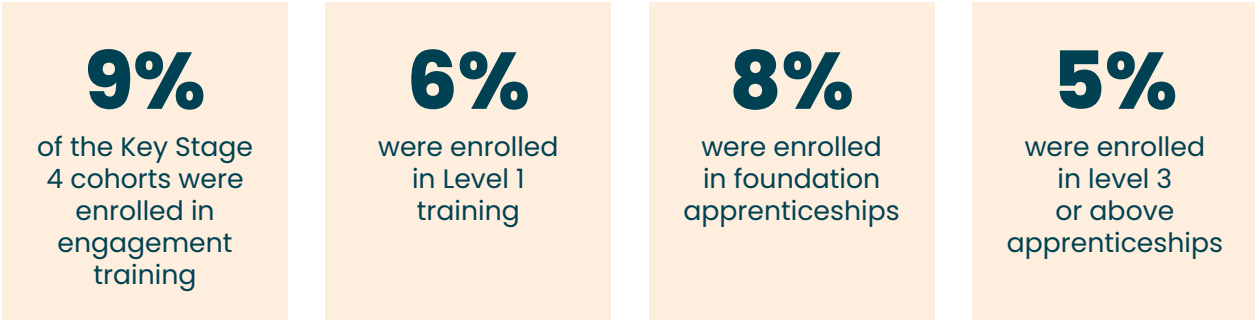
|  | AS level   | A level    | Vocational | WBL        | N              |
|--|------------|------------|------------|------------|----------------|
| <b>Deprivation measure</b>                   |            |            |            |            |                |
| No deprivation                               | 54%        | 41%        | 45%        | 16%        | 85,960         |
| Deprived in 1 dimension                      | 39%        | 27%        | 56%        | 22%        | 48,395         |
| Deprived in 2 dimensions                     | 28%        | 19%        | 62%        | 26%        | 23,450         |
| Deprived in 3 dimensions                     | 20%        | 13%        | 67%        | 31%        | 8,780          |
| Deprived in 4 dimensions                     | 14%        | 8%         | 67%        | 34%        | 905            |
| <b>Socio-economic status (NS-SEC)</b>        |            |            |            |            |                |
| 1.1: Higher managerial                       | 5%         | 50%        | 35%        | 9%         | 4,820          |
| 1.2: Higher professional                     | 6%         | 56%        | 29%        | 9%         | 13,070         |
| 2: Lower managerial/professional             | 5%         | 45%        | 40%        | 10%        | 36,665         |
| 3: Intermediate occupations                  | 4%         | 36%        | 49%        | 11%        | 16,720         |
| 4: Small employers/own account               | 8%         | 36%        | 46%        | 10%        | 22,445         |
| 5: Lower supervisory/technical               | 5%         | 32%        | 52%        | 10%        | 7,880          |
| 6: Semi routine occupations                  | 6%         | 25%        | 59%        | 10%        | 24,745         |
| 7: Routine occupation                        | 7%         | 23%        | 61%        | 10%        | 21,710         |
| 8: Never worked/l.t. unemployed              | 10%        | 15%        | 66%        | 9%         | 8,285          |
| 9: Students                                  | 7%         | 28%        | 54%        | 11%        | 2,360          |
| <b>Parental Occupation (SOC Major Group)</b> |            |            |            |            |                |
| 1: Managers                                  | 56%        | 42%        | 42%        | 14%        | 17,195         |
| 2: Professionals                             | 66%        | 52%        | 34%        | 10%        | 23,315         |
| 3: Assoc Professional                        | 58%        | 43%        | 43%        | 14%        | 16,085         |
| 4: Administrative                            | 50%        | 36%        | 50%        | 18%        | 12,085         |
| 5: Skilled Trades                            | 41%        | 29%        | 55%        | 21%        | 27,170         |
| 6: Personal Service                          | 36%        | 24%        | 59%        | 23%        | 15,855         |
| 7: Sales                                     | 33%        | 22%        | 60%        | 24%        | 10,270         |
| 8: Operatives                                | 35%        | 24%        | 61%        | 24%        | 18,010         |
| 9: Elementary                                | 29%        | 19%        | 63%        | 26%        | 20,485         |
| Missing                                      | 16%        | 10%        | 64%        | 33%        | 4,315          |
| <b>Parental education</b>                    |            |            |            |            |                |
| None   | 23%        | 15%        | 64%        | 30%        | 26,895         |
| Level 1                                      | 37%        | 25%        | 59%        | 23%        | 29,205         |
| Level 2                                      | 42%        | 29%        | 56%        | 21%        | 27,690         |
| Apprenticeship                               | 45%        | 33%        | 54%        | 22%        | 6,720          |
| Level 3                                      | 47%        | 34%        | 52%        | 19%        | 21,395         |
| Level 4+                                     | 63%        | 49%        | 37%        | 11%        | 46,185         |
| Other/not known                              | 40%        | 28%        | 57%        | 21%        | 6,700          |
| <b>All</b>                                   | <b>43%</b> | <b>31%</b> | <b>53%</b> | <b>20%</b> | <b>167,495</b> |

# Census derived personal and background characteristics

**Between 18% and 28% of learners with a long-term illness or disability were studying for AS levels compared to 46% of learners without limiting disabilities.**

In terms of other characteristics of learners collected by the 2011 Census, Table 7 shows that those with non-Welsh speaking parents or guardians, those born in the UK, and those with no religion were least likely to progress to AS levels.

From the analysis above, we observe that, overall, 20% of pupils enter WBL during Years 12 and 13. We further explored the activities of WBL learners by breaking this category down into engagement training, Level 1 engagement training, foundation apprenticeships, and Level 3 apprenticeships combined with higher apprenticeships. These classifications represent four key areas of WBL, which are relatively distinct in character and qualification levels.



**Table 7: Percentage of Key Stage 4 learners' CPET programme type by Census derived personal characteristics, 2011/12–2016/17**

|                            | AS level | A level | Vocational | WBL | N       |
|----------------------------|----------|---------|------------|-----|---------|
| <b>Household Welsh</b>     |          |         |            |     |         |
| No Welsh speaking parents  | 43%      | 30%     | 53%        | 21% | 132,010 |
| One Welsh speaking parent  | 52%      | 41%     | 47%        | 16% | 16,945  |
| Two Welsh speaking parents | 48%      | 40%     | 50%        | 17% | 15,755  |
| <b>Disability</b>          |          |         |            |     |         |
| Limited a lot              | 18%      | 11%     | 58%        | 19% | 2,790   |
| Limited a little           | 28%      | 19%     | 62%        | 24% | 5,555   |
| Not limited                | 46%      | 33%     | 51%        | 20% | 159,150 |
| <b>Country of origin</b>   |          |         |            |     |         |
| UK                         | 44%      | 32%     | 52%        | 20% | 162,455 |
| Non-UK                     | 58%      | 41%     | 45%        | 9%  | 5,040   |
| <b>Religion</b>            |          |         |            |     |         |
| No religion                | 36%      | 25%     | 57%        | 24% | 64,720  |
| Christian                  | 50%      | 37%     | 49%        | 17% | 86,820  |
| Non-Christian religion     | 63%      | 42%     | 42%        | 9%  | 4,195   |
| Not stated                 | 42%      | 30%     | 53%        | 20% | 11,755  |
| <b>All</b>                 | 43%      | 31%     | 53%        | 20% | 167,495 |

Table 8 shows the proportion of Key Stage 4 learners who subsequently enrolled in WBL following the completion of compulsory education by various personal characteristics. Male learners, FSM learners and SEN learners had the highest proportions entering engagement training. For example, learners registered for FSM during Key Stage 4 were three times more likely to enter engagement training (21%) during PCET compared to those not eligible for FSM (7%). In terms of SEN, those designated as Action Plus were approximately 5 times more likely to enter engagement training (25%) compared to those not classified as SEN during Key Stage 4. FSM learners and SEN learners similarly had higher proportions entering Level 1 training (for example, 17% in engagement training and 12% in Level 1 training for SEN Action learners compared to 6% and 5% respectively for learners with no known SEN status). These differences do not emerge for either foundation or higher level apprenticeships. Female learners appear to be uniformly less likely to engage in WBL at any level.

**Table 8: Percentage of Key Stage 4 learners' WBL programme type by personal characteristics, 2011/12–2016/17**

|                     | Engagement | Level 1   | Foundation apprentice | Apprentice and higher | N              |
|---------------------|------------|-----------|-----------------------|-----------------------|----------------|
| <b>Gender</b>       |            |           |                       |                       |                |
| Female              | 8%         | 7%        | 7%                    | 3%                    | 95,860         |
| Male                | 10%        | 7%        | 9%                    | 6%                    | 100,380        |
| <b>FSM status</b>   |            |           |                       |                       |                |
| FSM                 | 21%        | 13%       | 8%                    | 3%                    | 165,940        |
| Non-FSM             | 7%         | 5%        | 7%                    | 5%                    | 30,300         |
| <b>Welsh skills</b> |            |           |                       |                       |                |
| Welsh fluent        | 5%         | 4%        | 9%                    | 5%                    | 30,805         |
| Some Welsh          | 10%        | 7%        | 8%                    | 4%                    | 76,470         |
| No Welsh            | 10%        | 8%        | 8%                    | 4%                    | 76,400         |
| Not known           | 7%         | 5%        | 7%                    | 4%                    | 12,565         |
| <b>Ethnicity</b>    |            |           |                       |                       |                |
| White British       | 9%         | 7%        | 9%                    | 5%                    | 173,915        |
| Other / Not known   | 7%         | 5%        | 2%                    | 1%                    | 15,135         |
| <b>SEN status</b>   |            |           |                       |                       |                |
| No known SEN status | 6%         | 5%        | 8%                    | 5%                    | 145,740        |
| Action              | 17%        | 12%       | 11%                   | 5%                    | 23,325         |
| Action Plus         | 25%        | 14%       | 9%                    | 3%                    | 13,590         |
| Statemented         | 18%        | 9%        | 4%                    | 1%                    | 6,395          |
| <b>All</b>          | <b>9%</b>  | <b>6%</b> | <b>8%</b>             | <b>5%</b>             | <b>196,240</b> |

Note: Ethnicity categories have been collapsed due to low numbers.



## Census derived socio-economic characteristics

Table 9 examines differences in the rate of progression to WBL among Key Stage 4 learners related to various socio-economic characteristics as derived from the 2011 Census.

### Deprivation

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Learners from households experiencing multiple forms of deprivation were more likely to enter engagement training, and were less likely to enter either foundation apprenticeships or apprenticeships at Level 3 or above. Twenty per cent of learners experiencing three dimensions of deprivation enrolled in engagement training, rising to 24% for four dimensions.

### Socio-economic status

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Regarding socio-economic status of the household head, those learners from households where the adult had either never worked (22%) or were employed in routine occupations (13%) were particularly more likely to enter either engagement or Level 1 training.

### Parental education

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Entry to engagement training is particularly high among learners whose parents or guardians have low levels of educational attainment compared to the cohort overall. Compared to learners who studied engagement and Level 1 training, there was generally less variation in the progression of learners enrolled in apprenticeships across different measures of socio-economic background.

**Table 9: Percentage of Key Stage 4 learners' WBL programme type by Census derived socio-economic characteristics, 2011/12–2016/17**

|  | Engagement | Level 1   | Foundation<br>apprentice | Apprentice<br>and higher | N              |
|--|------------|-----------|--------------------------|--------------------------|----------------|
| <b>Deprivation measure</b>                   |            |           |                          |                          |                |
| No deprivation                               | 4%         | 4%        | 8%                       | 5%                       | 85,960         |
| Deprived in 1 dimension                      | 10%        | 7%        | 9%                       | 5%                       | 48,395         |
| Deprived in 2 dimensions                     | 14%        | 10%       | 8%                       | 4%                       | 23,450         |
| Deprived in 3 dimensions                     | 20%        | 14%       | 8%                       | 3%                       | 8,780          |
| Deprived in 4 dimensions                     | 24%        | 15%       | 8%                       | 3%                       | 905            |
| <b>Socio-economic status (NS-SEC)</b>        |            |           |                          |                          |                |
| 1.1: Higher managerial                       | 5%         | 50%       | 35%                      | 9%                       | 4,820          |
| 1.2: Higher professional                     | 6%         | 56%       | 29%                      | 9%                       | 13,070         |
| 2: Lower managerial/professional             | 5%         | 45%       | 40%                      | 10%                      | 36,665         |
| 3: Intermediate occupations                  | 4%         | 36%       | 49%                      | 11%                      | 16,720         |
| 4: Small employers/own account               | 8%         | 36%       | 46%                      | 10%                      | 22,445         |
| 5: Lower supervisory/technical               | 5%         | 32%       | 52%                      | 10%                      | 7,880          |
| 6: Semi routine occupations                  | 6%         | 25%       | 59%                      | 10%                      | 24,745         |
| 7: Routine occupation                        | 7%         | 23%       | 61%                      | 10%                      | 21,710         |
| 8: Never worked/l.t. unemployed              | 10%        | 15%       | 66%                      | 9%                       | 8,285          |
| 9: Students                                  | 7%         | 28%       | 54%                      | 11%                      | 2,360          |
| <b>Parental Occupation (SOC Major Group)</b> |            |           |                          |                          |                |
| 1: Managers                                  | 4%         | 3%        | 7%                       | 5%                       | 17,195         |
| 2: Professionals                             | 3%         | 2%        | 4%                       | 3%                       | 23,315         |
| 3: Assoc Professional                        | 4%         | 4%        | 7%                       | 4%                       | 16,085         |
| 4: Administrative                            | 6%         | 5%        | 9%                       | 5%                       | 12,085         |
| 5: Skilled Trades                            | 7%         | 5%        | 11%                      | 6%                       | 27,170         |
| 6: Personal Service                          | 10%        | 8%        | 10%                      | 5%                       | 15,855         |
| 7: Sales                                     | 12%        | 9%        | 9%                       | 4%                       | 10,270         |
| 8: Operatives                                | 10%        | 8%        | 10%                      | 6%                       | 18,010         |
| 9: Elementary                                | 14%        | 10%       | 9%                       | 4%                       | 20,485         |
| Missing                                      | 12%        | 15%       | 8%                       | 2%                       | 4,315          |
| <b>Parental education</b>                    |            |           |                          |                          |                |
| None   | 17%        | 12%       | 9%                       | 4%                       | 26,895         |
| Level 1                                      | 9%         | 8%        | 10%                      | 5%                       | 29,205         |
| Level 2                                      | 8%         | 6%        | 9%                       | 5%                       | 27,690         |
| Apprenticeship                               | 6%         | 5%        | 11%                      | 8%                       | 6,720          |
| Level 3                                      | 6%         | 5%        | 9%                       | 6%                       | 21,395         |
| Level 4+                                     | 3%         | 3%        | 5%                       | 4%                       | 46,185         |
| Other/not known                              | 9%         | 7%        | 9%                       | 5%                       | 6,700          |
| <b>All</b>                                   | <b>8%</b>  | <b>6%</b> | <b>8%</b>                | <b>5%</b>                | <b>167,485</b> |

## Census derived personal and background characteristics

Table 10 shows the high rates of progression among WBL learners with limiting illnesses or disabilities who enrolled in engagement training during PCET (13%).

Learners from non-Christian religious backgrounds appear less likely to engage in all WBL programme types, with participation rates 2% to 6% lower than the cohort average. Those born outside of the UK also appear to be slightly less likely to engage in WBL at any level (2%).

**Table 10: Percentage of Key Stage 4 learners' WBL programme type by Census derived personal characteristics, 2011/12–2016/17**

|                            | Engagement | L1        | Foundation<br>Apprentice | Apprentice<br>and Higher | N              |
|----------------------------|------------|-----------|--------------------------|--------------------------|----------------|
| <b>Household Welsh</b>     |            |           |                          |                          |                |
| No Welsh speaking parents  | 9%         | 7%        | 8%                       | 5%                       | 132,010        |
| One Welsh speaking parent  | 5%         | 3%        | 8%                       | 5%                       | 16,945         |
| Two Welsh speaking parents | 5%         | 3%        | 9%                       | 5%                       | 15,755         |
| <b>Disability</b>          |            |           |                          |                          |                |
| Limited a lot              | 13%        | 8%        | 4%                       | 2%                       | 2,790          |
| Limited a little           | 15%        | 9%        | 7%                       | 3%                       | 5,555          |
| Not limited                | 8%         | 6%        | 8%                       | 5%                       | 159,150        |
| <b>Country of origin</b>   |            |           |                          |                          |                |
| UK                         | 8%         | 6%        | 8%                       | 5%                       | 162,455        |
| Non-UK                     | 5%         | 3%        | 3%                       | 2%                       | 5,040          |
| <b>Religion</b>            |            |           |                          |                          |                |
| No religion                | 12%        | 9%        | 9%                       | 5%                       | 64,720         |
| Christian                  | 6%         | 5%        | 8%                       | 5%                       | 86,820         |
| Non-Christian religion     | 5%         | 4%        | 2%                       | 1%                       | 4,195          |
| Not stated                 | 9%         | 6%        | 9%                       | 5%                       | 11,755         |
| <b>All</b>                 | <b>8%</b>  | <b>6%</b> | <b>8%</b>                | <b>5%</b>                | <b>167,485</b> |

# Withdrawal from Sixth Form and FE

**Having considered which learners enter Sixth Form and FE, and what type of programme they study, we now move to consider the issue of withdrawal from Sixth Form and FE.**

Here, we look at the proportions of learners that did not complete all the programmes for which they enrolled in Year 12, and those for which they enrolled in Year 13.

Learners are often enrolled in many different learning activities, and so it is not uncommon for data to show learners withdrawing from particular activities, for various reasons – educational, personal, logistical, financial, wrong choice of course, and so on. For a more precise measure of withdrawal, we define non-progression as those students who were recorded as having withdrawn from all activities that they were enrolled in during a particular academic year. We examine those who withdrew from all activities for which they enrolled during Year 12 and those who withdrew from all activities for which they enrolled during Year 13. These measures indicate that the learner has withdrawn from study and did not complete the academic year. Within the cohorts:

**6%**

of learners were estimated to have withdrawn from all activities they were enrolled in during Year 12

**5%**

of Year 13 learners, were estimated to have withdrawn from all activities they were enrolled in during Year 13.

**Table 11 shows the proportion of learners who withdraw Sixth Form or FE before completing all programmes in Year 12 and those who withdraw in Year 13 by personal characteristics.**

It demonstrates that there is little variation in withdrawal rates from Sixth Form and FE according to personal characteristics recorded at Key Stage 4. One exception is the higher withdrawal rate exhibited by learners who were FSM-eligible (8%) or who were designated as having SEN Action Plus status (8%). There was less variation across characteristics in Year 13.

Clearer patterns in rates of withdrawal emerge concerning the socio-economic characteristics of learners as collected from the 2011 Census. Analysis presented in Table 12 reveals that there is a slightly increased rate of withdrawal from Sixth Form and FE for learners living in households a) that suffers increased levels of deprivation, b) have a lower socio-economic status, c) have adults working in lower-skilled occupations, and d) have adults with lower levels of educational attainment, particularly where no formal qualifications are recorded.

**Table 11: Percentage of Key Stage 4 learners identified withdrawing from Year 12 or Year 13 by Census derived personal characteristics, 2011/12–2016/17**

|                     | <b>Year 12<br/>Withdrawal</b> | <b>Year 13<br/>Withdrawal</b> | <b>N</b>       |
|---------------------|-------------------------------|-------------------------------|----------------|
| <b>Gender</b>       |                               |                               |                |
| Female              | 6%                            | 5%                            | 95,860         |
| Male                | 6%                            | 5%                            | 100,380        |
| <b>FSM status</b>   |                               |                               |                |
| FSM                 | 8%                            | 6%                            | 165,940        |
| Non-FSM             | 6%                            | 4%                            | 30,300         |
| <b>Welsh skills</b> |                               |                               |                |
| Welsh fluent        | 5%                            | 4%                            | 30,805         |
| Some Welsh          | 6%                            | 5%                            | 76,470         |
| No Welsh            | 7%                            | 5%                            | 76,400         |
| Information refused | 4%                            | 4%                            | 12,565         |
| <b>Ethnicity</b>    |                               |                               |                |
| White British       | 6%                            | 5%                            | 173,915        |
| White Other         | 6%                            | 4%                            | 3,490          |
| Asian               | 6%                            | 4%                            | 3,555          |
| Black               | 5%                            | 4%                            | 1,240          |
| Mixed               | 7%                            | 5%                            | 3,730          |
| Other               | 5%                            | 3%                            | 1,670          |
| Not known           | 5%                            | 4%                            | 1,450          |
| <b>SEN</b>          |                               |                               |                |
| No known SEN status | 6%                            | 5%                            | 145,735        |
| Action              | 7%                            | 6%                            | 23,325         |
| Action Plus         | 8%                            | 6%                            | 13,590         |
| Statemented         | 4%                            | 6%                            | 6,395          |
| <b>All</b>          | <b>6%</b>                     | <b>5%</b>                     | <b>196,240</b> |

**Table 12: Percentage of Key Stage 4 learners identified withdrawing from Year 12 or Year 13 by Census derived socio-economic characteristics, 2011/12–2016/17**

|  | Year 12<br>Withdrawal | Year 13<br>Withdrawal | N              |
|--|-----------------------|-----------------------|----------------|
| <b>Deprivation measure</b>                   |                       |                       |                |
| No deprivation                               | 5%                    | 4%                    | 85,955         |
| Deprived in 1 dimension                      | 6%                    | 5%                    | 48,395         |
| Deprived in 2 dimensions                     | 7%                    | 6%                    | 23,450         |
| Deprived in 3 dimensions                     | 8%                    | 6%                    | 8,775          |
| Deprived in 4 dimensions                     | 8%                    | 7%                    | 905            |
| <b>Socio-economic status (NS-SEC)</b>        |                       |                       |                |
| 1.1: Higher managerial                       | 4%                    | 3%                    | 4,820          |
| 1.2: Higher professional                     | 4%                    | 2%                    | 13,070         |
| 2: Lower managerial/professional             | 5%                    | 4%                    | 36,665         |
| 3: Intermediate occupations                  | 6%                    | 5%                    | 16,720         |
| 4: Small employers/own account               | 6%                    | 4%                    | 22,445         |
| 5: Lower supervisory/technical               | 6%                    | 4%                    | 7,880          |
| 6: Semi routine occupations                  | 7%                    | 6%                    | 24,745         |
| 7: Routine occupation                        | 7%                    | 6%                    | 21,710         |
| 8: Never worked/l.t. unemployed              | 8%                    | 6%                    | 8,285          |
| 9: Students                                  | 8%                    | 5%                    | 2,360          |
| <b>Parental Occupation (SOC Major Group)</b> |                       |                       |                |
| 1: Managers                                  | 5%                    | 4%                    | 17,195         |
| 2: Professionals                             | 4%                    | 3%                    | 23,315         |
| 3: Assoc Professional                        | 6%                    | 4%                    | 16,085         |
| 4: Administrative                            | 6%                    | 5%                    | 12,085         |
| 5: Skilled Trades                            | 6%                    | 4%                    | 27,170         |
| 6: Personal Service                          | 7%                    | 6%                    | 15,855         |
| 7: Sales                                     | 7%                    | 5%                    | 10,270         |
| 8: Operatives                                | 6%                    | 5%                    | 18,010         |
| 9: Elementary                                | 7%                    | 6%                    | 20,485         |
| Missing                                      | 9%                    | 6%                    | 4,315          |
| <b>Educational Background</b>                |                       |                       |                |
| None   | 8%                    | 6%                    | 26,895         |
| Level 1                                      | 6%                    | 5%                    | 29,205         |
| Level 2                                      | 6%                    | 5%                    | 27,690         |
| Apprenticeship                               | 6%                    | 5%                    | 6,720          |
| Level 3                                      | 6%                    | 4%                    | 21,395         |
| Level 4+                                     | 4%                    | 3%                    | 46,185         |
| Other  | 7%                    | 5%                    | 6,700          |
| <b>All</b>                                   | <b>6%</b>             | <b>5%</b>             | <b>167,495</b> |

# Progression to Higher Education

**With the data, it was possible to observe the progression of five cohorts of learners into HE from Key Stage 4 pupils who were in Year 11 between 2011/12 and 2015/16 (see Table 1).**

This amounts to 134,300 learners. It must be acknowledged that entry to HE can be protracted, with some learners taking a gap year or deciding to re-sit their A levels or other examinations. The learners we observe entering HE from these three cohorts will not represent the total population of Key Stage 4 learners that eventually enter HE. This issue is particularly pertinent to our third cohort of pupils (Cohort C) where we could only track the progression of Key Stage 4 learners into HE if they did so immediately following the completion of Key Stage 5.

**Table 13 shows the proportion of our Key Stage 4 cohorts who progress into HE by a selection of personal characteristics as recorded about these learners during Year 11.**

It indicates that the rate of progression to HE is higher among females (46%) than males (34%), non-FSM learners (43%) compared to FSM learners (19%), and learners with no known SEN status (45%) compared to those identified as having SEN (between 19% and 10%). SEN learners and those with FSM status had the lowest proportion of learners progressing to HE. White British learners exhibited the lowest rate of progression to HE (37%) compared to learners of other ethnicities.

**Table 14 shows the progression of Key Stage 4 learners to HE by a selection of other personal and household/family characteristics derived from Census data.**

Learner rates of progression into HE were lower among those recorded in the 2011 Census as having a limiting disability or health problem (18-27%). Progression to HE was also relatively low among those with no Welsh-speaking parents (40%), those born in the UK (41%), and those with no religion (33%).

**Table 13: Percentage of Key Stage 4 learners progressing into HE by personal characteristics, 2011/12–2015/16**

|                       | In HE      | N              |
|-----------------------|------------|----------------|
| <b>Gender</b>         |            |                |
| Female                | 46%        | 65,640         |
| Male                  | 34%        | 68,665         |
| <b>FSM status</b>     |            |                |
| FSM                   | 19%        | 20,600         |
| Non-FSM               | 43%        | 113,700        |
| <b>Welsh language</b> |            |                |
| Welsh fluent          | 48%        | 20,300         |
| Some Welsh            | 36%        | 50,790         |
| No Welsh              | 37%        | 52,800         |
| Information refused   | 52%        | 10,410         |
| <b>Ethnicity</b>      |            |                |
| White British         | 37%        | 117,465        |
| White Other           | 40%        | 2,120          |
| Asian                 | 56%        | 2,420          |
| Black                 | 55%        | 765            |
| Mixed                 | 78%        | 195            |
| Other                 | 45%        | 2,405          |
| Not known             | 58%        | 1,030          |
| <b>SEN</b>            |            |                |
| No known SEN status   | 45%        | 98,320         |
| Action                | 19%        | 15,255         |
| Action Plus           | 14%        | 9,065          |
| Statemented           | 10%        | 4,470          |
| <b>All</b>            | <b>40%</b> | <b>134,300</b> |



**Table 14: Percentage of Key Stage 4 learners progressing into HE by other Census derived characteristics, 2011/12–2015/16**

|                            | In HE      | N              |
|----------------------------|------------|----------------|
| <b>Household Welsh</b>     |            |                |
| No Welsh speaking parents  | 40%        | 91,685         |
| One Welsh speaking parent  | 50%        | 11,305         |
| Two Welsh speaking parents | 48%        | 10,655         |
| <b>Disability</b>          |            |                |
| Limited a lot              | 18%        | 20,030         |
| Limited a little           | 27%        | 3,970          |
| Not limited                | 42%        | 109,675        |
| <b>Country of origin</b>   |            |                |
| UK                         | 41%        | 112,180        |
| Non-UK                     | 56%        | 3,490          |
| <b>Religion</b>            |            |                |
| No religion                | 33%        | 44,860         |
| Christian                  | 47%        | 59,900         |
| Non-Christian religion     | 60%        | 2,785          |
| Not stated                 | 38%        | 8,120          |
| <b>All</b>                 | <b>40%</b> | <b>134,300</b> |

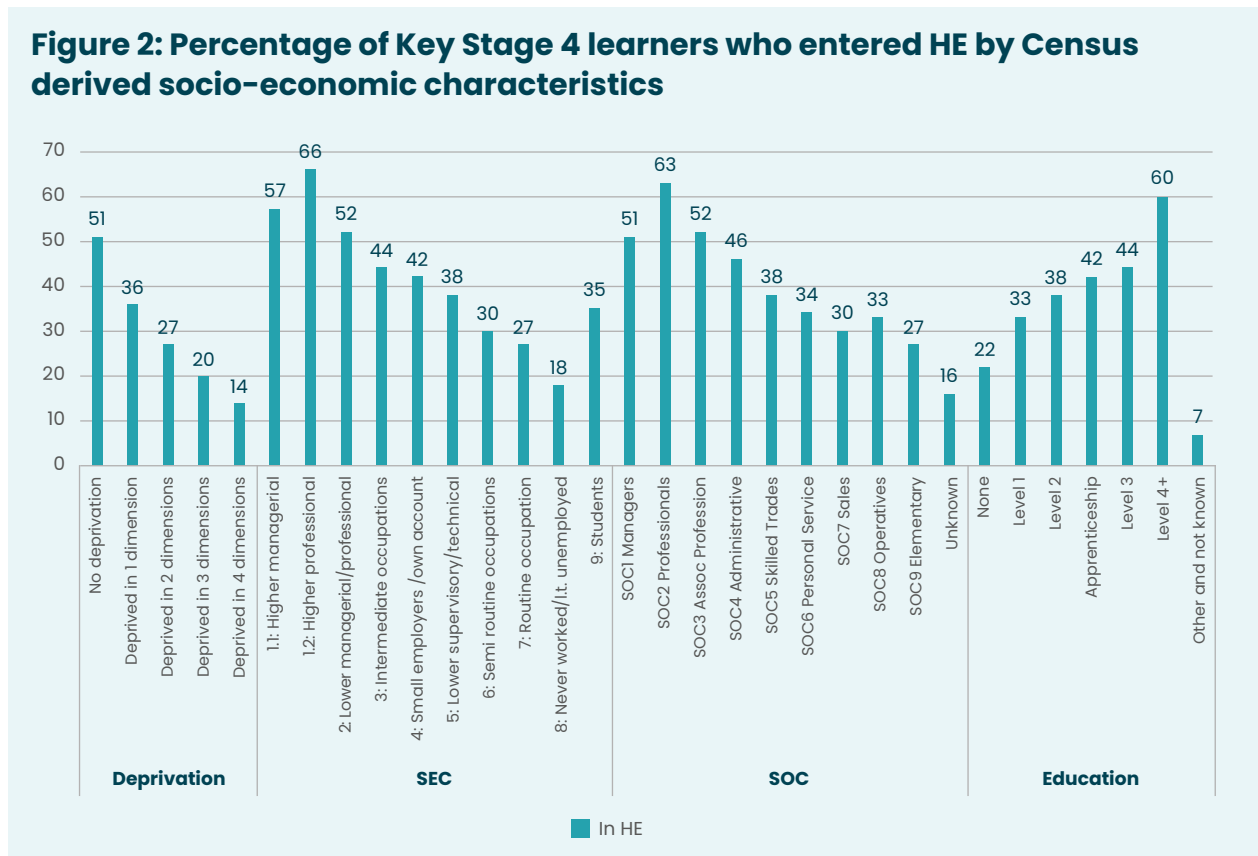
## Census derived socio-economic characteristics

Figure 2 shows that, as with progression into Sixth Form and FE, learners from more deprived households were less likely to progress to HE.

For each measure of socio-economic status, clear gradients emerge showing that learners from more disadvantaged backgrounds are least likely to enter HE.

In terms of deprivation, only 14% of learners who experienced four dimensions of deprivation entered HE, compared to 51% of learners from households not classified as deprived. Regarding the socio-economic status of the household head, only 18% of learners whose parents or guardians had never worked or were long-term unemployed entered HE, compared to 66% of those living in households with adults employed in a higher professional position. Concerning parental occupation, less than a third of learners whose parents were employed in sales occupations (SOC Major Group 7), as operatives (SOC Major Group 8) or in elementary occupations (SOC Major Group 9) progressed into HE. This is compared to over half of learners whose parents were employed in managerial, professional, and associate professional occupations.

**Figure 2: Percentage of Key Stage 4 learners who entered HE by Census derived socio-economic characteristics**



# Population Analysis

**The previous sections of this report have examined the transitions through tertiary education made by successive cohorts of Key Stage 4 learners.**

The benefit of this approach is that it allows us to use information collected about the characteristics of these learners at Key Stage 4 to examine the transitions made by different groups. For example, we have observed differences in the progression of learners based on eligibility for Free School Meals.

However, a limitation of this approach is that the analyses have so far been restricted to the early transitions made by selected cohorts of younger learners who follow a more traditional, uninterrupted, and sequential pathway through the tertiary system. It takes several successive years of data about these learners to build a rich picture of the transitions made through the tertiary system. Consequently, we have not been able to explore the entry to tertiary education made by these cohorts as they get older.

For example, while we have observed learners entering lower skill level WBL courses targeted at 16-18-year-olds, the cohort analysis provides only a partial view of those who undertake more advanced WBL programmes. The role of FE colleges in providing academic, vocational, or recreational courses for older learners has not been examined. Additionally, although we have been able to provide a picture of those who enter HE immediately following Sixth Form and FE, we lack sufficient data to then follow these cohorts through university to examine the qualifications they achieve upon graduation. Entry to postgraduate study has also not been explored.

To address these issues, this section examines the characteristics of the entire population of learners in tertiary education. This population analysis includes all learners who enrolled in Sixth Forms and FE settings (including WBL) from 2011/12 to 2018/19 and for HE learners between 2013/14 and 2018/2019.

When examining the characteristics of different groups within the tertiary sector, this analysis cannot rely on data collected at Key Stage 4, as it is unavailable for many learners within tertiary settings. In terms of examining the characteristics of different groups of learners, we are limited to information collected about them in the 2011 Census. Therefore, the analysis is restricted to learners domiciled in Wales in 2011, whether they lived with their parents or independently. For those on courses generally undertaken by younger learners (e.g., A levels or traineeships) or learners in Sixth Form, the population level analysis will not differ greatly from the cohort analysis results presented earlier. However, differences will emerge in relation to courses or settings that provide opportunities for learners from more diverse age groups.

# Participation in Tertiary Education

In the sections that follow we present findings from the population analysis grouped by different characteristics. Table 15 shows the proportion of learners in different settings by personal characteristics.

## Age

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There is a very wide age range of learners within the tertiary sector. In this analysis, age is extracted from the Census. It is therefore derived as the age of learners during the March prior to the academic year they commenced their learning activity. Learners in Sixth Form settings had a mean age of 16 when studying AS levels or GCSEs, and a mean age of 17 for A level and vocational qualifications. Those observed in FE were estimated to be older, even those who were engaged in qualifications undertaken predominantly by those in Key Stage 5 (e.g. AS/A levels). Those undertaking vocational qualifications were estimated to be on average 29 years old. For WBL, the average age of learners increased with the level of study. In HE, the mean age of undergraduate students was estimated to be 25 years, rising to 33 years among postgraduates. The oldest group of learners were in FE provision engaged in ACL (41 years).

## Gender

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Females constituted a higher proportion of learners across all programme types compared to males (for example, 53% of Sixth Form learners were female, compared to 47% who were male). In FE provision, the proportion of female learners increases to 57%. In WBL, the proportion of female learners increased steadily with the level of study. Women accounted for approximately two-thirds of those undertaking ACL courses in FE. In HE, women accounted for six out ten undergraduate and post-graduate students.

## Disability

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There was relatively little variation in the proportion of learners with a limiting long-term illness or health condition. The exception was among those undertaking non-academic and non-vocational courses within FE provision. A significant proportion of ACL Learners reported being limited by a long-term illness or health condition (21%). This reflects the relatively older age of this group. Nonetheless, this was still lower than the levels of disability observed within the wider population (27%).

## Religion

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Levels of religiosity were highest in Sixth Form settings, with fewer than a third of learners recorded in the Census as having no religion. Levels of religiosity were lowest among those in WBL, particularly at engagement and Level 1 training where over half (53–54%) reported having no religion. In the wider population, 29% were recorded as having no religion.

## Migrant Status

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There was relatively little variation in the proportion of learners recorded as being born overseas across provision types. Compared to the wider population (5%), the proportion of learners who were migrants was highest in the HE sector (8%) and among participants of ACL courses in the FE sector (8%).

## Welsh Speaking

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Learners within the tertiary education sector were more likely to be recorded as having Welsh language skills compared to those not observed in tertiary education (23%). This was particularly true among the younger learners in Sixth Form (62%) and those undertaking AS/A level qualifications in FE provision (50–51%). Welsh language skills were lowest among ACL learners (24%).

## Carers

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The prevalence of caring responsibilities is related to age, so learners in the tertiary education sector generally had lower levels of caring responsibilities than the wider population (14%). The exception was ACL learners, of whom 15% were recorded as having caring responsibilities. This figure will in part reflect the relatively high proportion of ACL learners who were women.

**Table 15: Composition of participation in tertiary education: Selected personal characteristics, 2011/12–2016/17**

|   | Age   | Gender   | Disability    | Religion      | Migrant Status | Welsh Language | Carers   |
|---|-------|----------|---------------|---------------|----------------|----------------|----------|
|   | Years | % Female | % Not limited | % No Religion | % Migrant      | % Welsh Skills | % Carers |
| <b>Sixth Form</b>                         |       |          |               |               |                |                |          |
| AS levels                                 | 16.2  | 54%      | 97%           | 31%           | 4%             | 63%            | 3%       |
| A levels                                  | 17.1  | 56%      | 97%           | 30%           | 4%             | 66%            | 3%       |
| GCSEs                                     | 16.2  | 54%      | 95%           | 34%           | 4%             | 61%            | 3%       |
| Vocational                                | 16.8  | 50%      | 94%           | 35%           | 3%             | 59%            | 3%       |
| Other                                     | 16.7  | 54%      | 97%           | 32%           | 3%             | 66%            | 3%       |
| All Sixth Form                            | 16.2  | 53%      | 96%           | 32%           | 3%             | 62%            | 3%       |
| <b>Further Education</b>                  |       |          |               |               |                |                |          |
| AS levels                                 | 17.7  | 60%      | 96%           | 35%           | 5%             | 50%            | 4%       |
| A levels                                  | 18.4  | 60%      | 96%           | 34%           | 5%             | 51%            | 4%       |
| GCSEs                                     | 20.6  | 55%      | 92%           | 40%           | 5%             | 43%            | 6%       |
| Vocational                                | 28.7  | 56%      | 92%           | 41%           | 4%             | 36%            | 9%       |
| Other: Level                              | 28.5  | 56%      | 89%           | 41%           | 5%             | 35%            | 9%       |
| Other: No Level                           | 32.0  | 57%      | 87%           | 39%           | 5%             | 34%            | 11%      |
| All FE                                    | 31.3  | 57%      | 88%           | 39%           | 5%             | 33%            | 11%      |
| <b>Work Based Learning</b>                |       |          |               |               |                |                |          |
| Engagement training                       | 16.1  | 45%      | 91%           | 54%           | 2%             | 40%            | 3%       |
| Level 1 training                          | 16.5  | 49%      | 93%           | 53%           | 2%             | 41%            | 4%       |
| Foundation Apprenticeship                 | 26.4  | 54%      | 94%           | 44%           | 3%             | 35%            | 8%       |
| Apprenticeship                            | 28.8  | 59%      | 95%           | 41%           | 3%             | 36%            | 9%       |
| Higher Apprenticeship                     | 36.5  | 73%      | 95%           | 39%           | 4%             | 31%            | 13%      |
| All WBL                                   | 27.5  | 56%      | 93%           | 44%           | 3%             | 34%            | 8%       |
| <b>ACL</b>                                | 41.2  | 64%      | 79%           | 37%           | 8%             | 24%            | 15%      |
| <b>All FE + WBL</b>                       | 31.2  | 56%      | 88%           | 40%           | 5%             | 34%            | 10%      |
| <b>Higher Education</b>                   |       |          |               |               |                |                |          |
| Undergraduate                             | 25.0  | 60%      | 95%           | 35%           | 6%             | 49%            | 6%       |
| Postgraduate                              | 32.7  | 62%      | 95%           | 36%           | 9%             | 38%            | 9%       |
| All HE                                    | 26.2  | 60%      | 93%           | 36%           | 8%             | 41%            | 9%       |
| <b>Not Observed in Tertiary Education</b> | 45.8  | 50%      | 73%           | 29%           | 5%             | 23%            | 14%      |

## Census derived socio-economic characteristics

### Socio-Economic Status

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**Table 16 explores the socio-economic backgrounds of learners across the tertiary education sector.**

For this analysis, socio-economic status is measured with respect to the head of the household, the person responsible for the property. For younger learners, socio-economic status will most likely reflect the employment position of their parent(s) and predominantly, their fathers. However, for those living independently at the time of the 2011 Census, the learners themselves or their partners may be the household heads.

Compared to other areas of the tertiary sector, those attending Sixth Forms come from higher socio-economic backgrounds. Learners from managerial and professional households (NS-SEC groups 1 and 2) accounted for a relatively high proportion of Sixth Form learners (44%) compared to those in FE (33%). This is largely driven by the prevalence of AS/A levels within Sixth Forms. Even among AS/A level students, the proportion from managerial and professional households is higher in Sixth Forms (AS levels, 48%; A levels, 50%) than it is in FE (AS levels, 42%; A levels, 45%). Learners from these higher socio-economic backgrounds are underrepresented among vocational learners in FE (27%) compared to those in Sixth Form (35%).

A clear trend emerges in the socio-economic status of participants in WBL. Those from managerial and professional backgrounds account for 16% of engagement training participants, 25% of foundation apprenticeships participants, 32% of apprenticeships participants, and almost half (47%) of higher apprenticeships participants. This suggests that different WBL qualifications are undertaken by distinct groups of people.

Among participants in HE, almost half (49%) come from higher socio-economic backgrounds. These students constitute a considerably higher proportion of postgraduate students (59%) compared to undergraduate students (45%).

**Table 16: Composition of participation in tertiary education: Socio-economic status, 2011/12–2016/17**

|   | NS-SEC of Household Head |     |     |     |     |    |     |     |     |    |
|---|--------------------------|-----|-----|-----|-----|----|-----|-----|-----|----|
|   | 1.1                      | 1.2 | 2   | 3   | 4   | 5  | 6   | 7   | 8   | 9  |
| <b>Sixth Form</b>                         |                          |     |     |     |     |    |     |     |     |    |
| AS levels                                 | 4%                       | 14% | 30% | 11% | 15% | 5% | 11% | 9%  | 2%  | 1% |
| A levels                                  | 5%                       | 14% | 31% | 11% | 14% | 4% | 10% | 8%  | 2%  | 1% |
| GCSEs                                     | 3%                       | 8%  | 24% | 11% | 15% | 5% | 15% | 13% | 4%  | 2% |
| Vocational                                | 3%                       | 8%  | 24% | 11% | 15% | 5% | 15% | 14% | 4%  | 1% |
| Other                                     | 4%                       | 12% | 28% | 11% | 15% | 5% | 12% | 9%  | 2%  | 1% |
| All Sixth Form                            | 4%                       | 12% | 28% | 11% | 14% | 5% | 12% | 10% | 3%  | 1% |
| <b>Further Education</b>                  |                          |     |     |     |     |    |     |     |     |    |
| AS levels                                 | 4%                       | 11% | 28% | 12% | 13% | 5% | 13% | 10% | 3%  | 2% |
| A levels                                  | 4%                       | 12% | 29% | 12% | 13% | 5% | 12% | 9%  | 3%  | 2% |
| GCSEs                                     | 2%                       | 5%  | 20% | 11% | 13% | 5% | 19% | 16% | 6%  | 2% |
| Vocational                                | 2%                       | 5%  | 21% | 11% | 12% | 6% | 19% | 16% | 5%  | 2% |
| Other – Level 3+                          | 2%                       | 6%  | 21% | 11% | 12% | 5% | 19% | 16% | 6%  | 2% |
| Other – No level                          | 2%                       | 6%  | 22% | 11% | 12% | 5% | 18% | 15% | 6%  | 2% |
| All FE                                    | 3%                       | 7%  | 23% | 11% | 12% | 5% | 18% | 15% | 5%  | 2% |
| <b>Work Based Learning</b>                |                          |     |     |     |     |    |     |     |     |    |
| Engagement training                       | 1%                       | 2%  | 13% | 8%  | 10% | 4% | 23% | 22% | 14% | 2% |
| Level 1 training                          | 1%                       | 3%  | 13% | 9%  | 10% | 5% | 23% | 22% | 12% | 2% |
| Foundation Apprenticeship                 | 2%                       | 4%  | 19% | 11% | 13% | 6% | 22% | 18% | 5%  | 1% |
| Apprenticeship                            | 3%                       | 6%  | 23% | 13% | 13% | 6% | 20% | 14% | 3%  | 2% |
| Higher Apprenticeship                     | 4%                       | 8%  | 35% | 12% | 10% | 5% | 14% | 9%  | 1%  | 2% |
| All WBL                                   | 2%                       | 5%  | 21% | 11% | 11% | 6% | 20% | 16% | 6%  | 2% |
| <b>ACL</b>                                | 2%                       | 7%  | 21% | 11% | 11% | 5% | 17% | 16% | 9%  | 2% |
| <b>All FE + WBL</b>                       | 2%                       | 6%  | 22% | 11% | 12% | 5% | 18% | 15% | 6%  | 2% |
| <b>Higher Education</b>                   |                          |     |     |     |     |    |     |     |     |    |
| Undergraduate                             | 4%                       | 12% | 29% | 12% | 13% | 4% | 12% | 9%  | 2%  | 2% |
| Postgraduate                              | 4%                       | 19% | 36% | 9%  | 10% | 3% | 7%  | 5%  | 1%  | 6% |
| All HE                                    | 4%                       | 14% | 31% | 11% | 12% | 4% | 11% | 8%  | 2%  | 5% |
| <b>Not Observed in Tertiary Education</b> | 3%                       | 9%  | 23% | 11% | 14% | 5% | 15% | 16% | 4%  | 1% |



## Deprivation

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Table 17 explores the deprivation backgrounds<sup>20</sup> of learners across the tertiary education sector.

### Education Deprivation

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Derived from Census Data, a household is classified as deprived in education if no one has at least level 2 education (generally achieved during Key Stage 4 and equivalent to GCSE passes at grades A\*-C) and no one aged 16 to 18 years is a full-time student. Levels of educational deprivation are generally lower among learners in the tertiary education sector compared to the wider population (28%) as many may have already achieved a Level 2 qualification at the time of the Census, thereby ensuring that their household was not classified as educationally deprived. For example, levels of educational deprivation at the time of the 2011 Census were lowest among students who were subsequently studying in HE. In some respects, this finding is tautological as many students attending university between 2013 and 2018 held level 2 qualifications at the time of the 2011 Census.

Likewise, levels of educational deprivation were highest among learners undertaking engagement (34%) or Level 1 (31%) training. These figures were approximately three times higher than the levels of educational deprivation observed among those on apprenticeships. However, it should be noted that attaining a Level 2 qualification is a condition of entry to foundation apprenticeships, which limits the household measure of educational deprivation as a predictor of subsequent participation in the tertiary education sector.

### Employment Deprivation

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A household is classified as deprived in employment if any member, not a full-time student, is either unemployed or economically inactive due to long-term sickness or disability. Compared to other areas of the tertiary sector, those attending Sixth Forms were among those least likely to come from employment-deprived backgrounds (12%). This is largely driven by the predominance of AS/A level learners in Sixth Forms, among whom employment deprivation levels were particularly low (AS levels, 11%; A levels, 10%). These levels of employment deprivation were considerably lower than those undertaking similar qualifications in FE provision (AS levels, 15%; A levels, 15%).

<sup>20</sup> Deprivation measures are created by the ONS Census teams. Information on these measures can be found within '2011 Census Variable and Classification Information: Part 4' here: <https://webarchive.nationalarchives.gov.uk/ukgwa/20160105160709/http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-user-guide/information-by-variable/part-4--derived-variables.pdf>

Those from employment-deprived backgrounds were relatively overrepresented among vocational learners in FE (22%) compared to those in Sixth Form (17%) and the wider population (17%).

Almost one in four (23%) of those undertaking WBL programmes were from employment-deprived households. A clear trend can be seen in employment deprivation status according to the level of WBL qualification being undertaken. Levels of employment deprivation were highest among learners undertaking engagement (33%) or Level 1 (31%) training. These figures decline steadily for those undertaking foundation apprenticeships (23%), apprenticeships (18%), and higher apprenticeships (12%).

Among participants in HE, 13% of students came from employment-deprived backgrounds. These students accounted for a higher proportion of postgraduate students (14%) compared to undergraduate students (10%).

## **Housing Deprivation**

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A household is classified as deprived in the housing dimension if the accommodation is either overcrowded, in a shared dwelling, or has no central heating. Compared to other areas of the tertiary sector, those attending Sixth Form were least likely to come from a housing-deprived background (7%). This is largely driven by the prevalence of AS/A level learners within Sixth Forms, where housing deprivation levels were particularly low (6%). Housing deprivation among Sixth Form AS/A level students was 2 percentage points lower than among those undertaking these qualifications in FE (8%). Beyond AS/A level learners, levels of housing deprivation were relatively uniform within FE provision at around 10–12%.

Overall, housing deprivation levels among those undertaking WBL programmes were similar to those observed across FE (10%). However, a trend appears in housing deprivation status according to the level of WBL qualification being undertaken. Housing deprivation levels were highest among learners undertaking engagement (17%) or Level 1 (17%) training. These figures decline steadily for those undertaking foundation apprenticeships (12%), apprenticeships (10%) and higher apprenticeships (7%).

Among participants in HE, only 8% of students came from housing deprived backgrounds.

## Health Deprivation

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A household is classified as deprived in the health dimension if any person has general health that is bad, very bad, or is identified as disabled. People who have assessed their day-to-day activities as limited by long-term physical or mental health conditions or illnesses are considered disabled.

Compared to other areas of the tertiary sector, those attending Sixth Forms were among those least likely to come from a health-deprived background (24%). This is largely driven by the preponderance of AS/A level learners within Sixth Forms, among whom health deprivation levels were relatively low (21-22%). Health deprivation among Sixth Form AS/A level students were approximately 4 percentage points lower than among those undertaking these qualifications in the FE sector (26%). A third of those undertaking GCSEs in FE came from a health deprived background.

Overall, health deprivation levels among those undertaking WBL programmes (29%) were similar to those observed across FE (32%). However, a trend can again be seen in health deprivation status according to the level of WBL qualification being undertaken. Health deprivation was highest among learners undertaking engagement (42%) or Level 1 (39%) training. These figures decline for those undertaking foundation apprenticeships (28%), apprenticeships (24%) and higher apprenticeships (20%).

Some of the highest levels of health deprivation were observed among those engaged in ACL (39%). This will reflect in part the relatively older age of this group of learners.

**Table 17: Composition of participation in tertiary education: Household deprivation, 2011/12-2016/17**

|   | Deprivation Measure (% deprived) |            |         |        |
|---|----------------------------------|------------|---------|--------|
|   | Education                        | Employment | Housing | Health |
| <b>Sixth Form</b>                         |                                  |            |         |        |
| AS levels                                 | 11%                              | 11%        | 6%      | 22%    |
| A levels                                  | 9%                               | 10%        | 6%      | 21%    |
| GCSEs                                     | 18%                              | 16%        | 9%      | 27%    |
| Vocational                                | 17%                              | 17%        | 9%      | 29%    |
| Other                                     | 11%                              | 12%        | 7%      | 24%    |
| All                                       | 12%                              | 12%        | 7%      | 24%    |
| <b>Further Education</b>                  |                                  |            |         |        |
| AS levels                                 | 10%                              | 15%        | 8%      | 26%    |
| A levels                                  | 8%                               | 15%        | 8%      | 26%    |
| GCSEs                                     | 19%                              | 22%        | 12%     | 33%    |
| Vocational                                | 17%                              | 22%        | 11%     | 29%    |
| Other - Level                             | 19%                              | 24%        | 11%     | 32%    |
| Other - No Level                          | 18%                              | 23%        | 10%     | 33%    |
| All                                       | 18%                              | 22%        | 10%     | 32%    |
| <b>Work Based Learning</b>                |                                  |            |         |        |
| Engagement training                       | 34%                              | 33%        | 17%     | 42%    |
| Level 1 training                          | 31%                              | 31%        | 17%     | 39%    |
| Foundation Apprenticeship                 | 18%                              | 23%        | 12%     | 28%    |
| Apprenticeship                            | 11%                              | 18%        | 10%     | 24%    |
| Higher Apprenticeship                     | 5%                               | 12%        | 7%      | 20%    |
| All WBL                                   | 18%                              | 23%        | 11%     | 29%    |
| <b>ACL</b>                                | 25%                              | 27%        | 10%     | 39%    |
| <b>All FE + WBL</b>                       | 18%                              | 22%        | 10%     | 31%    |
| <b>Higher Education</b>                   |                                  |            |         |        |
| Undergraduate                             | 9%                               | 14%        | 7%      | 24%    |
| Postgraduate                              | 2%                               | 10%        | 8%      | 19%    |
| All HE                                    | 6%                               | 13%        | 8%      | 24%    |
| <b>Not Observed in Tertiary Education</b> | 28%                              | 17%        | 7%      | 41%    |

# Attainment in Tertiary Education

**Whilst there has been investment in ‘Widening Participation’ schemes and those aimed at reducing the ‘attainment gap’ for learners, our cohort and population analysis reveals that patterns of participation in tertiary education often relate to learners’ personal and background characteristics.**

This section examines whether the attainment of tertiary education learners also varies by these characteristics.

Our analysis maintains the distinction between Sixth Form settings and FE colleges. Even when considering seemingly identical qualifications, attainment levels were higher in Sixth Form settings. For example, the average A level points<sup>21</sup> obtained by Sixth Form students was 550, compared to 495 points among those in FE. In other areas, the difference in attainment levels is far greater. For example, 78% of vocational learners achieved Level 3 or above in Sixth Form, compared to 48% in FE. This of course reflects the broader range of qualification levels offered in FE compared to Sixth Form.

**Table 18 shows the variation in attainment across personal characteristics by programme and provision type.**

## Gender

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There is limited variation in attainment across all types of learning between males and females. Differences, where they exist, are small, often only a few percentage points. Females outperformed males in Sixth Form, and FE (except for A level points for males) and in WBL (except for engagement and Level 1 training).

## Disability

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The attainment of learners with disabilities is lower compared to those without disabilities across all measures except for WBL. Disabled learners are likely to have a pass rate between 10% and 25% lower than other learners in Sixth Form and FE. This pattern persists in HE, where those with limiting disabilities have fewer first and upper second undergraduate degree classifications, and lower pass rates at the postgraduate level.

<sup>21</sup> We allocate points to A level grades as follows: A\*=300, A=270, B=240, C=210, D=180, E=150. We assume AS level points attract half the value of these points (A\*=150, A=135, B=120, C=105, D=90, E=75). This schema does not relate to UCAS Tariff points.

## Religion

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Learners identified as having a Christian background had slightly higher levels of performance compared to others, though they were not greatly different to those with no religious belief or those who follow other religions. Variation here is limited with only around 5% difference between groups.

## Welsh Language

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Learners with Welsh language skills had higher point scores than those with no such skills at AS and A level by between 5 and 25 points, and had 6-7% higher pass rates in vocational training at either Sixth Form or FE.

## Carers

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Learners with caring responsibilities have similar levels of attainment across programmes in Sixth Form, FE, and WBL, except for lower vocational pass rates. However, there was a noticeable difference in attainment for carers in HE. A smaller proportion of carers (46%), compared to non-carers (61%), achieved an undergraduate degree classification of first or upper second degree. Postgraduate pass rates for carers were also lower (76%) compared to non-carers (80%).

**Table 18: Attainment in tertiary education: Selected personal characteristics, 2011/12–2016/17**

|                                     | Gender |        | Disability  |                  |               | Religion |           |       | Welsh Language |     | Carers |     |     |
|-------------------------------------|--------|--------|-------------|------------------|---------------|----------|-----------|-------|----------------|-----|--------|-----|-----|
|                                     | Male   | Female | Not limited | Limited a little | Limited a lot | None     | Christian | Other | Not stated     | No  | Yes    | No  | Yes |
| <b>Sixth Form</b>                   |        |        |             |                  |               |          |           |       |                |     |        |     |     |
| AS levels (pts)                     | 240    | 275    | 260         | 225              | 205           | 245      | 265       | 260   | 255            | 255 | 260    | 260 | 240 |
| A levels (pts)                      | 530    | 565    | 550         | 490              | 460           | 535      | 555       | 540   | 550            | 535 | 555    | 550 | 540 |
| GCSEs (% C+)                        | 52%    | 48%    | 50%         | 39%              | 40%           | 43%      | 54%       | 45%   | 48%            | 44% | 53%    | 50% | 47% |
| Vocational (level 3+)               | 78%    | 78%    | 80%         | 55%              | 28%           | 76%      | 79%       | 73%   | 77%            | 74% | 80%    | 78% | 77% |
| Other (level 3+)                    | 94%    | 96%    | 95%         | 85%              | 70%           | 94%      | 96%       | 90%   | 95%            | 92% | 96%    | 95% | 94% |
| <b>Further Education</b>            |        |        |             |                  |               |          |           |       |                |     |        |     |     |
| AS levels(pts)                      | 95     | 100    | 100         | 80               | 75            | 95       | 100       | 85    | 95             | 95  | 105    | 100 | 80  |
| A levels (pts)                      | 495    | 490    | 495         | 430              | 375           | 490      | 500       | 455   | 490            | 480 | 505    | 495 | 455 |
| Vocational (level 3+)               | 46%    | 50%    | 50%         | 36%              | 30%           | 46%      | 51%       | 45%   | 47%            | 46% | 53%    | 49% | 45% |
| Other (level 3+)                    | 24%    | 31%    | 30%         | 17%              | 11%           | 26%      | 30%       | 27%   | 27%            | 25% | 34%    | 28% | 23% |
| <b>Work Based Learning (% pass)</b> |        |        |             |                  |               |          |           |       |                |     |        |     |     |
| Engagement training                 | 92%    | 89%    | 90%         | 88%              | 91%           | 90%      | 90%       | 94%   | 91%            | 91% | 90%    | 90% | 89% |
| Level 1 training                    | 83%    | 82%    | 82%         | 83%              | 85%           | 82%      | 83%       | 81%   | 83%            | 82% | 82%    | 82% | 82% |
| Foundation apprenticeship           | 85%    | 87%    | 86%         | 85%              | 86%           | 86%      | 87%       | 88%   | 85%            | 87% | 85%    | 86% | 88% |
| Apprenticeship                      | 88%    | 89%    | 89%         | 87%              | 89%           | 88%      | 89%       | 89%   | 88%            | 89% | 88%    | 89% | 89% |
| Higher apprenticeship               | 79%    | 82%    | 82%         | 81%              | 83%           | 81%      | 82%       | 81%   | 82%            | 82% | 80%    | 81% | 82% |
| <b>Higher Education</b>             |        |        |             |                  |               |          |           |       |                |     |        |     |     |
| Undergraduate (1st/2.1 degree)      | 60%    | 60%    | 61%         | 44%              | 40%           | 60%      | 60%       | 55%   | 61%            | 56% | 63%    | 61% | 46% |
| Postgraduate (pass)                 | 80%    | 80%    | 80%         | 75%              | 69%           | 80%      | 80%       | 79%   | 77%            | 80% | 79%    | 80% | 76% |

In Table 19 we show the variation across Census derived socio-economic characteristics by programme and provision type.

**Table 19: Attainment in tertiary education: Socio-economic status, 2011/12–2016/17**

|                                     | NS-SEC of Household Head |     |     |     |     |     |     |     |     |     |
|-------------------------------------|--------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                                     | 1.1                      | 1.2 | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   |
| <b>Sixth Form</b>                   |                          |     |     |     |     |     |     |     |     |     |
| AS levels (pts)                     | 290                      | 315 | 275 | 250 | 250 | 240 | 225 | 215 | 195 | 225 |
| A levels (pts)                      | 590                      | 640 | 570 | 530 | 540 | 505 | 485 | 470 | 450 | 500 |
| GCSEs (% C+)                        | 61%                      | 67% | 57% | 52% | 50% | 48% | 41% | 40% | 33% | 44% |
| Vocational (level 3+)               | 82%                      | 77% | 80% | 81% | 80% | 79% | 76% | 75% | 63% | 72% |
| Other (level 3+)                    | 97%                      | 97% | 96% | 96% | 96% | 94% | 92% | 91% | 83% | 92% |
| <b>Further Education</b>            |                          |     |     |     |     |     |     |     |     |     |
| AS levels (pts)                     | 120                      | 135 | 110 | 90  | 95  | 90  | 80  | 80  | 70  | 95  |
| A levels (pts)                      | 515                      | 545 | 505 | 485 | 485 | 485 | 465 | 465 | 435 | 485 |
| Vocational (level 3+)               | 58%                      | 58% | 55% | 52% | 51% | 52% | 44% | 41% | 29% | 48% |
| Other (level 3+)                    | 35%                      | 35% | 32% | 31% | 30% | 29% | 26% | 23% | 16% | 29% |
| <b>Work Based Learning (% pass)</b> |                          |     |     |     |     |     |     |     |     |     |
| Engagement training                 | 90%                      | 89% | 90% | 92% | 88% | 92% | 91% | 91% | 90% | 90% |
| Level 1 training                    | 86%                      | 85% | 83% | 81% | 81% | 83% | 82% | 81% | 85% | 84% |
| Foundation Apprenticeship           | 86%                      | 86% | 86% | 86% | 86% | 87% | 87% | 87% | 85% | 84% |
| Apprenticeship                      | 89%                      | 88% | 88% | 89% | 89% | 90% | 89% | 89% | 88% | 85% |
| Higher Apprenticeship               | 84%                      | 84% | 81% | 81% | 81% | 82% | 82% | 81% | 80% | 81% |
| <b>Higher Education</b>             |                          |     |     |     |     |     |     |     |     |     |
| Undergraduate (1st/2.1 degree)      | 66%                      | 62% | 60% | 58% | 62% | 60% | 58% | 57% | 54% | 66% |
| Postgraduate (pass)                 | 79%                      | 80% | 79% | 80% | 79% | 81% | 79% | 80% | 76% | 87% |



## Socio-economic status

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Variation in attainment by socio-economic status of the household was apparent across all programme types in both Sixth Form and FE provision. For example, a clear social class gradient emerges with respect to attainment at A level. Within Sixth Form provision, learners from managerial and professional households (NS-SEC groups 1 and 2) achieve higher grades (570-640 points) than those from households characterised by routine or semi-routine occupations (NS-SEC groups 6 and 7, 485-505pts) or those where the household head was long-term unemployed or had never worked (NS-SEC group 8, 470pts).

The social class gradient in A level attainment is noticeably steeper within Sixth Forms compared to FE settings. This is driven by the relatively high levels of attainment among those from managerial and professional households (NS-SEC groups 1 and 2) within Sixth Form settings.

Within HE settings, there was little variation in pass rates at the postgraduate level by socio-economic status. However, at the undergraduate level there was greater variation, with approximately a 10% difference between the highest pass rates for NS-SEC group 1: Large Employers and Higher Managerial (66%), and the lowest for NS-SEC group 8: Never Worked/Long-Term unemployed (57%).

## Deprivation

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The average difference in AS level points across each deprivation measure (education, employment, health, and housing) was 40 to 45 points lower for deprived learners in Sixth Form and 10 to 15 points lower in FE. Deprivation gaps in A levels appear worse in Sixth Form. For example, Sixth Form learners who experienced housing deprivation achieved 65 points less than those who did not, compared to a 15-point gap in FE.

Vocational learners saw attainment gaps of 4% for learners who experienced housing deprivation, 8% across employment and education deprivation, and up to 11% across health deprivation in Sixth Form provision. In FE, these gaps were more pronounced for education deprivation (20%), employment (13%) and housing (7%), but lower for health deprivation (8%). However, it must be noted that the finding with respect to education deprivation may be somewhat tautological, as those in educationally deprived households are more likely to be working towards lower-level qualifications.

Within HE, there were only small variations by deprivation. There was a gap in undergraduate attainment for education deprivation (6%), but variation of only a few percent across the other deprivation measures and at the postgraduate level.

**Table 20: Attainment in tertiary education: Household deprivation, 2011/12–2016/17**

|                                     | Deprivation Measure |     |            |     |        |     |         |     |
|-------------------------------------|---------------------|-----|------------|-----|--------|-----|---------|-----|
|                                     | Education           |     | Employment |     | Health |     | Housing |     |
|                                     | Yes                 | No  | Yes        | No  | Yes    | No  | Yes     | No  |
| <b>Sixth Form</b>                   |                     |     |            |     |        |     |         |     |
| AS levels (pts)                     | 210                 | 265 | 225        | 265 | 240    | 265 | 220     | 260 |
| A levels (pts)                      | 460                 | 555 | 490        | 555 | 520    | 555 | 485     | 550 |
| GCSEs (% C+)                        | 37%                 | 52% | 39%        | 52% | 43%    | 52% | 37%     | 51% |
| Vocational (level 3+)               | 71%                 | 79% | 71%        | 79% | 70%    | 81% | 74%     | 78% |
| Other (level 3+)                    | 89%                 | 95% | 90%        | 95% | 92%    | 96% | 91%     | 95% |
| <b>Further Education</b>            |                     |     |            |     |        |     |         |     |
| AS levels (pts)                     | 80                  | 100 | 80         | 100 | 85     | 100 | 80      | 100 |
| A levels (pts)                      | 465                 | 495 | 455        | 500 | 475    | 500 | 455     | 495 |
| Vocational (level 3+)               | 32%                 | 52% | 38%        | 51% | 43%    | 51% | 42%     | 49% |
| Other (level 3+)                    | 17%                 | 31% | 22%        | 30% | 24%    | 30% | 24%     | 28% |
| <b>Work Based Learning (% pass)</b> |                     |     |            |     |        |     |         |     |
| Engagement training                 | 90%                 | 91% | 89%        | 91% | 89%    | 91% | 89%     | 91% |
| Level 1 training                    | 83%                 | 82% | 83%        | 82% | 82%    | 82% | 82%     | 82% |
| Foundation Apprenticeship           | 86%                 | 87% | 85%        | 87% | 86%    | 87% | 86%     | 86% |
| Apprenticeship                      | 88%                 | 89% | 88%        | 89% | 88%    | 89% | 88%     | 89% |
| Higher Apprenticeship               | 80%                 | 82% | 82%        | 82% | 81%    | 82% | 80%     | 82% |
| <b>Higher Education</b>             |                     |     |            |     |        |     |         |     |
| Undergraduate (% 1st/2.1 degree)    | 54%                 | 60% | 57%        | 60% | 58%    | 60% | 55%     | 60% |
| Postgraduate (pass)                 | 82%                 | 80% | 78%        | 80% | 79%    | 80% | 83%     | 80% |

# Summary and Conclusion

**The analysis within this report provided an overview of the journeys learners took through the tertiary education system in Wales between 2011/12 and 2018/19. It highlights the characteristics and backgrounds of learners that appear to be significant in advancing or limiting engagement within Wales' publicly funded tertiary education sector.**

First, we took a longitudinal view, examining cohort progression from compulsory schooling into tertiary education and considering the characteristics of populations within different tertiary settings – Sixth Form, FE and HE.

We observed that a slightly higher proportion of male learners (8%) had not progressed to Sixth Form or FE in Wales compared to females (5%). Higher proportions of SEN Statement learners (21%) and Action Plus learners (12%) did not progress into Sixth Form or FE, followed by White Other (10%) and FSM learners (9%). Learners with limiting disabilities had much higher rates of non-progression (19%). Fluent Welsh speakers had the lowest proportion of learners not in Sixth Form or FE (4%).

Regarding deprivation, the proportion of learners not entering Sixth Form or FE increased with the number of deprivation indicators experienced in learner households (from 5% to 10%). For those in households where adults had never worked (NS-SEC 8), or where the occupational classification was missing, the proportion of learners not progressing to Sixth Form or FE was also high at 10% and 12% respectively.

Females had higher proportions attending Sixth Form (37%) than males (30%). Higher proportions of Asian learners (47%) compared to other ethnicities were in Sixth Forms. FSM learners (15%) and SEN learners (between 9% and 15%) had low proportions within Sixth Forms. Progression to Sixth Form was higher among those with no deprivation indicators (43%) and lowest for those with 4 dimensions of deprivation (13%).

Conversely, in FE males had higher proportions progressing to FE (53%) compared to females (47%), and FSM learners had higher proportions in FE (67%) compared to non-FSM learners (47%). Learners with SEN diagnoses were more frequently found in FE colleges (between 66% and 73%) compared to learners with no known SEN (46%). Deprivation and socio-economic status indicators show the most deprived learners were more commonly progressing to FE (between 60% and 70%).

Regarding programme type, the majority of learners (52%) enrolled in vocational learning, 45% enrolled in AS levels, 32% enrolled in A levels, and 20% enrolled in WBL activities.

Again, variation for FSM and SEN learners were apparent. Learners in less deprived households and those with higher family/household NS-SEC have higher participation in AS and A level programmes. Those experiencing deprivation and from households with lower status occupational groups were more commonly enrolled in vocational or WBL programmes.

Females made up a higher proportion of AS and A level programme learners than males, who were more likely to undertake vocational (54%) and WBL (58%) programmes. AS and A levels were dominated by non-FSM learners, while FSM learners comprised around one-fifth of vocational and WBL learners.

Variation in WBL showed greater equity across socio-economic and occupational groups for apprenticeship learners compared to engagement and Level 1 training. Similar patterns were observed for learners with limiting disabilities. This suggests that while FE were succeeding in engaging with those from lower socio-economic backgrounds, those facing multiple deprivation lack the necessary qualifications or skills to enrol in higher-level programmes.

There was minimal variation in withdrawal from FE and Sixth Form showed very little variation at either Year 12 or Year 13 based on personal and household characteristics. Further examination of prior attainment and attendance, or qualitative work, might shed more light on the reasons for early exit.

Gender, SEN status, and FSM status of learners showed variation in progression from Key Stage 4 to Sixth Form or FE settings, and type of programme – A level, AS level, and vocational programmes. The socio-economic background of the household also influenced progression routes and programme type.

Regarding progression into HE, we also found that learners who were female, non-FSM, with no known SEN, no disability status, of non-UK status, and of non-Christian religion had a higher proportion of entry to HE. Stark patterns highlighted non-progression to HE based on household deprivation indicators, socio-economic backgrounds, occupational backgrounds, and education levels. These revealed lower engagement in HE from multiply deprived, lower status, and lower education backgrounds.

Our analysis of the population data indicated that variation was similar to that of the overall Welsh population and the cohort population. This analysis additionally considered the attainment of learners within different settings. We found that attainment of AS and A level points was higher in Sixth Form than in FE, and there was higher attainment for those without household deprivation, without limiting disabilities, and with higher socio-economic and occupational backgrounds.

However, unlike the findings for Sixth Form and FE attainment, the type of WBL indicated little discerning inequity based on the characteristics of the person or household in relation to attainment. Nonetheless, there were decreasing levels of success (proportion passing the programme) with increasing programme skills levels.

For HE, there was little variation in attainment by personal characteristics. However, increasing household multiple deprivation saw lower attainment rates at the undergraduate level, and household disability status indicated a greater proportion achieving a HE qualification and a lower proportion achieving first or upper second-class degrees at undergraduate level. At the postgraduate level, there was again little variation in attainment by personal characteristics. The largest difference was between those with significantly limiting household disability status compared to those without disability status.

Overall, the analysis suggests that inequities are apparent in terms of progression, with learners with SEN status, disability, deprivation, lower socio-economic backgrounds, lower occupational backgrounds, and lower education backgrounds facing barriers to continued engagement in education post schooling.

There were also common patterns of pathways, delineated by these same characteristics, with more affluent households more likely to progress through the entire tertiary education system. We recommend that economic, social, health, and housing factors, and the impact of experiencing multiple dimensions of deprivation are taken into account in Medr strategies to reduce inequity in the future. This would move away from a focus on economic judgements and could be aided by contextualised admissions and additional support, especially as limiting factors are also likely to have impacted upon the attainment of learners at Key Stage 4 and earlier, creating the first barrier to continuing in education.

While there were limitations to the cohort analysis that could be undertaken on HE outcomes due to the period for which all data was available, it will be important to continue work in this area, looking at the exit and attainment of HE learners. Future data linkage might also consider using the Annual Survey of Hours and Earnings, or the Annual Population Survey, to further understand the impact of HE study on financial inequality.

Further analysis should also be undertaken to explore the descriptive findings within this report, using more advanced statistical analysis and taking into account prior academic engagement and attainment, as well as regional variation in provision. To support Medr and the Welsh Government in monitoring Medr's activity and learners' participation in the tertiary education sector, we also recommend that Medr further align, or even consolidate disparate data sources on tertiary education to enable more efficient analysis of trends within the tertiary sector in future.

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