



Understanding inequity in tertiary education

Data analysis key findings

Policy briefing

Introduction

The Welsh Government has established Medr, the Commission for Tertiary Education and Research, to oversee, fund, and regulate post-compulsory education and training (PCET; referring to all education and training post-16).

As part of its remit, Medr has a strategic duty to promote equality of opportunity for under-represented groups in tertiary education. The Wales Centre for Public Policy (WCPP) were asked to provide evidence to support Medr in discharging this duty, by:

- Undertaking data analysis looking at the proportions of learners across tertiary education with protected or supported characteristics and how these compare to relevant comparator populations;
- Reviewing interventions that have been put in place across the other nations in the UK and the Republic of Ireland to promote equality of opportunity in tertiary education; and

- Suggesting policy interventions or approaches that could help to tackle disparities identified in the data analysis.

We have published a series of outputs to answer these questions including a data analysis (Huxley and Davies, 2024); an evidence review covering existing policy approaches (Nesom et al., 2024); and a series of thinkpieces recommending policy interventions and approaches (Boliver, 2024; Hazelkorn, 2024; Miles, 2024; Sibieta, 2024). This policy briefing presents the key findings from the data analysis, informed by our additional outputs and other work that makes a similar attempt to assess participation in tertiary education across the United Kingdom (Robson et al., 2024).



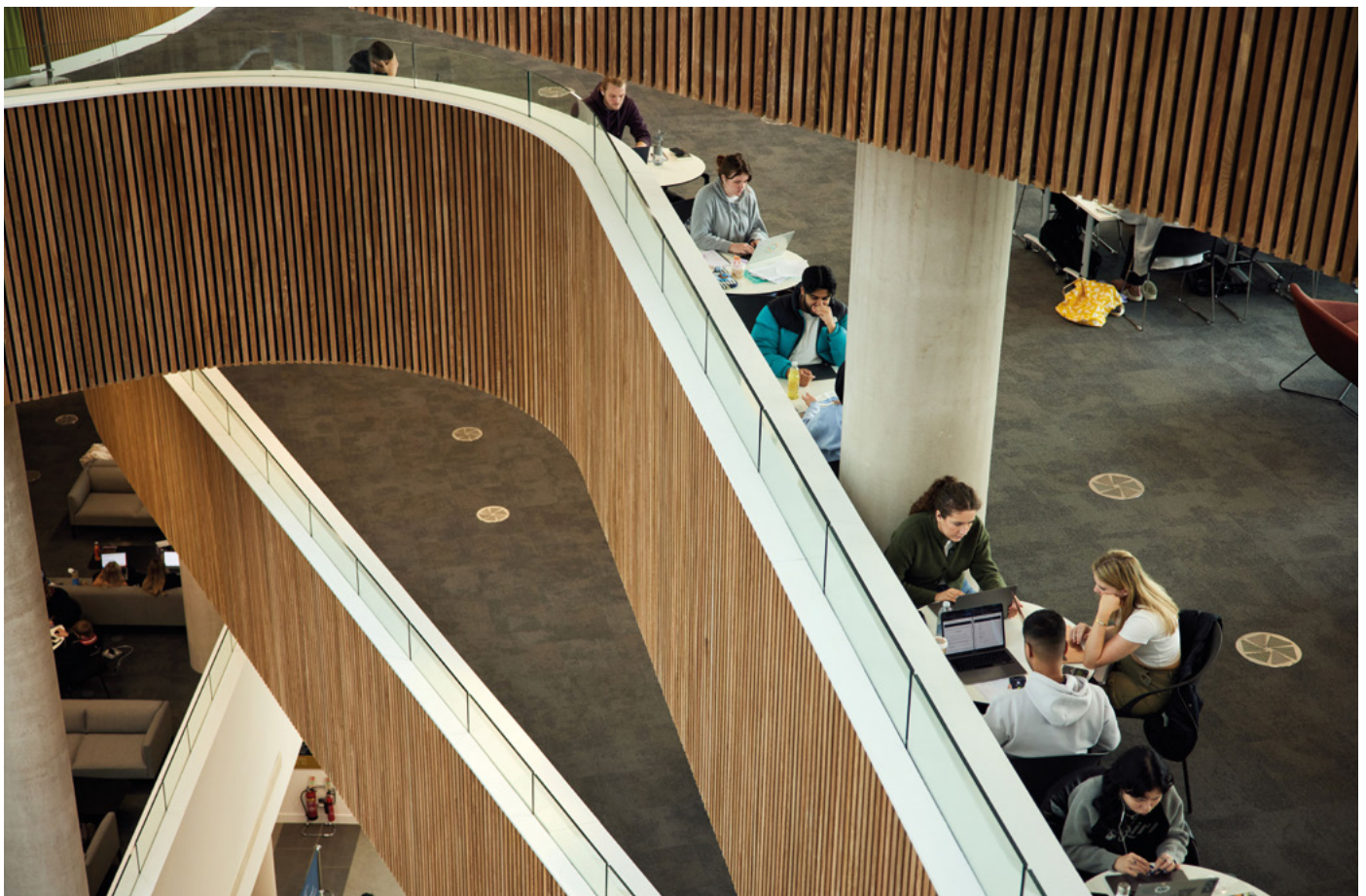
About our data analysis

We partnered with colleagues at Administrative Data Research (ADR) Wales to undertake the data analysis. ADR Wales researchers used linked administrative data, connecting 2011 Census data with various education databases.

The analysis consists of two parts:

- A cohort analysis, connecting learners from Key Stage 4 (GCSE) to higher education using 2011 census data to retrieve learner characteristics. This approach allows for five cohorts to be tracked over time via linked data, with the earliest being those in Year 11 in 2011/12 and finishing higher education in 2018/19.
- A population analysis linking post-16 learners in Sixth Form, further education and higher education with 2011 Census data, which allows us to capture the characteristics of learners who are not traceable through the cohort approach (e.g. adult learners; those who enter the Welsh system from outside of Wales; or learners who were in private institutions for their compulsory education).

In the full report, learner data is analysed alongside a large range of personal and family characteristics. In this briefing, we present a selection of these findings that are particularly significant, interesting or unexpected. The findings in this report are associational: they don't uncover any causal mechanism but do identify where people's personal and household characteristics are more or less prevalent among those who participate in tertiary education.



Key findings



Deprivation

Learners from more deprived backgrounds were less likely to progress to tertiary education than those from less deprived backgrounds.

For example, Figure 1 shows that pupils eligible for free school meals (FSM) were around a third more likely to not be in post-compulsory education or training (PCET) compared with their peers not in receipt of FSM. Figure 1 also shows that once in tertiary education, pupils who are eligible for FSM are more likely to attend further education over Sixth Form at age 16.¹

For progression to higher education, the data show that learners eligible for free school meals were less than half as likely to enter higher education (19%) than learners who were not eligible for free school meals (43%). This suggests barriers to access for the poorest learners in Wales.

As shown in Figure 2, learners who experience multiple dimensions of deprivation (including education, employment, housing and/or health) are much more likely to stop participating in education at age 16 or to attend further education settings. Pupils with no or fewer dimensions of deprivation were more likely to attend Sixth Form.



¹ Data on further education are complicated as in parts of Wales there are no school Sixth Forms and most post-16 learning is conducted through FE colleges.

Figure 1: Percentage of pupils progressing to Sixth Form and FE by FSM status

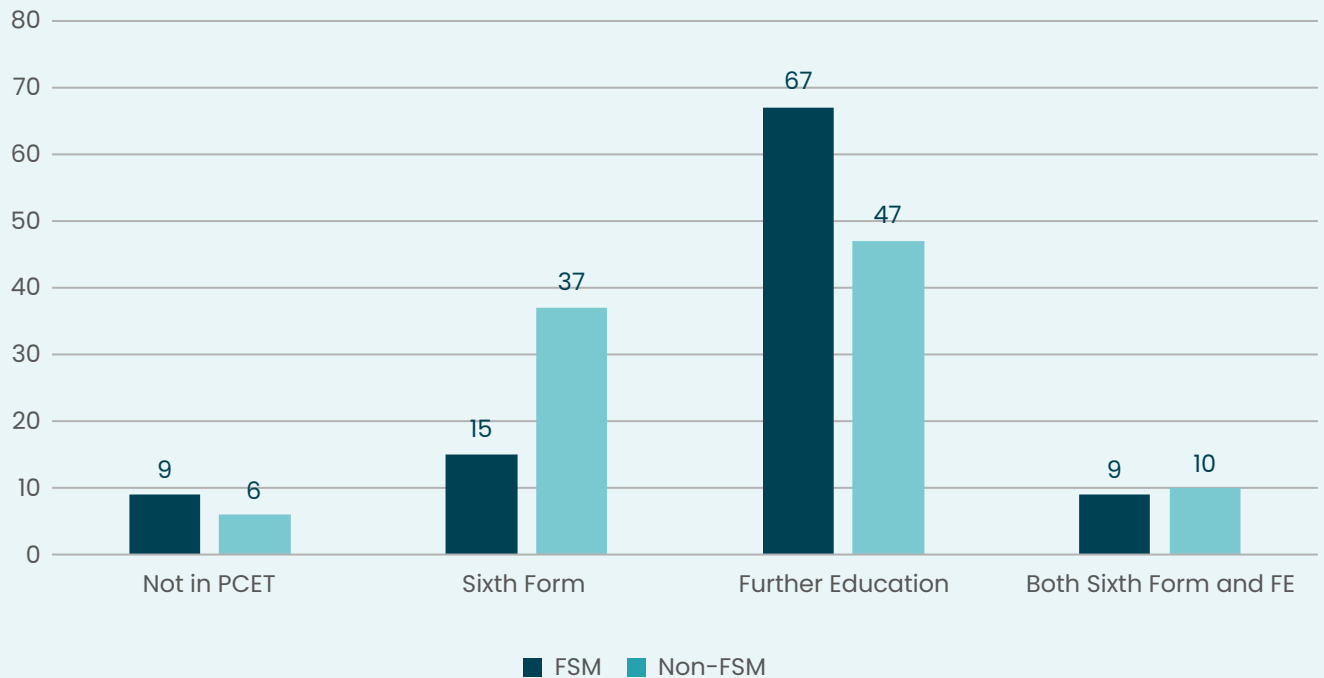
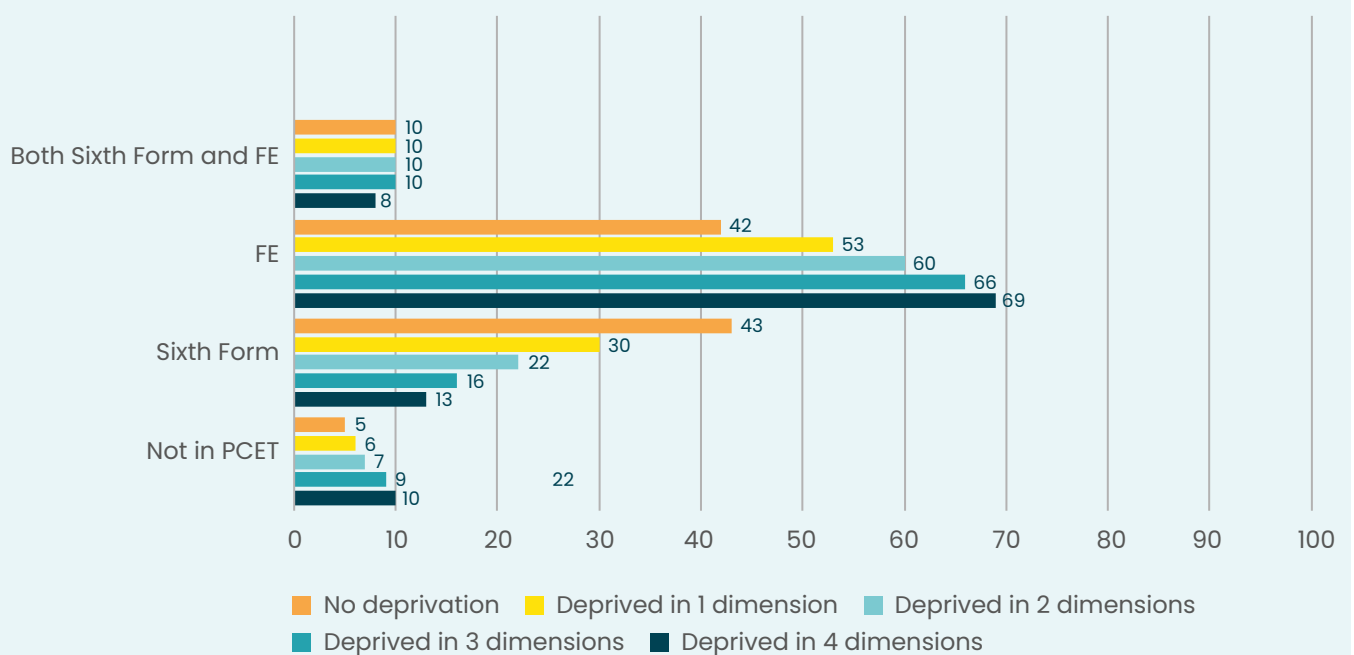


Figure 2: Percentage of pupils progressing to Sixth Form and FE by measures of deprivation





Family background and socio-economic status

Looking at the socio-economic family background of learners (Figure 3), we can see unequal patterns of progression in the data. Learners from backgrounds that can be considered likely to have higher economic, social and cultural capital (such as Large employers and managers; Higher professional; and Lower managerial) are more likely to progress to Sixth Form than to further education. By contrast, 10% of those whose household has never worked do not progress to PCET. Over 50% of learners from Lower Supervisory; Semi routine and Routine occupations; and Never worked background progress to further education exclusively. This may, again, to some extent reflect geographical background as in parts of Wales all post-16 education is delivered through further education (FE) settings.

Similarly, looking at Standard occupational classifications (Figure 4), we can see that learners whose parents hold professional roles are more likely to attend Sixth Form while others are more likely to attend FE, particularly learners from lower-skilled family occupational backgrounds. Interestingly, both socio-economic classification and standard occupation classifications show that children of managers are less likely to attend Sixth Form than higher professionals. This may reflect self-employed or entrepreneurial managers whose social and cultural backgrounds might encourage vocational qualifications over academic pathways, This also may reflect learners pre-16 engagement in the private, rather than state, school sector. However, data pertaining to private school engagement is not available and so further work to establish why this may be the case is required.

Figure 3: Percentage of pupils progressing to Sixth Form and FE by socio-economic classification

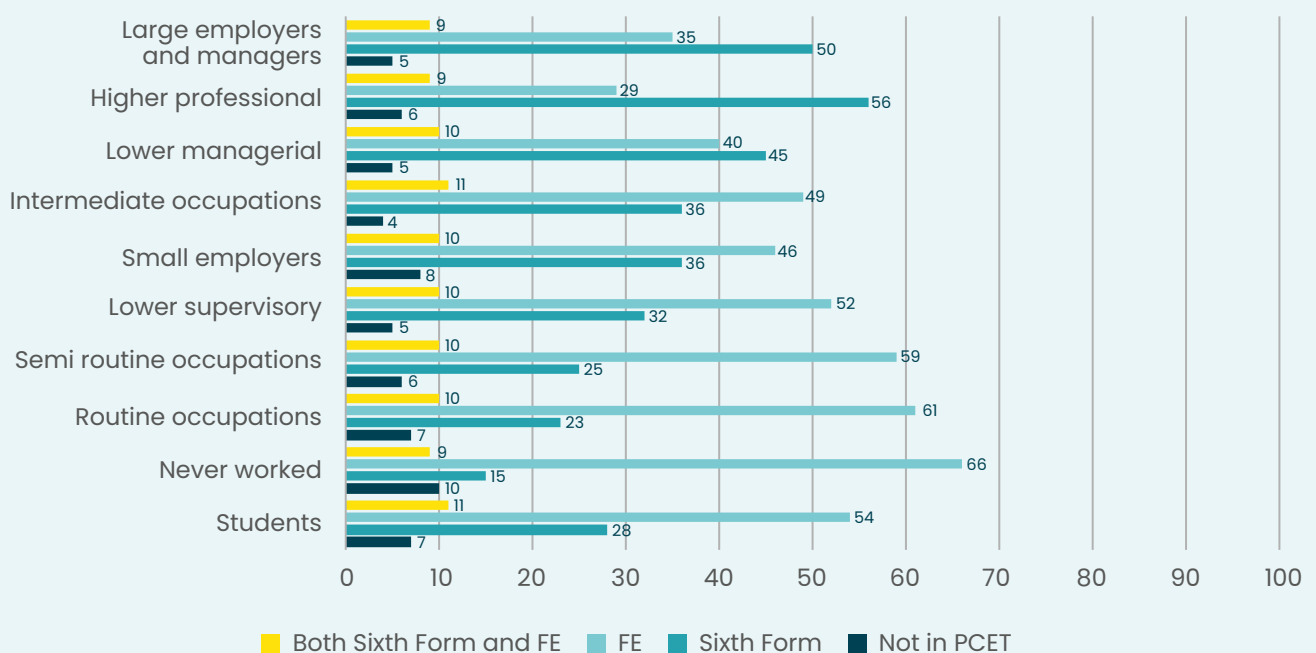
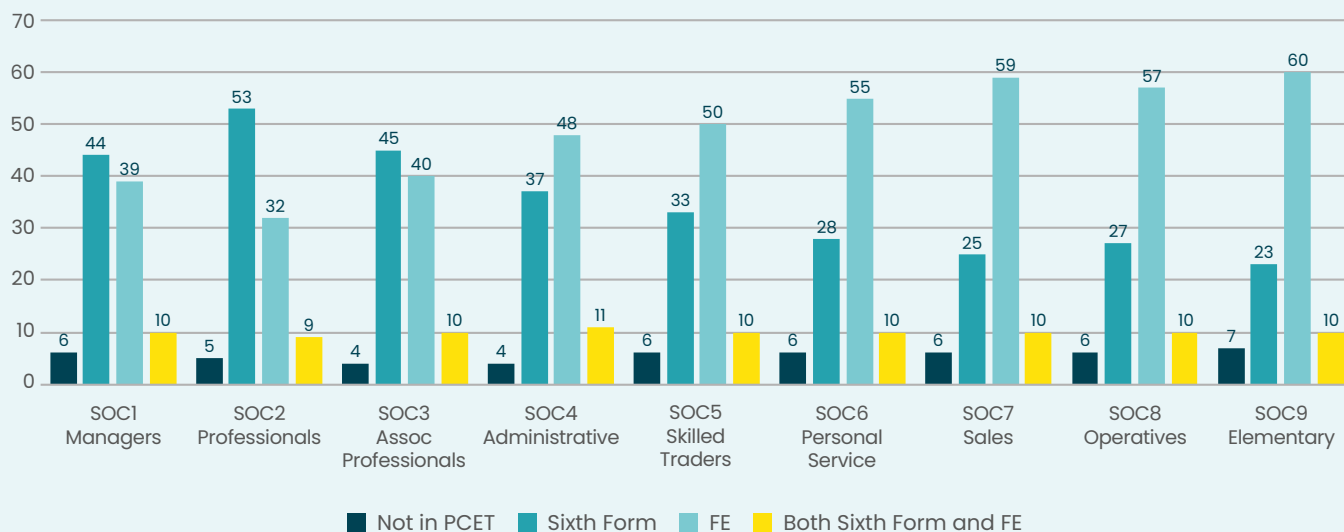


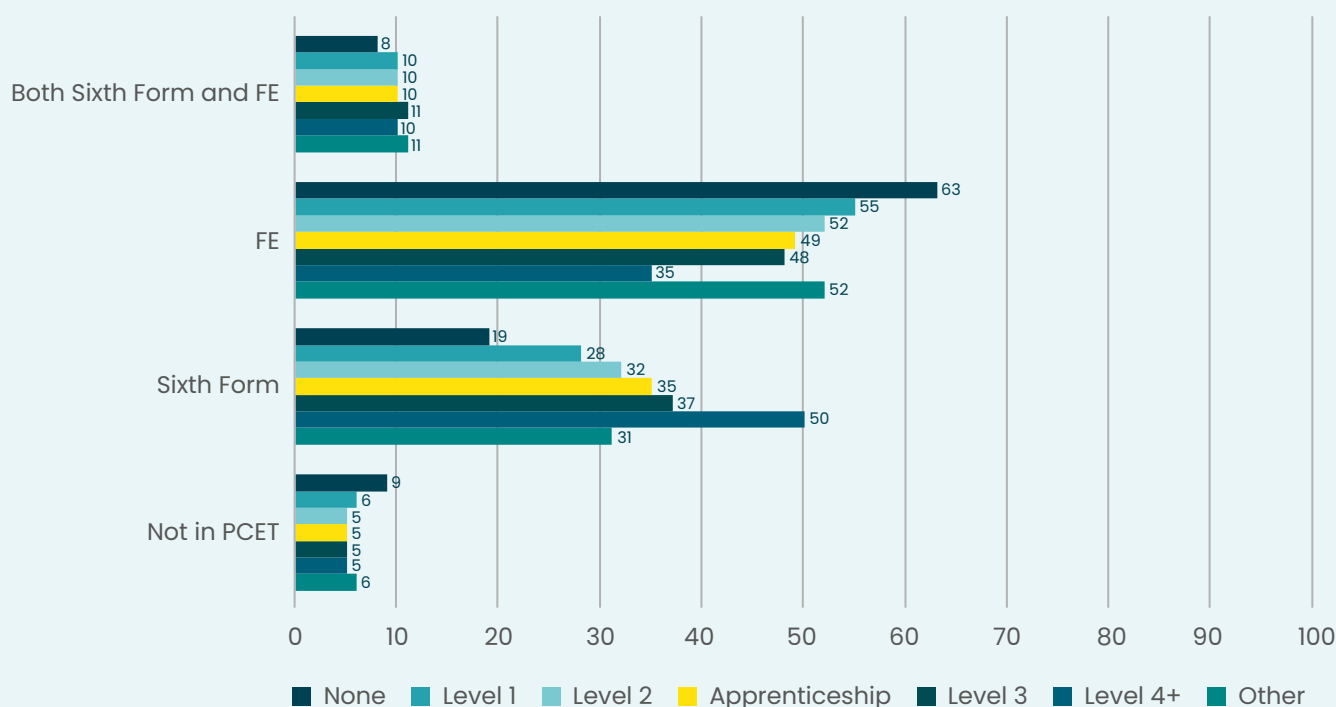
Figure 4: Percentage of pupils progressing to Sixth Form and FE by Standard occupational classification



Looking at parental educational achievement (Figure 5), which might be considered a proxy for both economic and cultural capital, we see a similar pattern in terms of pathway progression. Fifty per cent of those whose parents hold a level 4 or above qualification (corresponding to any qualification above

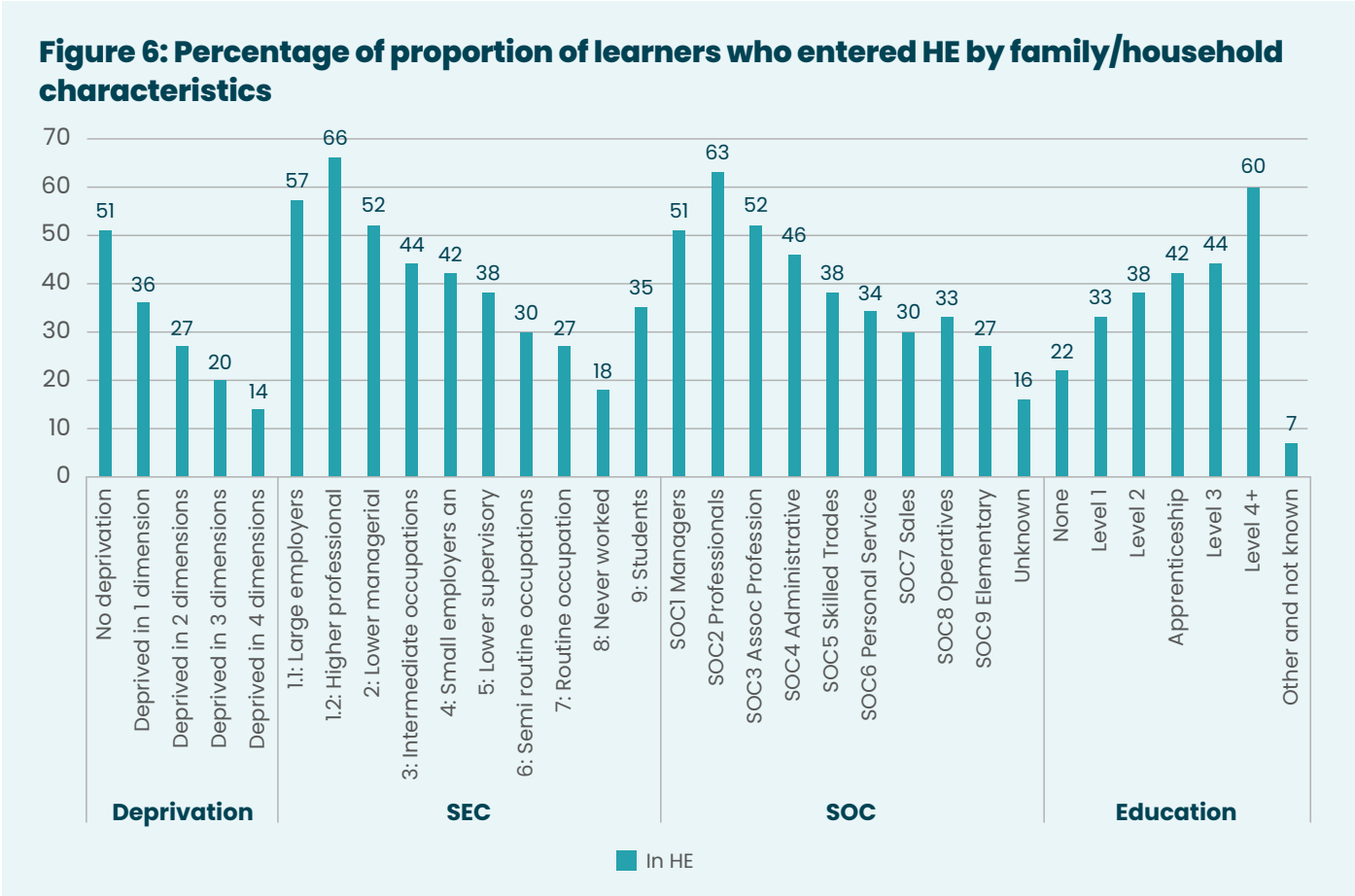
A Level, advanced apprenticeship, or level 3 NVQ equivalent) progress to Sixth Form whereas 19% of those whose parents hold no qualifications do. Encouragingly, however, non-progression rates are largely uniform at around 5–6% for all educational backgrounds except where parents hold no qualifications.

Figure 5: Percentage of pupils progressing to Sixth Form and FE by parental education



Access to higher education follows a similar pattern (Figure 6). Those who are most deprived are least likely to progress to higher education, whereas those who are least deprived or from higher socio-economic or occupational backgrounds are more likely to progress. Parental qualification at level 4+ (the majority of whom will be degree holders)

is also significantly more likely to lead to learners progressing to higher education. Interestingly, a similar pattern to PCET progression can be identified among managers, the children of whom are less likely to progress to higher education than those of professionals (although more likely to progress than all other groups aside from these).



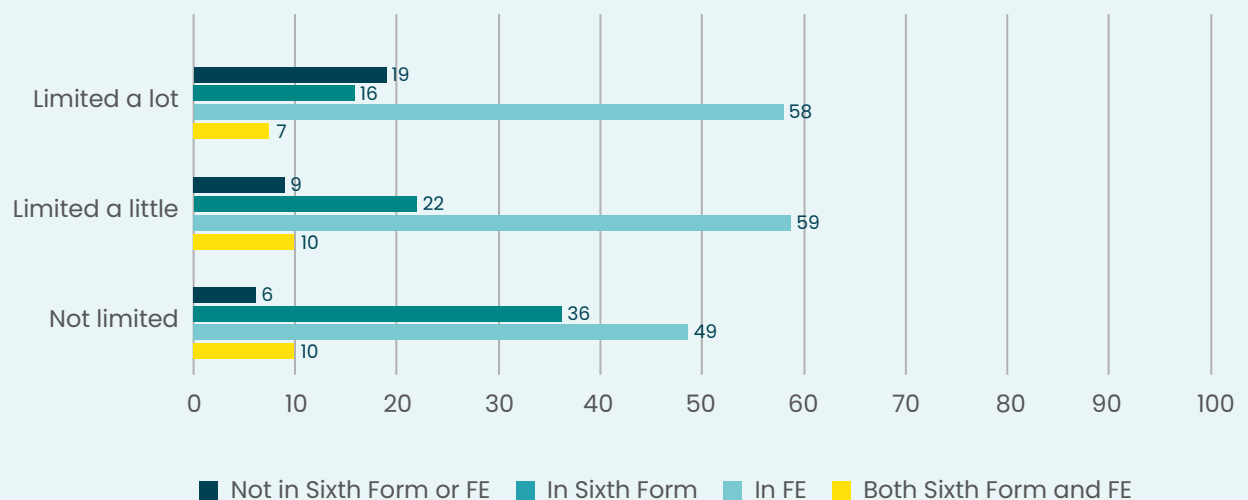


Disability

Disabled people are much less likely to participate in tertiary education than people without a disability. Our data show that pupils with disabilities are more likely to not attend Sixth Form or FE, with almost

a fifth of the most severely disabled pupils not progressing to either setting (Figure 7). Disabled pupils, whether limited a lot or a little, are also more likely to attend further education settings than Sixth Form.

Figure 7: Percentage of pupils progressing by disability status



For progression to higher education, there are similar inequalities, with those who are most limited by disability less than half as likely to enter higher education than those who are not limited at all (Table 1). Work will need to be done to establish what barriers to access exist for disabled learners and whether and how they can be overcome.

Table 1: Progression to higher education by disability status

Disability	% progressing to higher education
Limited a lot	18%
Limited a little	27%
Not limited	42%



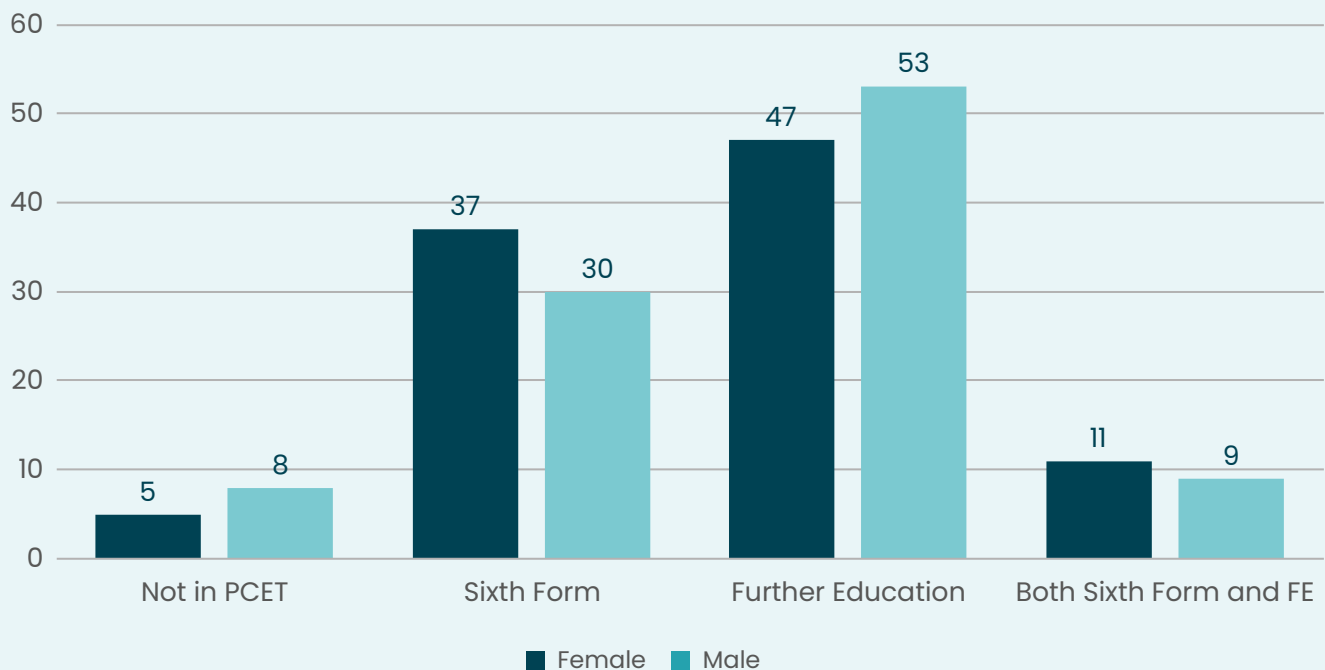


Gender

Females were more likely to engage with and progress to more academic forms of tertiary education than males. Figure 8 shows that a higher proportion of female learners progressed to tertiary education in comparison to male learners. However, whilst there were a higher proportion of female learners attending Sixth Form, there were more males who transitioned to FE after compulsory education. Male learners are also considerably more likely to not progress to tertiary education than female learners.

In terms of engaging with certain courses or types of study, registering for both A/S and A-Level learning was more common for female learners, and for male learners vocational and work-based learning (WBL) was more common. Females were more greatly represented across all undergraduate and postgraduate study although there was minimal difference in attainment between females and males at undergraduate level. In terms of apprenticeships, there were a higher proportion of males within Engagement and Level 1 training, but 73% of those in higher apprenticeships were female.

Figure 8: Percentage of pupils progressing to Sixth Form and FE by gender



A stark gender gap is evident in progression to higher education, with nearly half of female learners progressing compared to just over a third of males (Table 2). Further research could establish possible causes of this. Employment could

play a role, as if young men are taking up careers which do not require higher education qualifications this could affect their likelihood of progressing into higher education.

Table 2: Progression into higher education by gender

Gender	% progressing to higher education
Female	46%
Male	34%

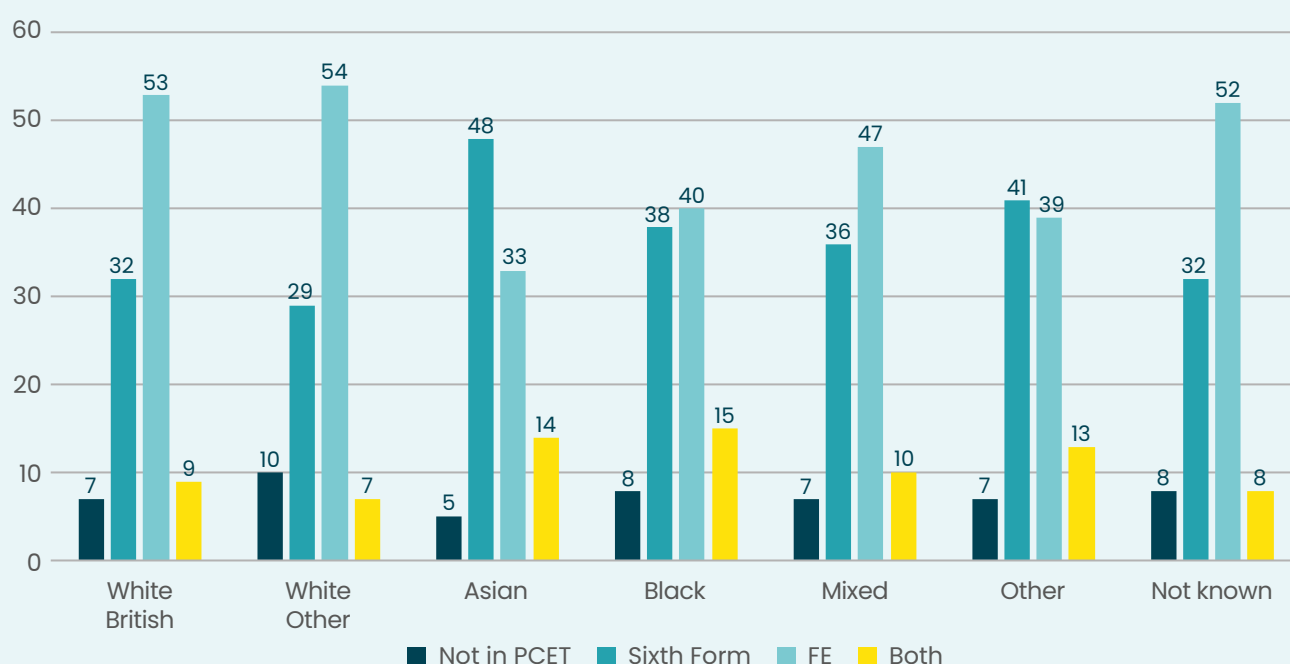


Ethnicity

Ethnic diversity within Wales is low, with 93.8% of the population in Wales identifying as White in the 2021 Census (Welsh Government, 2022). This is reflected in the data which shows that over 90% of learners in the cohort were from White Ethnic backgrounds. However, the data does show variation of proportional progression into tertiary education on the basis of ethnicity. Figure 9 shows that Asian learners had the highest proportional enrolment to Sixth Form. Not attending any form of tertiary education was most common for White Other learners, who

also had the lowest progression into Sixth Form. However, in relation to FE, White Other learners were more likely to enrol.

In terms of course type, the data indicates some variation on the basis of ethnicity. White British learners were more likely to enrol on vocational courses, and in terms of higher education, were the ethnic group with the smallest proportional progression. A/S-level registration was more common amongst White Other learners, and A-level enrolment was higher amongst Asian learners.

Figure 9: Percentage of pupils progressing to Sixth Form and FE by personal characteristic

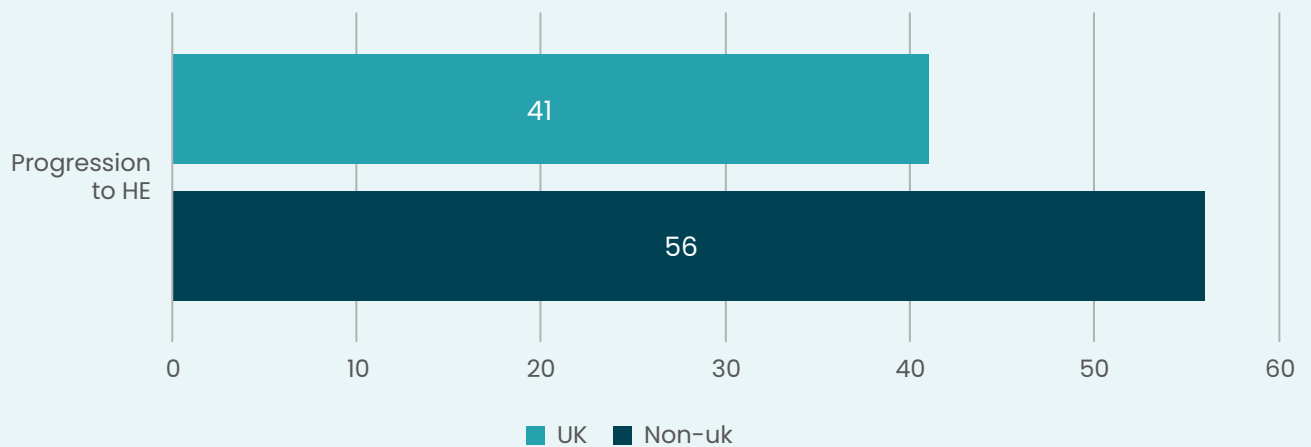


Country of Origin

In relation to nationality, learners whose households' country of origin was the UK were less likely to progress to Sixth Form and more likely to progress to further education. The converse was true for learners from households whose country of origin was outside of the UK, who were more likely to progress to Sixth Form and

less likely to progress to further education. As shown in Figure 10 the proportion of learners who progressed to higher education was higher than average for those from households with origins outside of the UK, and higher than learners from UK households.

Figure 10: Percentage of pupils progressing to HE by family/household nationality

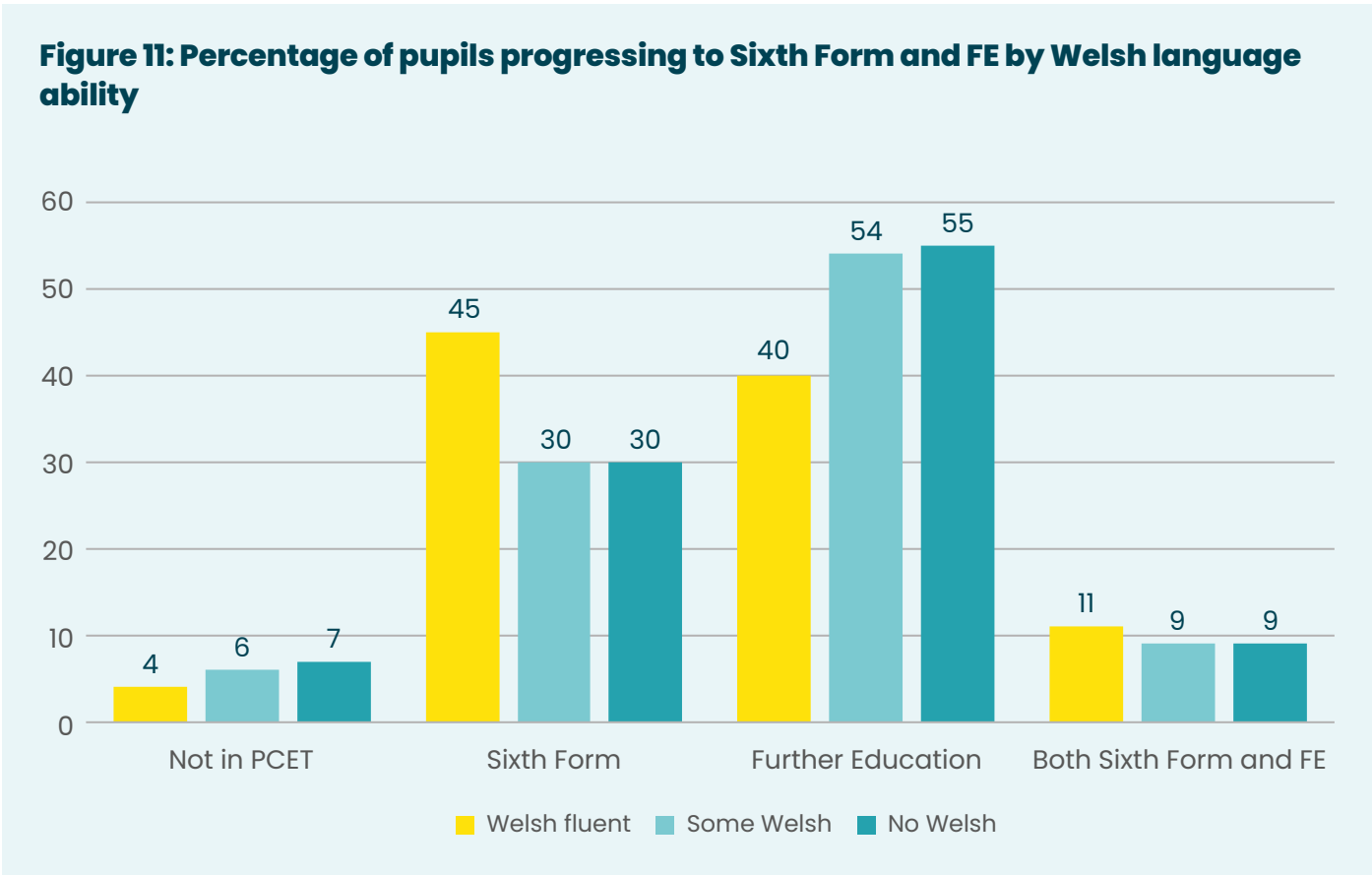




Welsh language ability

Generally, across the data, there was not large variation on the basis of the learner, or the learner’s household, and their Welsh speaking ability. However, Figure 11 does show that fluent Welsh speakers were more likely to be in tertiary education than those with less or no Welsh language,

and were more likely to be in Sixth Form than those with less or no Welsh. Work is needed to understand and disentangle Welsh speaking ability from other potential factors such as socio-economic status or factors associated with education at a Welsh-medium school.



Conclusion

Our data analysis highlights the scale and multi-dimensional nature of disparities in access to tertiary education in Wales. Personal and household characteristics, especially deprivation and disability, still go a long way in determining whether people access tertiary education and, if they do, whether they take more 'academic' pathways (Sixth Form and higher education) or more 'vocational' pathways (further education and work-based learning).

These findings should be seen in the wider context of [lower participation in Wales](#) compared with the rest of the UK and much higher rates of children who are not in education, employment or training since the Covid-19 pandemic. Our analysis does not capture the effects of Covid-19 and lockdowns on young people's education as the data we have analysed is from the pre-pandemic period with the last cohort recorded at Key Stage 4 in school in 2016/17. We know from [Welsh Government data](#) that participation in general has decreased since then.

Our other publications in this series have explored policy approaches that could remedy some of the inequities in access we have identified. Our work looking at interventions in other UK nations and the Republic of Ireland suggests that there has been some success in widening access to higher education, particularly in England (Nesom et al., 2024). However, there is a risk that the current approach, which looks to broaden opportunity, will fall victim

to a less favourable financial climate. Redistribution of opportunity, meaning active efforts to allocate limited places more fairly, may need to be considered.

Such efforts could include wider use of contextualised admissions to higher education for learners from more deprived backgrounds, an approach that has shown promise in England (Boliver, 2024; Nesom et al., 2024). Tackling barriers to access for work-based learning and encouraging lifelong learning could help to capture learners later in life to build on aspirations for skills development through life, but would need to be accompanied by measures to implement parity of esteem and educational pathways between more 'academic' and 'vocational' settings (Miles, 2024; Hazelkorn, 2024). Finally, progression is often determined by events before the age of 16, so a whole-of-education approach including compulsory and post compulsory education will need to be in place to tackle longstanding and stubborn inequalities (Sibieta, 2024).



For the full report go to
www.wcpp.org.uk/publication/ete

For further information contact:

Briefing author Dr Jack Price
info@wcpp.org.uk
+44 (0)29 2087 5345

References

Boliver, V. (2024). **Contextualised admissions: a key to widening participation in tertiary education in Wales**. Wales Centre for Public Policy.

Hazelkorn, E. (2024). **Widening Participating & Transforming Lives: What Works? Reflections on Widening Participation In Tertiary Education and Equity in Tertiary Education in Wales**. Wales Centre for Public Policy.

Huxley, K. and Davies, R. (2024). **Equity in tertiary education in Wales**. Wales Centre for Public Policy.

Miles, J. (2024). **Equity in Tertiary Education in Wales: an adult learning perspective**. Wales Centre for Public Policy.

Nesom, S., Silva, L., Skeels, A., Taylor-Collins, E., Hill-Dixon, A., Price, J. (2024). **Widening participation in tertiary education: Evidence review and reflections for Wales**. Wales Centre for Public Policy.

Robson, J., Sibieta, L., Khandekar, S., Neagu, M., Robinson, D., & James Relly, S. (2024). **Comparing policies, participation and inequalities across UK post-16 Education and Training landscapes**. Education Policy Institute.

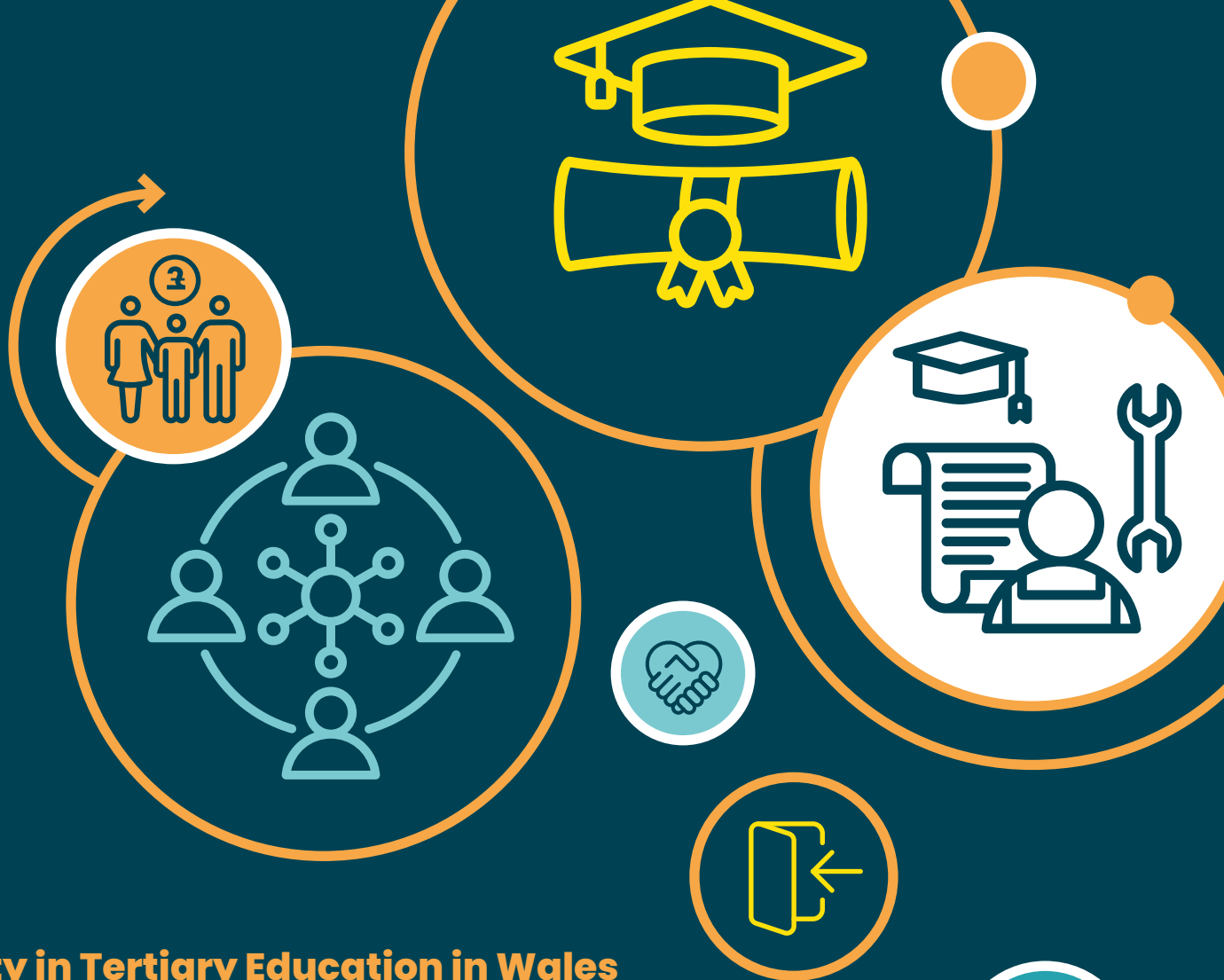
Sibieta, L. (2024). **More data and earlier focus key to tackling post-16 inequalities in education and training**. Wales Centre for Public Policy.



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 **Wales Centre for Public Policy**
Canolfan Polisi Cyhoeddus Cymru

Wales Centre for Public Policy
Cardiff University, Sbarc | Spark,
Maindy Road, Cardiff CF24 4HQ

 www.wcpp.org.uk

 029 2087 5345

 info@wcpp.org.uk

 @WCfPP

