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Effective Interventions to Increase Participation in Tertiary Education in Wales: an evidence review

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Effective Interventions to Increase Participation in Tertiary Education in Wales: an evidence review

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Table of contents

Glossary	3
Background	6
Widening Access and Participation	6
Methodology.....	10
Interventions to raise participation	10
Outreach and Early Awareness Programmes	12
UK Evidence	13
International Evidence	16
Contextualised Admissions/ Holistic Admission/ equity of opportunity model	20
UK Evidence	21
International Evidence	23
Financial Support (through scholarships or loans)	27
UK Evidence	27
International Evidence	30
Mentorship and Peer Support.....	31
UK Evidence	32
International evidence.....	34
Mental Health and Wellbeing Support.....	36
UK Evidence	37
International evidence.....	41
Academic Readiness.....	42
UK Evidence	43
International Evidence	46
Digital Learning, inclusion and Pedagogical Innovations.....	48
UK evidence	49
International evidence.....	50

Summary of Findings	53
Summary of Reflections	57
Bibliography.....	59

Glossary

ACSES

Australian Centre for Student Equity and Success

A level

Advanced Level (qualification)

ASAP

Accelerated Study in Associate Programme (City University of New York)

BBBS

Big Brothers Big Sisters (mentoring programme)

CBE

Competency-Based Education

CBT

Cognitive-Behavioural Therapy

CHE

Council for Higher Education (Israel)

DYW

Developing the Young Workforce (Scotland)

EALP

Earn and Learn Programme (Singapore)

EMA

Education Maintenance Allowance

FCF

Financial Contingency Fund

FE

Further Education

FSM

Free School Meals

HE

Higher Education

HEFCW

Higher Education Funding Council for Wales

HESA

Higher Education Statistics Agency

JED

The Jed Foundation (mental health initiative)

Medr

Wales's Commission for Tertiary Education and Research

MHULS

Mental Health University Liaison Service

NCOP

National Collaborative Outreach Programme (now Uni Connect)

NCSEHE

National Centre for Student Equity in Higher Education (Australia)

OfS

Office for Students

PAL

Peer-Assisted Learning

PEI

Private Education Institution

POLAR

Participation of Local Areas (measure of HE participation)

PSAT

Preliminary Scholastic Aptitude Test

RCT

Randomised Control Trial

STEM

Science, Technology, Engineering, and Mathematics

TE

Tertiary Education (as defined by the Tertiary Education and Research Act (Wales) 2022, includes HE, FE, and training for those aged 16+)

UTC

University Technical College

VET

Vocational Education and Training

WCPP

Wales Centre for Public Policy

WGU

Western Governors University

WG

Welsh Government

WISERD

Wales Institute of Social and Economic Research, Data and Methods

Background

In this report, tertiary education (TE) is defined according to the Tertiary Education and Research Act (Wales) 2022 (Wales Tertiary Education and Research Act, 2022), which includes higher education (HE), further education (FE) and training suitable to the requirements of persons aged 16 or above.

Learners from socio-economically deprived backgrounds are less likely to progress to TE. For instance, learners eligible for free school meals are significantly less likely to attend HE compared to their peers (Huxley & Davies, 2024).

Through an analysis of linked individual-level data from Wales (WISERD, 2015), young people from more advantaged socio-economic backgrounds were shown to be more likely to participate in HE than their less advantaged peers which was found to be largely, although not entirely, due to differences in prior educational attainment which is discussed further in this review. Furthermore, it was found that the differences in overall participation rates in HE between schools and between local authorities in Wales was substantial and greater than the effects related to individual characteristics (attainment, ethnicity). Upon entry into HE, learners from socially disadvantaged backgrounds are equally likely to attain a 'good degree' as those from more advantaged backgrounds. WCPP analysis highlights that there was a gap in undergraduate attainment for education deprivation¹ (6%), but variation of only a few percent across the other deprivation measures such as such as income and employment. At the postgraduate level, the disparities are less pronounced, with smaller variations observed across different deprivation measures (Huxley & Davies, 2024).

Increasing participation in TE in Wales requires tailored approaches for different sectors within TE to meet the needs of the diverse learner population. Interventions which aim to increase participation in TE both in the UK and internationally are aimed at increasing:

1. Enrolment (starting a TE course),
2. Retention (staying in TE),
3. Attainment (completion rate and achieving a qualification)

Widening Access and Participation

The theory and philosophy behind Widening Access in education are rooted in principles of social justice, equity, inclusion and economic need.

¹ The report defines deprivation using the Welsh Index of Multiple Deprivation (WIMD) 2019

The National Committee of Inquiry into Higher Education (also referred to as the Dearing Report) (Dearing, 1997) was commissioned by the UK government and was the largest review of HE in the UK since the 1960s. The report made a series of recommendations which included expanding HE to increase participation among underrepresented groups such as women, ethnic minorities, and learners with disabilities. The purpose of the report was to create a more inclusive, effective, and receptive HE system to meet the needs of the UK over the next 20 years. The report emphasized maintaining and enhancing the quality and standards of HE through frequent reviews, improvements in teaching and integrating information technology to improve access and learning outcomes. The report advocated for a vision of lifelong learning, encouraging continuous education and skill development throughout an individual's life. It accentuated the role of HE in supporting economic growth and social development, by recommending strengthening links between educational institutions and the labour market. Education can be seen as an investment in human capital, which can lead to economic growth and development. By widening access, societies can maximise their potential by developing the skills and talents of all their members (Burke, 2006).

Social justice theories such as those by John Rawls (Beattie, 1982) advocate for a fair distribution of resources and opportunities for widening access to education; where societal structures are arranged to benefit the least advantaged members and resources are allocated in a way that improves the educational outcomes of the least advantaged learners e.g. targeted funding, scholarships, and support programmes for underrepresented groups.

Widening access in education is rooted in principles of equity and inclusion aimed to ensure that all individuals, regardless of their background, have access to educational opportunities. This involves addressing systemic barriers and creating supportive environments for underrepresented groups (Case, 2024).

Achieving high standards and aspirations for all in education is a main aim of Welsh Government (Welsh Government, 2024). The goal is to ensure all learners, whatever their background, are supported to be healthy, engaged, enterprising and ethical citizens, ready to play a full part in life and work.

Widening access and participation in HE and further education in Wales has been a focus for both the Welsh Government (WG), the Higher Education Funding Council for Wales (HEFCW) and now Medr, Wales's Commission for Tertiary Education and Research. Medr has produced a draft Strategic Plan for 2025-2030 in response to Welsh Government's strategic priorities for TE (Welsh Government, 2024) and one of its main focuses will be

widening access. Widening access is also an objective of the Diamond reforms and the Diamond Reforms evaluation plan (Welsh Government, 2024) which is available on the WG website.

There have been several large-scale reviews of the evidence on widening access initiatives in the UK in recent years, which provide a broad evidence base:

- In 2015, research was undertaken by the Wales Institute of Social and Economic Research, Data and Methods (WISERD, 2015) which provided insights into the effectiveness of various widening access initiatives. The report emphasized the importance of tailored support and early interventions in improving access for disadvantaged groups. Young people from more advantaged socio-economic backgrounds are more likely to participate in HE than their less advantaged peers due to differences in prior educational attainment. Ethnic background significantly affects HE entry, with patterns similar in both Wales and England. For example, white students often have higher HE entry rates compared to some ethnic minority groups. Asian students, particularly those of Indian and Chinese descent, tend to have higher HE entry rates. Black students and those from Pakistani and Bangladeshi backgrounds may face more barriers, resulting in lower HE entry rates compared to their White and Asian peers. There are substantial differences between schools and local authorities in terms of HE participation, beyond individual characteristics. Widening Access initiatives are diverse and target different social groups, focusing on both entry to and progression through HE.

- In October 2024, an evidence review was conducted (Nesom, et al., 2024) on widening participation in TE in England, Scotland, Northern Ireland, and the Republic of Ireland. The report identified several interventions that have shown positive impacts on widening participation. These include financial support, mentoring, tailored advice and guidance, and summer schools. Programmes that combined multiple support interventions tended to be the most effective. Providing financial aid is a high-cost intervention but largely results in a small positive effect on enrolment. Mentoring and counselling services improve learners' aspirations and understanding of HE as does summer schools, but there is a lack of evidence on how these interventions impact enrolment rate into HE and FE. The report highlighted that more robust evidence is needed regarding effective interventions especially for those interventions targeting mature learners, carers, ethnic

minorities and learners pursuing vocational courses. The report emphasised the importance of following long term outcomes of learners that have been involved in a programme that is delivering a particular intervention.

- A systematic review (Baines, Gooch, & Ng-Knight, 2022) examined the evidence base of peer-reviewed evaluations of UK Widening Participation programmes within the last 20 years; and whether widening participation interventions change attitudes around university for UK school children aged 16. The most successful interventions exposed learners to role models and helped learners to learn new skills. However, the report did highlight that there were limited casual studies of how interventions were affecting children's attitudes and behaviours towards university. The review recommended that future widening participation programmes should examine and explicitly consider the theory underlying the intervention and use the theory to examine outcomes and impacts.

- A report commissioned by TASO carried out by the Education Policy Institute (The Education Policy Institute, 2020) analysed 92 studies on the impact of interventions for widening access to HE. The report found that activities influenced learner's understanding and aspirations but there is no rigorous evidence on their impact on enrolment numbers for HE. The report highlighted that there is an urgent need to go beyond learner perceptions and establish the impact of these activities on enrolment numbers. Most research to date on widening access has failed to determine this. Furthermore, the report recommends that both Government and HE sectors should do more to monitor learner progress and build a greater understanding of the impact of activities on disadvantaged school age pupils, as well as on groups such as mature learners, carers, care leavers, some ethnic minority learners and vocational learners.



Methodology

Widening participation and increasing participation within HE and further education is not a new concept. As discussed above, there is a large evidence base on UK interventions to increase participation. This review presents evidence on the main UK-based interventions developed in recent years alongside wider international evidence on successful interventions.

A rapid evidence review was conducted between Sept 2024 and Feb 2025. This review presents evidence from over 130 sources (grey literature, academic literature, governmental and sector sources) on the main UK-based interventions developed in recent years alongside wider international evidence on successful interventions (US, Australia, Canada, New Zealand, Germany,). Sources were assessed for quality based on credibility of source, robustness of methodology and relevance.

The scope of TE in this review includes HE, and Further Education (FE) and considers interventions which target learners who are aged 16 and over as this aligns with the age of post-compulsory education and training in Wales. Internationally, the age of post-compulsory education and training differs by country. In countries where this age is aligned, for example Finland and England at age 18, TE is used as a common measurement to conduct comparative analysis (Morris, 2024).

This evidence review is part of a series of reviews being conducted by analysts within Knowledge and Analytics Services in Welsh Government. The interventions covered in this review often include a rationale based on addressing barriers to participation. Whilst an assessment of the evidence on barriers to TE participation is out of scope for this work, a separate evidence review on barriers to participation will support this review. A separate evidence review will also be conducted to examine adult learning (including essential skills).

Interventions to raise participation

Although some of the interventions targeting participation have been considered collectively in large scale evidence reviews, here we will consider the weight and strength of evidence

for distinct interventions, before considering limitations with the overall evidence base and recommendations.

Outreach and Early Awareness Programmes

Policy Area: Outreach

Definition:

Outreach refers to initiatives and activities—typically organised at the institutional level—designed to raise aspirations and encourage participation in tertiary education (TE) among potential learners.

Locations: UK, Wales, United States, Australia, Chile, Germany, Italy

Sector Focus: Higher Education (HE), Further Education (FE)

Strength of Evidence:

There is strong evidence that outreach and early awareness programmes successfully increase learners' aspirations to attend HE and FE. However, there is limited evidence that these programmes directly impact actual enrolment levels in HE and FE.

Summary of Findings:

- **Impact on Learners:** Outreach interventions tend to improve learners' understanding and aspirations regarding higher education. However, robust evidence is lacking on whether these interventions increase actual enrolment numbers or influence which universities individuals attend.
- **Parental Influence:** Parents play a direct role in learners' decision-making about higher education. Parents of disadvantaged learners are particularly likely to question the value and cost of HE. Therefore, effective outreach should include activities that engage families and help parents understand HE options.

Reflections and suggested research pathways:

- **Measuring impact:** There is a need for evaluations to go beyond measuring learner's perceptions through surveys and establish the impact on enrolment numbers. There is a need for longitudinal studies with larger sample sizes and improved collection of baseline data of participants. There is also a need for data linking to capture participants educational progression after attending outreach and early awareness programmes
- **Monitoring and evaluation:** It is essential that the monitoring and evaluation plan for an intervention aligns with the aim of that intervention, to ensure outcomes and

impacts can be measured. This includes longer term monitoring to assess progress after outreach programmes are delivered to and build a greater understanding of the impact of interventions and activities on disadvantaged school age pupils, and specific learner groups including mature learners, carers, care leavers, ethnic minority learners and vocational learners.

Outreach Programmes and Early Awareness programmes aim to engage and support individuals or groups of learners and their families to raise awareness about HE options, financial aid, and the steps needed to prepare for college and university; especially for those who might not have access to certain services or information. The aim is to ensure that individuals are well-informed and can make proactive decisions about their educational and career paths.

Many of the outreach programmes delivered in the UK are aimed at both pre and post 16-year-olds. Programmes offered to post-16 learners are aimed at increasing HE participation through raising aspiration levels in the later years of secondary school. This is to encourage learners to continue their education through to FE and eventually reach HE.

UK Evidence

Welsh Government interventions such as Reaching Wider Partnership (Reaching Wider Partnership, 2025) and the Seren Academy (Welsh Government, 2025) target underrepresented groups and focus on early engagement and raising awareness of HE through increasing aspiration.

The Reaching Wider programme is a partnership of universities, schools and colleges in Wales working together to improve social mobility by widening access to all forms of HE. It aims to increase HE participation from under-represented groups by raising educational aspirations. A review of the Reaching Wider programme (Hill & Hatt, 2012) found several areas of best practice including a robust approach to supporting looked after young people and care leavers, a holistic approach where widening access was aligned and integrated with teaching and learning and equality and diversity, and emerging regional networks. The review did not provide quantifiable data to show this programme's impact on enrolment numbers for higher education and highlighted the need to improve the use of qualitative and quantitative data to support and monitor widening access and to work with young people, especially young people who are care leavers (are coming out of the care system) and the young people's carers. The review also highlights the challenge in attributing causation when widening

access initiatives are delivered in an integrated fashion; for the purposes of evaluation, it is difficult to disentangle the impact of Reaching Wider from institutional Widening Access (WA) outreach work and WA from other funding streams including voluntary sector organizations.

Similar to the Reaching Wider Programme in Wales, the National Collaborative Outreach Programme (NCOP) in England (renamed Uni Connect in January 2020) includes 29 partnerships of universities, colleges and local partners to deliver outreach programmes in England with the aim of increasing progression to HE for young people in years 9 to 13; especially from areas with lower higher education participation rates, aiming to increase their access to and success in higher education through NCOP. The NCOP phase 1 report draws on evidence from an annual survey of partnership staff, 12 field visits to individual partnerships, a baseline and follow-up survey of over 4,000 learners who took part in the programme, three randomized control trials (RCTs) and a qualitative review of the partnerships' evaluation evidence (CFE Research, 2019). The evidence suggests that outreach interventions such as mentoring, summer schools and campus visits, are enhanced if the programme is targeted at older year groups, learners with an interest in a particular subject/discipline or certain demographic groups, such as disadvantaged learners.

Furthermore, the evaluation suggested that parents have a direct influence on the learner's choice of HE. The outreach event 'Women into STEM' delivered in NCOP phase 1, suggests that parents, particularly mothers, have a direct influence on the learners' choice of HE education and learners have stated in the surveys that their mothers and fathers had a significant impact on their decision-making process. Longitudinal evidence supports this with research from ALSPAC showing that higher maternal expectations for their children's education are associated with better academic performance and HE attainment (Northstone K, 2023). Therefore, although engagement with learners and teachers are crucial, outreach programmes should also engage with parents and promote the benefits of HE.

NCOP events such as the 'Year 10 Holiday Club' and activities held on HE campus, indicated that the majority of the learners perceive the barrier of distance as an issue when they are considering applying to university. Some learners had concerns about living away from home and felt they didn't have enough information about accommodation or how they could apply for bursaries etc. The report proposes a role here for outreach by local universities through local schools and colleges.

The NCOP phase 1 report highlighted that having a role model for learners through mentoring schemes encouraged learners to think about their future and increased their self-confidence. This could also help them to develop social skills and perform better at school. This would be

an intermediate outcome to increasing the likelihood of continuing in education post 16. Educational attainment levels (Universities Wales, 2024) at the secondary school level at both GCSE and A level in some parts of Wales are below the UK average (Education Policy , Comparing GCSE performance in England and Wales – equivalent or not?, 2019) This makes it harder for learners to meet entry requirements for HE institutions.

A report evaluating the Welsh STEM (science, technology, engineering, and mathematics) Programme (S4) (Bryan, R., Gagen, M.H., Bryan, W.A. et al., 2022) surveyed 61 young people aged between 13 and 18, attending school in South Wales along with interviews with three teachers. The report found that participants attended at least one science related workshop on the university campus. The report highlighted that participants are enthusiastic, ambitious, and confident in their abilities in both science and wider skill areas, but certain aspects of ambition were linked to socio-economic status. For example, although most surveyed young people aspired to go university, those who did not give different reasons depending on their socio-economic status. Many students from lower socio-economic backgrounds are concerned about the high costs of university education, including tuition fees, accommodation, and other living expenses. These students often lack encouragement and support from their families, who may not have a history of higher education themselves. Some students feel the need to enter the workforce immediately to support their families financially, rather than pursuing further education. There is a perception among some disadvantaged students that university education may not lead to better job opportunities or is not relevant to their career aspirations. Teachers mentioned low literacy and numeracy, household poverty, entrenched generational unemployment, rural isolation, disabilities, caring responsibilities, and teenage pregnancy as barriers to HE for their pupils.

The Seren network (also known as the Seren Academy) is a system of hubs across state schools and FE colleges in Wales aimed at supporting learners to reach their academic potential. The Seren Academy programme is available for years 8 to 13 with a focus on learners in Years 12 and 13 (ages 16-18) (Welsh Government, 2025). The interventions focus on extracurricular activities through workshops, lectures and seminars aimed at deepening learners' subject knowledge and increasing their academic skills. Activities centred around expanding opportunities for learners to progress to high-ranking universities include university visits, including to Oxford and Cambridge. During these visits, learners attend academic sessions to gain an insight into life at university. Seren network also includes, mentoring to support learners with university applications, personal statements and interview preparation.

The evaluation of the Welsh Seren Network (2018) (Welsh Government, 2018) recommended that a data sharing agreement be set up between Seren and HE providers (HEPs) to provide an opportunity to be able to showcase the impact Seren is having on HE participation rates. Case studies show the impact that the Welsh Seren Network is having on learners (Welsh Government, 2024), however capturing quantifiable data on whether the intervention leads to an increase in participation in HE and which universities learners go on to attend, would enhance the credibility of the programme.

A report by Pickering (Pickering. N, 2021) focused on providing high quality information, advice and guidance about HE opportunities and benefits through workshops with learners traditionally underrepresented in HE. The anticipated outcomes were to increase their confidence and skills to enable them to make informed decisions about their future in HE. The evaluation found that the effectiveness of the intervention was limited because of poor attendance at the workshops and that learners who benefited were those already pursuing a HE pathway.

International Evidence

In 2023, academics conducted a systematic review of outreach programmes targeted young people in second-level education (secondary age schooling) (Chorcora E.N., Bray A., Banks J., 2023) to increase HE participation for low socio-economic or marginalized groups. The studies included within the review were published between 2012 and 2022 with 19 studies included (10 conducted in the United States, 3 conducted in Australia, 1 in Chile and 5 in Europe between the United Kingdom, Germany and Italy). The review found that outreach programmes had positive effects on learners' FE college readiness, educational aspirations and college enrolment (equivalent to university level in UK). The most effective interventions included:

- guidance-based interventions - these include career guidance, college application support, and financial aid workshops.
- multidimensional interventions - combining multiple components, such as academic support, mentorship, and extracurricular activities.
- pedagogical interventions - involving innovative teaching methods and curriculum changes designed to engage learners and improve their academic performance through collaborative classroom activities, and

- community and parental engagement interventions - involving parents and the community in the educational journey of learners through parent workshops and community events.

The review emphasized the need for a clearly defined definition of what 'success' looks like and ensuring consistency in measuring educational outcomes. The report also highlights that strong cross-collaboration between schools and universities would help the need for longitudinal studies with larger sample sizes as well as the collection of baseline data of participants. Studies also highlighted the importance of addressing barriers faced by disadvantaged learners.

Within the US, a HE preparation programme called GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programmes) was introduced on a national level in 1998 with the first grants awarded in 1999 for activities and services aimed at grades 7 (ages 12 to 13 years) through to grade 12 (ages 17 to 18 years). The GEAR UP programme aims to increase access to HE for low-income learners and was targeted at schools with at least 50 percent of learners eligible for free school meals or a reduction in lunch costs (Gear up Washington Stage, 2018). A national evaluation of GEAR UP (U.S. Department of Education, Office of the Under Secretary, Policy and Program Studies Service, 2003), focused on the first 2 years of the programme and included information from 18 schools. The main activities and services offered to learners included:

- academic support through tutoring and summer camps aimed at helping learners improve their academic skills and performance.
- College introductory activities were used through college visits and information sessions that increased awareness of post-secondary education.
- Workshops were designed to engage parents with the aim of encouraging parents to support their children's academic and college aspirations.
- Financial aid information so that learners and parents understand the financial aid options available e.g. scholarships, grants, and the FAFSA (Free Application for Federal Learner Aid) process.

The evaluation showed that tutoring was the most common service offered across sites in the first 2 years, along with college-planning activities offered at almost all projects. Summer programmes were generally not as well attended as expected, and many GEAR UP partnerships were scaling back summer programme activities. GEAR UP was shown to positively influence parents' knowledge and expectations regarding their children's education. Parents of GEAR UP learners were found to be more involved in their child's schooling and had higher academic expectations for them.

A report (Johnson C.C, MayDrexel T., Janet B. Walton J., Bolshakova V., 2023) examined the implementation of a state-level GEAR UP programme (SGUP) in an urban school district and the associated college and career readiness outcomes based on participation from seventh to tenth grade. The study examined the impact on Preliminary Scholastic Aptitude Test (PSAT) scores in 10th graders (age 15 to 16 years old), comparing the SGUP cohort with a comparison group of prior 10th grade learners from the same large, urban high school. Research has shown that PSAT scores are an indicator of whether learners in 10th and 11th grades are on track to be ready for college-level coursework. The study found that GEAR UP learners significantly outperformed the comparison group on their combined PSAT score, as well as on mathematics and reading subtests.

Overall, evidence suggests the GEAR UP initiative has had significant positive impacts on increasing participation in HE, particularly among low-income learners. A study (Fogg N.P and Harrington P.E, 2015) focusing on the College Crusade of Rhode Island's GEAR UP programme found that 77% of GEAR UP participants graduated from high school on time, compared to 67% of a matched comparison group. Participants are more likely to stay in college (higher education equivalent in the UK) after their first year, indicating that the programme's benefits persist into higher education.

The Upward Bound programme (U.S Department of Education, 2025) part of the Federal TRIO Programme² in the US, aims to support learners aged 13-19 who have completed the 8th grade from low-income families and those whose parents do not hold a bachelor's degree. The programme provides training in specific subjects and offers tutoring, counselling, and mentoring services. Upward Bound helps learners prepare for college entrance by offering guidance on secondary school re-entry, alternative education programmes, and financial literacy education. Participants engage in cultural enrichment activities and work-study programmes, designed to broaden their educational experiences and prepare them for

² Federal TRIO Programme was established under the Higher Education Act of 1965 to help disadvantaged learners

college life. The programme specifically supports learners from groups traditionally underrepresented in post-secondary education, learners with disabilities, homeless learners, and those in foster care. For example, the (Mathematica Policy Research, Inc, 2007) programme awards grants to colleges and universities to provide hands-on experience in laboratories, computer facilities, and at field sites, as well as opportunities to learn from mathematicians and scientists at host institutions. The 2007 report on the UBMS programme found a positive effect on postsecondary enrolment, particularly in four-year institutions, with an increase in participants enrolling in four-year colleges and completion of degrees in STEM fields. Participants were more likely to enrol in college immediately after high school than their non-participating peers. The report found that whilst there was evidence of an increased likelihood of earning a postsecondary certificate, the impact on bachelor's or associate degrees was less clear, with some studies indicating no significant differences.

Contextualised Admissions/ Holistic Admission/ equity of opportunity model

Policy Area: Contextualised Admissions (CA)

Definition:

Contextualised admissions (CA) refer to the use of information and data by universities to assess an applicant's prior attainment and potential within the context of their individual circumstances.

Locations: UK, Wales, United States, Australia, Canada, New Zealand

Sector Focus: Higher Education (HE)

Strength of Evidence:

There is good evidence that contextualised admissions increase participation among underrepresented groups in higher education. However, procedures are not consistent across all higher education institutions.

Summary of Findings:

- **Impact on Enrolment:**
Contextualised admissions are successful in increasing enrolment of disadvantaged groups in HE. However, once enrolled, holistic, ongoing support is needed to help learners from diverse backgrounds thrive. This includes academic advising, mentoring, and financial aid to support retention and success. Holistic support in the first year of university is especially important for learners from disadvantaged backgrounds.
- **Impact on Retention:**
Providing holistic support (career counselling, tutoring, and financial incentives) throughout university significantly increases completion rates. Learners who receive such support are more likely to have higher salaries than those who do not.
- **Data Sharing:**
Since 2022, the Welsh Government has formally shared individual-level FSM eligibility data with UCAS so it can be matched to Welsh applicants and provided to universities as contextual information. Welsh universities, including Cardiff University

and Cardiff Metropolitan University, use data supplied through the UCAS application (including background and contextual factors) to inform contextualised admissions

Reflections and suggested research pathways:

- Welsh Government and Medr should collaborate with higher education providers to strengthen the transparency and coherence of contextualised admissions across Wales and improve the use of indicators of disadvantage to support fair access and participation
-

UK Evidence

Many UK universities have adopted the approach of contextualised admissions (Mountford-Zimdars, Moore, & Graham, 2016) and is similar to the equity of opportunity model. Contextualised admissions require universities to consider the context in which an applicant's academic achievements were obtained. However, equality of opportunity, is a broader concept that ensures all individuals have the same chances to pursue their goals, regardless of their background and includes education, employment, and social mobility. Prospective learners' qualifications are considered alongside their socioeconomic background. This approach aims to widen access to HE for learners from disadvantaged backgrounds. This differs from the *equality of opportunity* model, where university places are awarded to the most highly qualified candidates regardless of social background. In recent years contextualised admissions has been heavily debated, with criticism of the use of neighbourhood level indicators (such as the 'POLAR' measure) as opposed to household level indicators (such as free school meal (FSM) eligibility) (Gorard, 2019; Harrison & McCaig, 2015). The UK Department for Education has begun to share individual-level FSM data with universities via UCAS (UCAS, 2021) which may help universities to target their contextualised admissions approaches more effectively (Martin, 2024). According to the Higher Education Statistics Agency (HESA), there has been a notable increase in the proportion of students from the most deprived areas (MD quintile 1) accessing higher education. Specifically, the percentage has risen from 19% to 21% since 2021 (HESA, 2022)

A report by the Sutton Trust (Boliver, Crawford, Powell, & Craige, 2017) found that universities practicing contextualisation did not see significantly higher dropout rates or lower degree completion rates among learners admitted through these processes. This suggests that contextualised admissions could be an effective way of widening access without compromising academic standards and completion rates. Furthermore, a review (Mountford-

Zimards, Moore, & Graham, 2016) highlighted that contextualised admissions could enhance access specifically to selective HE institutes for disadvantaged learners. The Office for Learners (OfS) reported that learners admitted via contextualised admissions tend to have similar or better retention rates compared to their peers from more advantaged backgrounds.

An extensive review of existing literature on contextualised admissions (CAs) was conducted to understand the current landscape and identify gaps in research (Mountford-Zimards, Moore, & Graham, 2016). The review includes case studies of various HEP's that have implemented contextualised admissions policies which provide insights into how CAs are applied in practice and their outcomes. The report highlights that ensuring that contextually admitted learners receive adequate academic and social support is crucial for their success. This is because contextually admitted students often come from diverse backgrounds and may face unique challenges that their peers do not. Adequate support helps bridge gaps in academic preparation and social integration. The review highlights that academic and social support helps students build the confidence and skills needed to thrive in a higher education environment through developing effective study behaviours, time management, and interpersonal skills. Therefore, the effectiveness of contextualised admissions also depends on the support provided to these learners once they are admitted

Currently, the Welsh Government and Medr are actively working on policies to address inequalities in TE (Sibieta, Miles, Boliver , & Hazelkorn, 2024)

In Wales, Cardiff Metropolitan university (Cardiff Metropolitan University, 2024) suggested that contextual indicators would be used for the 2024 admissions cycle. This means that contextual information provided as part of UCAS applications will be used including:

- care experience,
- parents/guardians who have not attended university,
- living in an area with low progression to HE (identified from Participation of Local Areas POLAR score),
- Welsh, English, Scottish and Northern Irish Indexes of multiple deprivation,
- attendance at a school with lower-than-average participation to HE or those that have a higher number of learners from low participation neighbourhoods,

- completion an accredited Widening Participation programme at the university.

International Evidence

In the United States, many universities use holistic admissions process like contextualised admissions, considering factors such as race, ethnicity, socioeconomic status, and extracurricular achievements when assessing applicants (Coleman. A.L, Keith J.L, 2018). Prestigious universities including Harvard, Stanford, and the University of California are leaders in adopting these practices. However, the recent US Supreme Court ruling in 2023 significantly limited the use of race in college admissions, stating that such programs violate the Constitution's equal protection clause (Rennie Center Education Research and policy, 2024). Where contextualised admissions focus on individual circumstances without explicit consideration of race such as an applicant's achievements and socio-economic background, 'affirmative action' policies explicitly aimed to address racial and gender disparities, which has now been curtailed by the Supreme Court ruling. This ruling effectively ended race-based affirmative action in college admissions, requiring institutions to find other ways to promote diversity. (Howe, 2023)

The benefits of holistic admissions in the US, considering a range of factors beyond standardised test scores, has been an increase in diversity and maintenance of academic standards in HE, with universities admitting a more diverse learner body from various socioeconomic background, races and ethnicities (Liu, 2022). A national study by Urban Universities for Health (Urban Universities for Health, 2014) found that holistic admissions significantly increased diversity in health profession schools. Leaders from 91% of these schools reported positive impacts, including admitting learners who faced barriers to success and who would have been excluded under traditional admissions processes. The report shows that learners admitted through holistic review processes perform well academically. Comprehensive evaluation of an applicant's potential by considering factors such as leadership, community service, and personal challenges helps to identify learners who are likely to succeed and contribute positively to university life. Lui highlights that practices and criteria vary significantly between education institutions across the U.S, therefore consistency and fairness is not achieved amongst HEI's (Liu, 2022).

In Australia, universities have developed equity programmes that incorporate contextual factors into admissions decisions, such as the Equity Admission Scheme (EAS) (Universities

Admissions Centre, 2025). This programme provides additional points to learners from disadvantaged backgrounds during the admissions process. Research by the National Centre for Learner Equity in Higher Education (NCSEHE) now the Australian Centre for Student Equity and Success (ACSES) suggests that contextualised admissions in Australia have contributed to a significant increase in the enrolment of learners from low socioeconomic backgrounds and rural or remote areas (Bennett, Naylor, Hanley, Lewis, & Burgess, 2024)

In Canada, universities such as the University of Toronto offer an access guarantee for learners from low-income families, and the University of British Columbia incorporates personal context into its admissions process. A study by People for Education (Bastedo, Umbricht, Bausch, Byun, & Bai, 2023) highlighted that contextualised admissions policies have been effective in increasing the proportion of learners from underrepresented groups in Canadian universities. This has led to greater social mobility and equity, with better access to HE leading to improved economic and social outcomes for disadvantaged learners. The study analysed a dataset of 2.3 million students and found that contextualised indicators of high school grades and standardized tests are strongly associated with student success in university. The report found that a holistic review process, considering an applicant's entire profile rather than just grades and test scores, helps identify learners with the potential to succeed despite facing significant challenges.

In New Zealand, Zepke et al. emphasized the need for not just holistic admission but holistic, ongoing support to ensure learners from diverse backgrounds can thrive (Zepke, Leach, & Prebble, 2024). This includes academic advising, mentoring, and financial aid to aid retention and success. Their report emphasized that targeted academic support for first-year learners and mentoring programmes have proven effective in helping learners from disadvantaged backgrounds succeed. The report recommends adapting practices to better meet the needs of a diverse learner body. To achieve this, data should be regularly collected and analysed on learner performance and engagement to identify areas for improvement and to aid decision-making processes.

In the US, the Accelerated Study in Associate Programme (ASAP), originally run by the City University of New York (CUNY) and then undertaken in Ohio is an example of how holistic support offered to disadvantaged learners can improve graduation rates by helping them overcome financial, academic, and scheduling difficulties that undermine degree attainment. ASAP provide support to complete an associate degree (equivalent to one year of an undergraduate university degree in the UK) by providing extensive academic, personal, and financial support to learners, including required full-time enrolment, dedicated advisors,

career counselling, tutoring, and financial incentives, such as tuition contracts, MetroCards for transport and free textbooks.

A study (Levin & Garcia, 2012) looked at the cost effectiveness of ASAP in the City of University of New York (CUNY). It was calculated by comparing the costs of the programme to the financial benefits it generates. The total cost of ASAP includes additional resources such as enhanced academic advising, tutoring, career services, and financial support. These costs are higher than those of traditional associate degree programmes. The benefits are measured in terms of increased graduation rates, higher lifetime earnings for graduates, and savings in public expenditure (e.g., reduced reliance on public assistance, lower criminal justice costs). The study uses a benefit-cost ratio to compare the financial returns to the costs. For each dollar invested in ASAP, the return is between three and four dollars for taxpayers. This ratio is derived from the increased tax revenues and reduced public spending associated with higher graduation rates and better employment outcomes for ASAP graduates. The study found that ASAP doubled the graduation rates of participating learners compared to non-participants; 55% of ASAP learners graduated within three years, compared to 25% of a matched comparison group. The analysis revealed that ASAP is not only effective but also cost-efficient. The success of ASAP at CUNY has led to it being replicated in Ohio and adaptation for four-year colleges through the Accelerate, Complete, Engage (ACE) programme. Randomised controlled trials of ASAP carried out in New York and Ohio found large, statistically significant increases in college graduation rates (Social Programs That Work, 2024). ASAP showed 11 to 15 percentage point gains in two-year or four-year degree completion. The Ohio study of ASAP also found a statistically significant increase in annual earnings six years after study entry, with an 11% (\$1,948) increase in average annual earnings for ASAP participants compared to the control group. The success of ASAP at CUNY has led to it being replicated in Ohio and adaptation for four-year colleges through the Accelerate, Complete, Engage (ACE) programme. Where ASAP is focused on associate degree learners at community colleges, ACE is designed for bachelor's degree learners at four-year colleges. These adaptations have also shown positive results, further verifying the programme's model and the need for not just holistic admission but holistic, ongoing support to ensure learners from diverse backgrounds can thrive and to increase degree attainment among diverse backgrounds.

Alongside the observed benefits, there are several disadvantages associated with using these approaches. Holistic admissions introduce subjectivity and potential bias into the decision-making process (Liu, 2022). Those responsible for admissions may have unconscious biases

that affect those who are accepted and potentially lead to inconsistent, unfair outcomes. When the criteria used in holistic admissions differs from universities and are not clearly defined or communicated, this can lead to applicants who have not been unsuccessful, to perceive the process as unfair and not understand why they haven't been successful. Furthermore, the process of reviewing the applications with added qualitative data e.g. recommendation letters, background information of candidate, can be resource intensive for administrators and potentially costly (Finn, 2022).

Financial Support (through scholarships or loans)

Policy Area: Financial incentives

Locations: UK, United States

Sector Focus: Higher Education (HE) and Further Education (FE)

Strength of Evidence: There is a small but robust evidence base that financial support does aid participation and improve retention rates in FE and HE.

Summary of Findings:

- There is a lack of comprehensive data on the long-term impacts of financial aid.
- Financial incentives are more impactful when they are integrated with other interventions to increase participation.

Reflections and suggested research pathways:

- **Monitoring:** Monitor learners who have received financial support to understand longer-term outcomes. Linking administrative datasets would provide opportunities for longitudinal analysis.
- **Policy design:** Future programmes focusing on increasing participation should not apply financial incentives in isolation but combine them with other interventions, such as information events about attending FE and HE, and mentoring support to manage issues that arise. Monitoring and evaluation frameworks should be set up during the policy design process to understand the impacts of different strands within programmes.

UK Evidence

Financial support has been an intervention aimed at increasing participation in both further education and HE both in the UK and internationally for prospective learners.

A study exploring the impact of financial support on learner retention at a UK university found that scholarships significantly improved retention rates, especially for learners from low and intermediate-income households (Moore & Burgess, 2022). Furthermore, the value of the scholarship (varying from £500 to £3,000) did not affect the withdrawal rates from HE. The research highlights the importance of targeting financial aid to those most in need to maximise

its effectiveness. The (OECD, 2019) looked at the impact of financial aid across OECD countries, finding that upfront support (grants) and income-contingent loans have positive effects on enrolment, particularly for low-income learners.

However, some young people perceive that having a HE qualification is not necessarily the catalyst that shapes their employment outcomes (Tomlinson, 2008). This is because the graduate labour market is seen as congested and highly competitive, which diminishes the perceived value of academic qualifications alone. Students believe that academic credentials need to be supplemented with other skills and experiences, such as internships, extracurricular activities, and networking, to stand out to employers. Furthermore, employers are increasingly looking for a combination of qualifications and practical experience, making it essential for graduates to demonstrate more than just academic achievements. The report highlights that there is a perception from some young people that the value of a degree has declined over time, making it less of a guarantee for securing desirable employment.

A report by the Institute for Fiscal Studies (IFS) (Institute for Fiscal Studies., 2022) highlights that the variation of the cost of living across the UK impacts the financial returns of attending different universities as economic returns from having a degree are not as meaningful in areas where the cost of living is higher. For example, while London offers many graduate job opportunities, the high cost of living significantly impacts the financial returns of higher education. London and the Southeast have much higher living costs compared to other regions in the UK. This includes housing, transportation, and other daily expenses. Graduates working in London may earn higher salaries, but their disposable income (income after living costs) may not be significantly higher than graduates in other regions with lower living costs. The report highlights that graduates from universities in regions with lower living costs, such as the Northwest, may achieve a similar or better standard of living despite earning lower salaries.

For Welsh-domiciled learners, there are financial grants to help increase participation in further education and HE.

- For HE learners, maintenance grants and loans are offered, and eligible new full-time undergraduates receive a minimum grant of £1,000 a year (Welsh Government, 2025)
- The Education Maintenance Allowance (EMA) (Welsh Government, n.d.) provides financial support to 16- to 18-year-olds who want to continue their education after school leaving age. Eligible learners can receive £40 a week, which helps reduce

financial barriers to continuing education. The review of the Education Maintenance Allowance (EMA) in Wales (Welsh Government, 2024) identifies several gaps and areas for improvement. These include a lack of comprehensive data on the long-term impact of EMA on learners' educational and career outcomes. More longitudinal studies are needed to understand whether EMA influences learners' progression into HE and employment. The report suggests that the targeting of EMA could be improved and there is a need for better alignment with other financial support systems to ensure that the most disadvantaged learners receive adequate support. The report presents evidence regarding the impact on non-recipients of the Education Maintenance Allowance (EMA) just above the eligibility threshold: surveys conducted with students indicate that those who do not receive EMA are more likely to report financial difficulties that affect their ability to continue in education. The report found that recipients of EMA were more likely than non-recipients to enrol in further education (school or FEI) in the September following their year 11 year. Non-recipients were more likely to enrol after some time out of education. Interviews with students and educators reveal that non-recipients often need to take on longer hours in part-time work to support themselves, which can interfere with their studies. Furthermore, some stakeholders suggest a discretionary system based on individual circumstances is needed (related to the allowance being contingent on attendance) and that the role of parental and community engagement in the effectiveness of EMA is not thoroughly explored.

- The Welsh Government Learning Grant (Student Finance Wales, n.d.) is available to learners over 19 years old from low-income families to help cover tuition fees and living costs, making further education more accessible. It requires learners to be at a participating school or college, lead to a nationally recognised qualification, up to and including Level 3 qualifications.
- The Financial Contingency Fund (FCF) (Welsh Government, n.d.) is offered to learners aged between 16 and 18 who are in financial difficulty and at risk of leaving their education. It provides additional financial assistance to help them stay in education. The fund is administered by FE colleges in Wales on a discretionary basis.
- Financial support for transport and childcare is available, which helps learners manage the additional expenses associated with attending further education. This is offered to over 16-year-olds studying at their local sixth form and travelling over a set distance to

get there, 16- to 19-year-olds and studying full-time at a further education college, or 19-year-olds or over studying part-time.

International Evidence

In 2020, Transforming Access and Student outcomes (TASO) commissioned a study of the impact of interventions for widening access to HE (Education Policy Institute, & TASO, 2020). A component of the study was an international literature review looking at financial support (grants, bursaries, scholarships and fee-waivers) offered to prospective learners of HE, to see whether financial help influences the actual cost of applying and/or participating in HE. Evidence was reviewed from eight causal research studies and six literature reviews. All the studies used experimental or quasi-experimental techniques to assess impact with most of the research from the US. The study also reviewed UK evidence available since 2012 when the UK Government introduced reforms to student finance alongside international evidence from the last 10 years. The review highlighted that more evidence is needed on the impact of financial support specifically in the UK. The review of international evidence indicated that financial support could have a positive impact on retention/completion in HE. However, there is insufficient evidence to make claims about which forms of financial support (bursaries/grants/fee-waivers/scholarships) are most effective. There are also questions around the threshold after which financial support is effective at increasing enrolment to HE because it covers a significant proportion of the unmet financial need (gap between the cost of HE and all learner resources that do not need to be repaid) (Education-to-Workforce Indicator Framework, 2025). Furthermore, the report highlighted that financial support is most effective when it is easy to understand and apply for, and where efforts are made to raise awareness among potential beneficiaries. Interventions that combine financial aid with other support measures, such as mentoring and counselling, tend to be more effective. These programmes not only provide financial relief but also help learners navigate the HE system.

The ASAP (Kelchen, 2022) study in the US, detailed in the Contextualised Admissions section, provides comprehensive support including financial assistance and has significantly improved graduation rates among participants. The Bottom-Line programme, delivered in the US (The Bottom Line, 2025), provides personalized support (including financial support) to low-income and first-generation learners. It has shown positive impacts on learner persistence and graduation rates

Mentorship and Peer Support

Policy Area: Mentorship and Peer Support

Location: UK, United States, Australia, Canada and South Africa.

Sector Focus: Higher Education (HE) and Further Education (FE)

Strength of Evidence: Good robust evidence that mentoring does have a positive impact on maintaining participation in HE and FE. Causal evidence is limited.

Summary of Findings:

- Timespan: The findings highlight that effective academic coaching interventions typically span at least 12 hours over 4 weeks.
- Role models: Relatable role models can significantly boost learners' confidence, aspirations, and understanding of HE, especially when the mentors have similar backgrounds to the learners they are supporting.
- Preventing drop-out: Academic coaching and targeted support for struggling learners are crucial in preventing dropouts in FE.
- Career prospects: The support from mentors and peers often leads to better career prospects; apprentices who receive support are more likely to advance within their chosen fields, as they are better prepared for the challenges of their professions.

Reflections and suggested research pathways:

Evidence gaps: Establishing causal impact of mentoring and peer support on enrolment and longer-term impacts would provide more robust evidence for the intervention.

According to TASO (Transforming Access and Student Outcomes in Higher Education, 2020) mentoring, counselling and role model interventions are intended to encourage learners to perceive HE as a place where they belong and are directed at increasing aspirations and the learners' confidence. Peer mentorship is used both in the UK and internationally.

In 2020, TASO reviewed evidence (Education Policy Institute, & TASO, 2020) on the impact of interventions aimed at widening participation in HE, with studies focused on mentoring and role models predominantly coming from the UK and US. The review found that mentors who act as relatable role models can significantly boost learner's confidence, aspirations, and understanding of HE especially when the mentors have similar backgrounds to the learners they are supporting. Effective mentorship programmes are tailored to the specific needs of learners and integrated with other support measures, such as career advice and financial aid. The report also highlights that starting mentorship early, before learners enter HE, has a more substantial impact on their educational journey. UK based evidence includes The National Collaborative Outreach Programme (NCOP), discussed previously, where mentoring is a key component to help underrepresented, groups access HE.

UK Evidence

The Sutton Trust's Pathways to Law (Sutton Trust, n.d.) programme provides mentoring, work placements, and university visits to support learners from disadvantaged backgrounds aspiring to study law. It is delivered over two academic years, in Year 12 and 13. It includes a mix of work experience placements, skill workshops, information sessions, and networking events. Data from the Higher Education Access Tracker (HEAT) (Sutton Trust, 2024) shows learners who participate in the programme are more likely to attend research-intensive universities and study law compared to those who applied but did not get a place. The programme has also been shown to boost learner's confidence and provide valuable connections and insights into the legal profession, which helps them make informed decisions about their future careers. However, to caveat this, the Sutton Trust's Pathways to Law programme is selective. The programme targets high-achieving students from underrepresented backgrounds who are interested in pursuing a career in law. Applicants must meet specific eligibility criteria, including academic performance and attending a state-funded school. Given this selectivity, the control group (those who applied but did not get a place) might indeed differ in terms of academic ability or other factors, potentially introducing bias.

In the UK, Peer Mentoring and Peer-Assisted Learning (PAL) programmes are designed to enhance learning and success through collaborative and supportive peer interactions. The PAL approach is learner-centred and aims to increase academic confidence and a sense of belonging through peer learning. The programmes focus on leadership development and character education in order to improve academic performance. A report explored the use of PAL and translanguaging (multilingual speakers switching between languages and

blending them fluidly to make meaning, communicate, and learn) to support learners' transition into HE and found significantly improved academic performance and well-being, particularly for multilingual learners (Meletiadou, 2022). Moreover, a report (Emily Stapley, 2022) provided groundwork evidence for the positive impact of peer mentoring on various outcomes for both mentors and mentees in a UK secondary setting. Their paper suggests that peer mentoring can enhance academic engagement and success. These studies collectively indicate that peer mentoring and PAL can play a substantive role in supporting learners' academic journeys, particularly in increasing participation and success in HE.

A report focused upon second- and third-year undergraduate students experiences at a small UK HE Institution as PAL Leaders. Students facilitated group study sessions and provided mentoring support to lower-year students (Bailey, 2021). The research, conducted through in-depth interviews and visual data collection, reported on three main themes: social connectedness, self-development, and self-efficacy. The study highlighted that PAL Leaders reported that engaging in PAL activities helped them build meaningful relationships with peers and faculty, enhancing their overall university experience. The role of a PAL Leader contributed significantly to personal growth particularly for the PAL leaders. Students developed important skills such as communication, leadership, and critical thinking. They also gained confidence and a better understanding of their own academic abilities. Positive feedback and encouragement from peers and mentors played a crucial role in boosting their self-efficacy and they became more empathetic and understanding of the challenges faced by their peers, which in turn enhanced their mentoring effectiveness.

A crossover randomised controlled trial in the South West of England examined the impact of role models and mentoring on university applications among learners from disadvantaged backgrounds (Sanders, et al, 2018). The trial involved learners from local schools and colleges, particularly focusing on those from poorer backgrounds. Current university learners visited these schools and colleges to provide accurate information about the costs and benefits of university education and to give inspirational talks. Data was collected on the learners' university application outcomes. The finding highlight that the intervention significantly increased the likelihood of learners applying to selective universities. The effects were more pronounced for learners attending further education colleges, which typically serve more disadvantaged learners. The intervention had weaker effects on other outcomes, such as overall academic performance. These findings suggest that role models and mentoring can effectively encourage learners from disadvantaged backgrounds to apply to selective universities, particularly those in further education colleges.

International evidence

Programmes that pair learners with mentors such as the Big Brothers Big Sisters (BBBS) in the US help learners build confidence and navigate the college application process, boosting their likelihood of enrolling in college (Evidence for ESSA, 2025). The BBBS programme is a well-documented example of a successful mentoring initiative that pairs learners with mentors. A large-scale national study found significant improvements in academic performance and engagement among BBBS participants. The same study reported decreases in disruptive behaviour and improvements in interpersonal relationship skills. BBBS programmes help learners develop better social and emotional skills, which are crucial for their overall development. Although some effects may diminish over time, the presence of a mentor can have lasting positive impacts on learners' lives, including better relationships and increased self-confidence.

A report explored the impact of peer mentorship programmes on first-year college learners in the US (Graham, Wayne, & Persutte-Man, 2022). Conducted as a mixed-methods study, it assesses a class leader peer mentor programme. The study found that learners with peer mentors showed up to a 10% higher persistence rate and a 0.4 grade point increase in first-term GPA (Grade point average) compared to those without mentor. Grade Point Average is a standard way of measuring academic achievement in the U.S. and other countries. The GPA is calculated by averaging the grades a student receives in their courses, typically on a scale from 0 to 4.0, where 4.0 represents an "A" or excellent performance.

Peer mentorship correlated with greater enjoyment of the university experience, a stronger sense of belonging, and higher campus participation. The study also gathered qualitative data, corroborating the positive effects of peer mentorship on learners' social and academic adjustment. The research underscores the importance of structured peer mentorship programmes in supporting learner transitions and improving overall outcomes

A systematic review by examined the effectiveness of academic coaching interventions on learner success in HE (Campbell, & Mogashana, 2024). 25 peer-reviewed articles published between 2010 and 2023 were included, with research from the US, UK, Australia, Canada and South Africa. The characteristics of effective academic coaching interventions were analysed, including coaching format (individual or group), mode (in-person or distance), topics, coach background, duration, and frequency. A key finding of the review is that effective academic coaching interventions typically span at least 12 hours over 4 weeks. In-person coaching was found to be more effective than distance coaching. Professional coaches were

more effective than peer coaches. The review highlighted improvements in learner retention, academic success, and overall well-being as key outcomes of effective coaching interventions. These findings suggest that structured, professional, and in-person academic coaching can significantly enhance learner success in HE.

Qualitative analysis by examined the German apprenticeship system and its effectiveness in vocational education (Oh, 2024). The research examined reports, academic studies, and real-world examples of the German apprenticeship model, focusing on the structure, implementation, and outcomes of the apprenticeship system. Mentorships and peer support are integral to the dual system (dual vocational training system, combines theoretical learning with practical experience), providing apprentices with practical, hands-on experience and guidance from more experienced colleagues. This helps bridge the gap between theoretical knowledge and practical application. Having mentors and peer support systems increases apprentices' motivation and engagement. They feel more supported and valued, which can lead to higher retention rates and better performance. Mentors play a crucial role in developing both technical and soft skills, which helps them become more competent and confident in their roles. The support from mentors and peers often leads to better career prospects with apprentices who receive support more likely to advance within their chosen fields, as they are better prepared for the challenges of their professions.

Mental Health and Wellbeing Support

Policy Area: Mental Health and Wellbeing Support

Location: Wales, England, United States, Australia.

Sector Focus: Higher Education (HE) and Further Education (FE)

Strength of Evidence: Good evidence that there is a demand for mental health and wellbeing support in HE and FE, however there is a lack of robust evidence identifying the impact of types of mental health support on increasing students' participation in HE and FE.

Summary of Findings:

- Evidence of impact: Cognitive-behavioural therapy (CBT) and counselling were found to be effective in reducing symptoms of depression and anxiety among students, and practices such as meditation and yoga showed positive effects on reducing stress and improving overall well-being.
- Peer-led support groups: The most common type of intervention targeting learners with mental health difficulties; however, there is not enough substantial evidence for the effectiveness of peer support.
- Accessible mental health support: Can significantly improve learner retention, highlighting the importance of mental health services in HE settings.

Reflections and suggested research pathways:

- Monitoring and evaluation: Robust data collection processes could be put in place to identify whether access to this type of support has led to increased retention for learners and academic achievement. Also, developing robust feedback systems to continuously improve the service based on learner experiences and outcomes could be integrated.
- Accessible mental health support: Providing accessible mental health support can significantly improve learner retention, highlighting the importance of mental health services in HE settings.

Poor mental health has been shown to be barrier for young people when it comes to educational attainment and participation in TE. Public Health Wales analysis shows that

mental health problems among children and young people are on the increase with higher rates of mental health crises³ particularly among teenage girls and young women (Public Health Wales, 2022). Furthermore, children living with a parent who has depression are more likely to develop depression and face difficulties in achieving educational milestones (Brophy, Todd, Rahman, Kennedy, & Rice, 2021). A report produced by the Children, Young People and Education Committee in the Senedd, emphasizes the need for consistent mental health support in HE settings in Wales and recognizes that the transition to HE can lead to exacerbation of existing mental health issues as well as a need for immediate mental health support (Senedd Children, Young People and Education Committee, 2023).

The report 'Learner experiences in post-16 education: April to May 2024' (Welsh Government, 2024) presents the findings of a survey into learner experiences in post-16 education. The research focused on improving understanding of the recent experiences of learners in further education who are aged 16 to 24. The findings highlighted that high proportion of FE learners reporting poor mental health and emotional wellbeing, Learners reported struggles with anxiety, depression, and overall deterioration in mental health. Whilst learners felt providers were attempting to meet their mental health and wellbeing support needs there remains a significant unmet demand which requires training and resource.

UK Evidence

There are several effective interventions both in the UK and internationally that have been implemented to support learner mental health and well-being in HE.

The report 'What works to tackle mental health inequalities in higher education?' (Robertson A., Mulcahy E., and Baars S. from Centre for Education and Youth, 2022) explores factors affecting student mental health and evaluates various interventions aimed at improving mental health outcomes for students. The report includes a comprehensive review of existing literature to assess the effectiveness of different mental health interventions. Stakeholders participated in surveys and roundtable discussions. The consultation was structured around different types of higher education providers, including further education colleges, Russell Group universities, post-1992/metropolitan universities, and small/specialist providers. Additional interviews were conducted with students and stakeholders who could not attend the roundtables. A caveat of the methodology is that the report relies heavily on cross-sectional studies, which provide a snapshot in time but do not capture long-term effects of

³ Mental health crisis defined by Aneurin Bevan NHS Health Board as being in great emotional distress or anxiety, being unable to cope with day-to-day life, thinking about suicide or self-harm or experiencing hallucinations or seeing voices. [Mental Health Crisis - Aneurin Bevan University Health Board](#)

interventions. Longitudinal studies would offer more robust evidence on the sustained impact of these interventions.

The report highlighted those students from low socioeconomic backgrounds and Black, Asian, and Minority Ethnic backgrounds are at higher risk of poor mental health. The report reviews several types of interventions, including psychological, mindfulness-based, recreation programmes, technology-based, and peer mentoring. It identifies that Cognitive-behavioural therapy (CBT) and counselling were found to be effective in reducing symptoms of depression and anxiety among students and practices such as meditation and yoga showed positive effects on reducing stress and improving overall well-being. Physical activities and social engagement through sports and exercise classes contributed to better mental health outcomes. Furthermore, mental health apps and online platforms provided accessible support and were effective in reaching a broader student population. The report also highlighted that combining different types of interventions (e.g., psychological, mindfulness, and recreation programmes) was more effective than single interventions alone. The report also did highlight that the main barriers for students accessing mental health support was to do with the stigma around mental health, lack of awareness about available resources, and insufficient funding for mental health services.

Interventions in the UK include:

- the Learner Minds Programme (Cardiff Student's Union, n.d.) (aimed at promoting mental health in HEI's),
- UK's Step change framework (Universities UK , 2023) (aimed at universities to implement a whole institution approach to mental health from admission to graduation),
- The Mental Health University Liaison Service (MHULS) (Public Health Wales , 2025) (aimed at ensuring learners receive access to comprehensive mental health care),
- training mental health champions (University of South Wales , 2025)(includes staff and learners),
- online and proactive mental health services and counselling, peer support and mentorship programmes and mental health literacy campaigns.

Within the Cardiff region, The Mental Health University Liaison Service (MHULS) pilot scheme was launched in 2022 to provide support for HEI learners with moderate to complex mental health issues. NHS mental health staff worked with the wellbeing services in the universities

around the Cardiff area to identify those learners in need of mental health support. The services offered were mental health assessments to identify the most appropriate care pathways for learners, safety plans to manage their mental health effectively and facilitate referrals to more relevant tailored support. The MHULS attends review meetings with stakeholders to monitor and adjust support plans as needed. As a result of this pilot, there has been improved access to mental health support for learners, ensuring they receive timely and appropriate care and learners have reported feeling better understood and supported through their engagement with MHULS. The partnership between universities and NHS services has strengthened, leading to more cohesive support for learner mental health. To further increase retention rates within universities, particularly those with mental health struggles, other universities across Wales should look to work with NHS mental health staff to increase availability of the services. Providing additional training for university staff and mental health practitioners could help in handling a wider range of mental health issues, especially for those learners who are on the cusp of needing NHS service. To ensure that the impact of the MHULS is captured, robust data collection processes (Senedd Cymru, 2024) could be put in place between the NHS and Universities to identify whether access to this type of support has led to increased retention for learners and academic achievement. Also developing robust feedback systems to continuously improve the service based on learner experiences and outcome could be integrated.

The UK charity Student Minds developed the Student Minds programme (2016) to promote mental health in HEI's. One of their main programmes was 'Look after your mate' (Warren & Byrom, 2016) which was developed to identify the issues that learners face in providing support to friends with mental health difficulties, their needs as supporters, the support they receive and the impact this responsibility has on their lives. The study included a survey of 79 HEI learners who were supporting a friend with mental health difficulties. The report highlighted that those friends providing support need more information on how to provide effective support and balance their responsibilities and there is a need for better access to mental health services and academic accommodations. Student Minds developed training for university and student staff so that they could run 'Look After Your Mate' workshops (Student Minds , 2025) with the aim of increasing their knowledge, confidence and skills to empower learners to support friends experiencing mental health difficulties. A study by Reis et al. (2022) looked at relationship between peer-delivered health promotion programme and learner well-being within HE with participants of a Sydney-based University Mental Health Day event (Reis , Mortimer, Rutherford, Sperandei, & Saheb, 2022). The report highlights that with the

continuing pressure on university learner services to provision learner well-being not being encountered with appropriate resourcing, peer-to-peer programme such as Mental Health and Well-being and Learner Ambassador Programme could make a difference in supporting and promoting learner mental health. A study by Pointon-Haas et al (2023) conducted a systematic review of peer support interventions for learner mental health and wellbeing in HE (Pointon-Haas, et al., 2023). The study suggested that peer learning and peer mentoring had more positive results reported for inducing anxiety and stress than the other interventions. Peer-led support groups seem to be the most successful type of intervention targeting learners with mental health difficulties; however, the report did emphasise that there is not enough substantial evidence for the effectiveness of peer support.

Incorporating mental health support for university learners using internet-based interventions, including smartphone apps have been developed to help learners with their mental health particularly those with depression and anxiety symptoms. A study by Morris et al. (2020) uses a randomised controlled trial approach to evaluate the effectiveness of a self-guided mobile app, 'Feel Stress Free' for six weeks (McCloud, Jones, Lewis, Bell, & Tsakanikos, 2020). The app included relaxation activities such as calm breathing, mindfulness-style meditation, deep muscle relaxation, and self-hypnosis. There is also mood tracking and information on challenging unwanted/ negative thoughts and a relaxing minigame. The results showed that the 'Feel Stress Free' app did have positive effects on reducing the symptoms of both depression and anxiety whilst also allowing quick access to Cognitive Behavioural Therapy help. As the research was conducted over six weeks, further research is needed to establish its effectiveness beyond the 6 weeks.

The Step change framework was developed by Universities UK to provide guidance for universities to put in place a strategic approach to mental health and wellbeing within their institutions (Universities UK , 2023). The framework along with the University Mental Health Charter (UMHC) includes a whole university approach to mental health where mental health support is embedded in all aspects of learner life (Hughes & Spanner, 2024). It emphasises collaboration between universities and NHS services, the need for early interventions and aims to create a supportive environment that promotes well-being. As part of the framework, a self-assessment tool has been created to aid universities. However, there is a lack of robust data to measure the impact of the framework on universities and learners in need of mental health support. Similar to the Step change framework, the US have the JED Campus, it offers a comprehensive framework for mental health support but is tailored to the US context (JED Campus, 2025). The Jed Campus is designed to support the emotional health and well-being

of college and university learners. It aims to help colleges and universities to develop comprehensive systems, programmes, and policies to enhance mental health, reduce substance abuse, and prevent suicide among learners. According to an evaluation report from The Jed Foundation published in 2024, participants that have completed the JED Campus programme were 25% less likely to report a suicide attempt, 13% less likely to report planning a suicide, and 10% less likely to report suicidal ideation (The Jed Foundation, 2024). A study by Harris et al. (2022) highlights that universities, colleges and universities across New York State are adopting a holistic approach to mental health, integrating it into various aspects of campus life, including academic curricula through courses, learner services, and extracurricular activities (Harris, Maher, & Wentworth, 2022).

International evidence

In Australia, a study by Zając et al. (2023) analysed how accessing university mental health services impacts learner retention rates in HEI's in Australia (Zając, Perales, & Tomaszewski, 2023). They linked administrative data on the full population of domestic learners who were starting an undergraduate course at an Australian university between 2012 and 2015. They found that learners who accessed university mental health services had a 14% higher retention rate compared to those who didn't access these services. The findings suggest that providing accessible mental health support can significantly improve learner retention, highlighting the importance of mental health services in HE settings.

Educational campaigns that raise awareness of mental health issues and resources are shown to reduce stigma, increase help-seeking behaviours, and could improve retention. A study by Harris et al. (2022) highlighted that the State University of New York (SUNY) system public awareness campaign led to increased knowledge of mental health services and encouraged learners to seek help (Harris, Maher, & Wentworth, 2022). A systematic review conducted by Song et al. (2023) found interventions to reduce stigma associated with mental health conditions showed small, short-term effects in young people (Song, Hugh-Jones, West, Pickavance, & Ghazala, 2023). Education-based interventions showed relatively more significant effects than other types of interventions and a study by Waqas et al. also supports this (Waqas, et al., 2020). Within their paper they highlighted that most successful interventions included education through lectures and case scenarios, contact-based interventions, and role-play as strategies to address stigma towards mental illnesses. These strategies seemed to be the most successful in improving stigma, attitude, help-seeking, knowledge of mental health including recognition of depression, and social distance.

Academic Readiness

Policy Area: Academic Readiness

Location: Wales, England, Germany, Finland

Sector Focus: Further Education (FE) and Higher Education (HE)

Strength of Evidence: Good evidence for academic readiness interventions. Academic readiness interventions have included curriculum reform and skills alignments using vocational education and training (VET) programmes and foundation courses to provide learners with practical skills and knowledge in specific career fields, and further support to build their confidence, making them more prepared for both HE and the workforce.

Summary of Findings:

- Curriculum reform: Incorporating vocational and technical qualifications motivates learners to continue through education by making their learning relevant to future careers.
- Alignment with labour market needs: By aligning the curriculum with labour market needs and offering apprenticeships as part of VET, the reforms increased participation and completion rates in further education. The reform also increased engagement levels as learners found the learning more compatible with their intended future career, and employers reported higher satisfaction with the readiness of VET graduates.

Reflections and suggested research pathways:

- There is a need to ensure the curriculum is up to date, incorporating vocational and technical qualifications that motivate learners to continue through education by making their learning relevant to future careers.
 - To make vocational education and training (VET) successful, there is an ongoing need to increase employer participation and engagement to ensure there are work placements and apprenticeships available.
 - Ensure high quality work placements, as they are crucial in providing learners with the practical industry expertise and skills.
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Academic readiness interventions in post-compulsory education aim to ensure that learners are prepared for the demands of HE and can successfully transition from secondary school to further education or training (Kurlaender, Reed, & Hurtt, 2019). Academic readiness ensures that learners are equipped to meet the academic challenges they will face, thereby increasing their chances of success and continued participation in compulsory education.

Academic readiness interventions have included curriculum reform and skills alignments using vocational education and Training (VET) programmes and foundation courses to provide learners with practical skills and knowledge in specific career fields, and further support to build their confidence making them more prepared for both HE and the workforce. There have been several successful programmes in the UK and internationally aimed at increasing participation in further education (16+). FE in Wales has focused on aligning the curriculum with labour market needs, particularly in STEM and vocational areas. Research stresses that an updated curriculum, which incorporates vocational and technical qualifications, motivates learners to continue through education by making their learning relevant to future careers (Hodgson & Spours, 2008). This is particularly crucial in FE, where learners may be more vulnerable to disengagement.

UK Evidence

The introduction of T Levels in England in 2020, as outlined by the Department for Education (DfE), has aimed to improve the quality of technical education in FE colleges. T Levels are a 2-year post GCSE (level 3) qualification that combine theoretical learning with a placement in a work setting of more than 315 hours.

Prior to a T Level, a T Level Foundation Year (previously called a Level Transition Programme) was also introduced. The T Level Foundation Year is designed for learners who need additional preparation before starting a T Level (Department for Education, 2021). It is not a replacement for GCSEs but instead is a bridge for those who have completed their GCSEs and need further support or need to build their confidence. A T-Level foundation is designed for learners with specific learning needs and who may have education, health and care plan that may need tailored support to prepare for a T Level. It is also aimed at learners who are looking for vocational pathways.

In 2023, Ofsted conducted a final report on T Levels and the T Level Foundation Year (Ofsted, 2023). The main findings showed that providers of T Levels and the T Level foundation year were more successful if they had substantial engagement with employers and ensured that the work experience was successfully embedded in the curriculum plan.

Furthermore, the report highlighted that high quality work placements were crucial in providing learners with the practical industry expertise and skills. There was also a strong link between high quality information, advice and guidance and the retention of learners on the courses. For example, those learners who attended taster sessions and events about the T-Levels, were more likely to stay on the course. Furthermore, the progression from the T-Level Foundation Year to T Level completion, according to the latest T Level Action Plan (Department for Education, 2024) has seen a steady increase in completion rates. For the 2022/23 academic year, the completion rate was approximately 75%. Of those who completed the T Level Foundation Year, around 65% progressed to a T Level programme. This indicates a significant portion of learners successfully transitioning to the more advanced T Level courses (level 2). These statistics highlight the effectiveness of the T Level Foundation Year in preparing learners for the demands of T Levels.

Furthermore, for those first cohort of students completing T-levels in 2022, about one-third cited higher education as their preferred next step (Shea, 2023). Additionally, T-levels are seen as a pathway for students from widening participation groups, such as those from low socioeconomic backgrounds. However, it's important to note that T-levels are still relatively new, and ongoing research is needed to fully understand their long-term impact on higher education participation.

A report published by EPI in 2024 (Maris, Khandekar , & Robinson, 2024) highlighted the significant challenges with enrolment and retention for T levels, noting that nearly one in three learners drop out within the first year of their T Level courses, which is particularly high in health and science courses. The report suggests several policy changes are needed to improve T Level outcomes. These include more beneficial support for learners during their transition to T Levels, greater training for teachers, and more robust methods for obtaining industry placements. The report highlights the need to raise awareness of T Levels with both learners and employers, also ensuring that the content of the courses and assessment are manageable. Furthermore, as the T Levels are designed around limited number of subjects e.g. construction work, health, business services etc., it provides less flexibility than A levels, especially if a learner wants to go and study something else. Also, the report highlights that not all HE providers accept T Levels as valid entry qualifications.

University Technical Colleges (UTC) are also used to increase participation in Further Education (FE) among 16- to 19-year-olds. UTCs are secondary schools in England for 14- to 19-year-olds that focus on STEM areas (Science, Technology, Engineering, and Mathematics) and operate in partnership with employers and universities. The aim behind

UTC's is to provide a tailored curriculum to meet local industry needs, providing learners with the local industries relevant skills and knowledge. The Baker Dearing Educational Trust reports (Baker Dearing Educational Trust, 2019) that learners graduating from UTCs have higher levels of skills alignment with industry needs, which has contributed to increased post-16 participation in further education and work placements. The National Audit Office (2019) also reported that these colleges provide a clear progression route into education and employment (The Comptroller and Auditor General, 2019). A report by the Sutton Trust (2021) highlights that further education, including UTCs, play a significant role in improving social mobility (Lisauskaite, McIntosh, Speckesser, & Espinoza, 2021). The report indicates that learners from disadvantaged backgrounds who attend UTC colleges are more likely to continue their education and achieve better long-term outcomes.

However, although learners may have better skills aligned with industry needs, an evaluation undertaken by the National Foundation for Educational Research (2019) highlighted that UTCs face difficulties in recruiting and holding onto learners and staff, and ensuring consistent employer engagement (McCrone, White, Kettlewell, Sims, & Rush, 2019). A report by Education Policy Institute (2018) showed that UTC learners generally make less academic progress compared to their peers in traditional schools and that high dropout rates for learners aged 16 to 17 years old (Dominguez-Reig & Robinson, 2018). Although this may have a detrimental effect on participation rates into HE, the report does also highlight that UTC learners are more likely to pursue apprenticeships and technical careers, aligning with the college's goals.

Scotland launched the national youth employment strategy: Developing the Young Workforce programme (DYW) from 2014 to 2021 (Education Scotland Foghlam Alba, 2023). The aim of the programme was to prepare young people for work by enhancing vocational education and reducing youth unemployment by 40% by 2021. The programme aimed to bridge the skills gap between education and employment by involving local businesses in shaping courses in the curriculum for learners age 3 to 18 years old. The programme incorporated work-based learning opportunities. The programme significantly expanded apprenticeship opportunities, including Foundation, Modern, and Graduate Apprenticeships. DYW advanced partnerships between schools, colleges, and employers to provide learners with real-world work experiences. According to the Scottish government, the programme successfully met its target of reducing youth unemployment by 40% in 2017 which was four years ahead of their schedule. The report produced by the Scottish Government did highlight challenges, as found in other studies of education interventions which collaborate with industries. There was an

ongoing effort needed to increase employer participation and engagement to ensure there was work placements and apprenticeships available. Furthermore, as the DWY programme aimed to provide work placements and apprenticeships for underrepresented groups and address both educational and workplace inequalities; it was challenging to ensure those learner's needs were met.

International Evidence

Internationally, the German model of vocational education (Graf, 2013), which integrates academic study with practical work experience, is often cited as a model of best practice (Hummelsheim & Baur, 2014). Germany's Dual Education System, also known as the Dual Vocational Training System, is recognized for its effectiveness in combining theoretical education with practical training. The system integrates classroom-based education at vocational schools with hands-on training in companies. Learners in Germany are legally required to stay in some form of education until they are 18 years old, which differs from Wales as post compulsory education is 16 years old. Learners in Germany in general, spend part of the week in school and the rest in a workplace setting. The system is credited with contributing to Germany's low youth unemployment rate compared to other European countries. A study by Euler (2023) outlines how the German system's close collaboration between education providers and industry ensures that learners develop skills that are directly applicable to the workforce (Euler, 2023). The report identifies essential components of the dual system in order for it to be a success in other countries. They include appropriate financing of the system, curriculum design, and quality assurance (consulting on training issues, and the handling of final examinations). The report highlights that successful dual systems require strong partnerships between the state, businesses, and educational institutions which studies discussed in this paper have also shown to be important. Strong partnerships ensure that training programmes meet industry needs and are maintained at a high standard with also being relevant to the changing labour market.

In 2018, Finland introduced Reform of Vocational Education and Training to make the system more learner focused, flexible, and competency-based, allowing for more individualized learning paths (Cedefop EU body, 2019). By aligning the curriculum with labour market needs and offering apprenticeships as part of VET, the reforms increased participation and completion rates in further education in Finland. The reform also increased engagement levels as learners found the learning more compatible with their intended future career and the employers reported higher satisfaction with the readiness of VET graduates (Romoleroux Lovo, 2020). Australia's VET in Schools (VETiS) programme also integrates vocational

education into the high school curriculum, allowing learners to attain nationally recognised qualifications while completing secondary education (Queensland Government, 2025). According to the National Centre for Vocational Education Research (NCVER) (2017), this approach has increased learner engagement and retention in further education by making school-based learning more practical and relevant to job opportunities (Misko, Korbel, & Blomberg, 2017). In Singapore, The Skills Future Earn and Learn Programme (EALP) aimed at 17 to 24 year olds is a work-study programme designed to help graduates from polytechnics and the Institute of Technical Education (ITE) transition smoothly into the workforce (Skills Future, 2015). The programme includes work-based learning combined with part-time courses, allowing participants to gain practical work experience while continuing their education. Each participant is appointed a mentor to guide them through their training and career development and there is a financial incentive. The graduates who successfully complete the programme receive a \$5,000 incentive and employers also receive grants of up to \$15,000 per participant to support the training of participants (Skills Future, 2015). The evaluation of the EALP in 2019 showed that EALP graduates enjoyed a continuous higher wage of about 10% over their peers who did not complete a EALP, and that their wage is comparable to that of graduates with degrees from Private Education Institutions (PEIs), despite the EALP taking less time to complete (Singapore Department of Statistics, 2019). The evaluation did emphasise that a major challenge was maintaining consistent quality across different sectors and training providers remains a challenge.

Euler (2023) in their report 'Roadmap to High-Quality Dual Vocational Education and Training' highlights that decisions and design choices used around the world should be based on solid evidence and continuous evaluation to achieve quality assurance and ensure the system is effectively captured and successful modifications can be made based on robust evidence (Euler, 2023). Also, it highlights that every endeavour should be made that all learners, regardless of their socio-economic background, have access to excellent vocational education

Digital Learning, inclusion and Pedagogical Innovations

Policy Area: Digital Learning, Inclusion and Pedagogical Innovations. The integration of technology to help learners prepare for higher education (HE) to increase enrolment, and the introduction of innovative pedagogical practices to universities (particularly after the COVID-19 pandemic), have become major focuses both in the UK and internationally.

Location: UK, Israel, Singapore, Sweden, United States

Sector Focus: Higher Education (HE) and Further Education (FE)

Strength of Evidence: Mixed evidence. There is evidence that digital learning makes education more accessible and flexible, but more research is needed to determine its impact on academic success and increasing participation in higher education settings.

Summary of Findings:

- **Accessibility and flexibility:** Resources are available for post-16 learners who have been disrupted by the pandemic, as well as for learners who need support in making the transition to university life. Digital learning has made education more accessible and flexible, but there are challenges with technological adaptation.
- **Potential of AI:** Artificial intelligence can be used to connect with learners about assignments, course information, and to offer encouragement, which could enhance learner success.
- **Learner recognition:** Approaches that include providing awards for excellence could increase retention and completion rates.
- **Adaptive learning technologies:** Tailoring content to individual learners' progress could help increase learner engagement and improve learning outcomes.
- **Part-time learners' needs:** Online platforms provide flexible learning options that are ideal for part-time learners, particularly working adults, but they require ample investment in staff training and infrastructure to ensure learner engagement.
- **Upskilling educators:** Investing in professional development for educators to effectively integrate digital technologies into their teaching practices is crucial. Offering continuous training to teachers with the latest digital tools and strategies could enhance their ability to support diverse learners.

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Reflections and suggested research pathways:

Monitoring and evaluating digital tools: Engagement in a digital environment can add complexities, and developing digital content that is sensitive to the diverse backgrounds of learners can be challenging. However, continuous monitoring of and consistent feedback on digital content and tools could help in ensuring that what is offered is fit for purpose

The integration of technology to help learners prepare for HE to increase enrolment and innovative pedagogical practices introduced to universities (particularly after the COVID-19 pandemic), to increase engagement and retention rates has been a major focus of pedagogical reform both in the UK and internationally.

UK evidence

A study by Watermeyer et al. (2021) examines the rapid transition to online learning in UK universities and its impact on both learners and staff. Their findings suggest that while online platforms provide flexibility, they require ample investment in staff training and infrastructure to warrant learner engagement (Watermeyer, Crick, & Knight, 2021).

The Open University in the UK has been investigating and implementing innovative pedagogical approaches as immersive learning methods show promise in enhancing learner engagement and retention (Kukulska-Hume, et al., 2024). To deliver their 'Innovating Pedagogy Report', the Open University worked with researchers and practitioners from the US university of Vanderbilt to come up with pedagogical innovations. These approaches included formative analytics (using data to provide ongoing feedback to learners and educators to identify learning patterns and areas where learners may need additional support), teach-back (involves learners teaching what they have learned to others with the aim of achieving deeper learning and retention), place-based learning (connecting learning to the local environment and community to create experiences and projects that are relevant to learners' lives), and learning with robots and drones (using robots and drones provides hands-on learning opportunities in STEM fields). These approaches have been shown to improve learner engagement and learning outcomes and the 'Innovating Pedagogy Report' highlights the importance of collaboration with other researchers and practitioners (including from other countries) in order to discover and develop innovative approaches to incorporate within the UK education system.

Within Wales, the Renew and Reform Programme (Welsh Government, 2023) includes interventions such as the University Ready Hub (The Open University, 2025), that provides online, bilingual resources for post-16 learners that have been disrupted by the pandemic and need support in making the transition to university life. The resources are hosted on the Open University's 'OpenLearn platform' and are created and gathered on behalf of all nine universities in Wales. These include videos, podcasts, articles, short interactives, and online courses. Topics include study skills, health and wellbeing support, and introductions to specific subjects and areas of academic study. This intervention highlights how digital platforms are being used to engage with potential learners and therefore increase enrolment into HE.

International evidence

Blended learning models that combine face-to-face with digital instruction have proven particularly effective in maintaining learner satisfaction and educational outcomes. Research on hybrid teaching approaches in Sweden suggests that combining in-person and digital learning enhances learner engagement and improves learning outcomes (Ottergren & Ampadu, 2023). Furthermore, Arizona State University (ASU) in the US has implemented a blended learning model that combines online and face-to-face instruction.

Also, work by Laurillard et al. (2018) emphasises the role of adaptive learning technologies, which tailor content to individual learners' progress, as a crucial innovation in university education (Laurillard, Kennedy, Charlton, Wild, & Dimakopoulos, 2018). The research suggests that universities that invest in these tools see higher rates of learner engagement and improved learning outcomes. Research on global trends in HE Governance highlights that investing in professional development for educators to effectively integrate digital technologies into their teaching practices is crucial (Digout & Samra, 2023). By offering continuous training to teachers with the latest digital tools and strategies to use these tools could enhance their ability to support diverse learners. The Professional Development Programmes in Singapore focused on professional development for educators to integrate digital technologies into their teaching practices. Constant training and support for teachers has enabled them to use up to date digital tools to ensure that learners benefit from the experience of these tools (Ng, 2015). This in sequence has contributed to higher learner engagement and enhanced learning.

In Israel, the Council for Higher Education (CHE) together with the Planning and Budgeting Committee (PBC) launched the digital learning initiative. This programme included developing

and investing in flexible technological infrastructure to enhance accessibility; particularly during the COVID-19. One notable example of how Israel's digital learning initiative has helped learners is through the Campus-IL platform. The digital learning platform offers a wide range of free online courses from reputable Israeli universities and colleges which included courses that help them prepare for HE and develop new skills that are linked to the changes in the labour market. During the pandemic, Campus IL-platform saw a huge increase in usage and the platform's psychometric exam preparation course (Kolodny, 2020). As the course is free it is accessible and inclusive to all learners regardless of socioeconomic status. Bitar and Davidovich (2024) research focuses on Israel's digital learning initiative and uses thematic analysis of in-depth interviews with 15 lecturers to investigate the implementation of the scheme (Bitar & Davidovich, 2024). The findings revealed that digital learning has made education more accessible and flexible, but there are challenges with technologic adaptation. For example, ensuring that learners have the technical skills required to effectively use digital learning tools, ensuring digital platforms are user-friendly and meet educational needs and ensuring learners have reliable internet access. Also, cultural integration can be challenging with digital learning, for example there may be resistance from educators and learners who are accustomed to traditional teaching methods, such as the tradition of 'chavruta' (where a small group of Jewish learners analyse, discuss, and debate a shared text). Engagement in a digital environment can add complexities and developing digital content that is sensitive to the diverse backgrounds of learners can be challenging.

In the United States at Georgia State University, AI-enhanced chatbot technology has been used since 2016 to improve learner engagement and retention (Georgia State University, 2024). For example, the 'Pounce chatbot' has been used to connect with learners about assignments, course information and to also offer encouragement. In 2024, the Georgia State's National Institute for Learner Success (NISS) received a \$7.6 million grant from the U.S. Department of Education to study the benefits of AI-enhanced classroom chatbot. This is with the aim of helping learners in undergraduate Maths and English. Taking it a step further, a private high school in London announced in 2024 that they are looking to trial a 'teacherless' AI classroom (Carroll, 2024). Evidence of the impact of these AI trials is expectant; however, it does indicate the types of AI technology that the UK and countries like America are focusing upon.

Furthermore, pedagogical innovations and digital learning approaches have shown to enhance the value of part-time study, making HE more accessible and effective for a diverse range of learners. Western Governors University in the USA (WGU) offers competency-based

education (CBE), allowing learners to progress at their own pace. Competency based education measures skills and learning rather than time spent in a classroom. Learners earn competency units (the equivalent of credit hours) when they demonstrate their skills through completing assessments (Western Governors University , 2025). This means learners are not limited to advancing only when the semester or term ends because they can progress through courses as soon as they've proved that they've learned the information. WGU online university provides flexible learning options that are ideal for part-time learners, particularly working adults. According to national surveys completed by WGU graduates, the results highlighted better employment outcomes, stronger employee engagement, and higher levels of well-being compared to graduates from other institutions WGU also use learner recognition approaches to increase retention and completion rates (Andersen & Leasure, 2016). A study on the impact of learner recognition at WGU found that learners who received awards for excellence showed a significant increase in persistence and retention rates (Bliven & Jungbauer, 2021). Specifically, there was a 10.9% overall lift in persistence among award recipients. This suggests that the CBE model, combined with motivational strategies, can enhance learner success. Online platforms and digital resources allow learners to learn at their own pace, providing flexibility which helps part-time learners balance their studies with other responsibilities. Technology can supply a wide range of learning styles and needs, making HE more inclusive. Video lectures, discussion forums, and adaptive learning software can support different types of learners, including those with disabilities. The University of Maine System has implemented various best practices and initiatives to improve learner retention and success (Maine's Public Universities, 2017). These include peer and staff mentoring programmes, academic support services, and the use of data analytics to monitor learner progress and provide targeted interventions. Furthermore, online and hybrid learning models can reduce the overall cost of education by minimizing expenses related to commuting, housing, and physical resources (Talib, Bettayeb, & Omer, 2021).

Summary of Findings

The review highlights the importance of a multi-faceted approach to increasing participation in TE in Wales. Combining financial support, mentorship, academic readiness programmes, and digital learning can create a more inclusive and supportive educational environment. The evidence review also emphasizes the importance of tailored, evidence-based approaches to address the diverse needs of learners, especially those from disadvantaged backgrounds, to enhance enrolment, retention, and attainment in TE.

The full review includes examples of each of these interventions. The interventions include:

1. Outreach and Early Awareness Programmes:

- **Objective:** These programmes aim to inform and inspire potential learners about the benefits and opportunities of TE. They often include activities like school visits, workshops, and information sessions to raise awareness and interest in higher education
- **Evidence:** Effective in increasing aspirations but limited evidence of direct impact on enrolment numbers.
- **Reflections and suggested research pathways:** Implement longitudinal studies to be able to measure impact and involve parents to enhance programme effectiveness.

2. Contextualised Admissions/Holistic Admissions:

- **Objective:** This approach involves evaluating a student's application in the context of their background and personal circumstances. It aims to provide a fairer assessment by considering factors such as socioeconomic status, school performance, and personal challenges.
- **Evidence:** Effective in increasing participation of underrepresented groups.
- **Reflections and suggested research pathways:** For those universities that have used contextualised admissions it does have a positive effect on increasing enrolment of disadvantage groups in HE. However, once enrolled, there is a need for holistic, ongoing support to ensure learners from diverse backgrounds can thrive once they are in HE. This includes academic advising, mentoring, and

financial aid to support retention and success of those learners admitted through contextualised admissions. Some universities within Wales have used contextualised admissions however, data needs to be reviewed to see whether the use of contextualised admissions in Wales had increase participation of underrepresented groups.

3. Financial Support:

- **Objective:** Financial support includes grants, scholarships, and loans designed to help students cover the costs of tuition, books, and living expenses. This support aims to make education more accessible to students from low-income backgrounds.
- **Evidence:** Mixed; financial aid helps retention but its impact on enrolment is less clear.
- **Reflections and suggested research pathways:** Combine financial aid with other support measures such as mentoring and counselling.

4. Mentorship and Peer Support:

- **Objective:** Mentorship programmes pair students with mentors who can offer advice, support, and encouragement. Peer support involves students helping each other, often through study groups or peer mentoring schemes, to enhance their educational experience.
- **Evidence:** Effective in boosting confidence and aspirations.
- **Reflections and suggested research pathways:** Tailor mentorship programmes to specific needs.

5. Mental Health and Wellbeing Support:

- **Objective:** These interventions include counselling services, mental health workshops, and wellness programmes designed to support students' mental health and wellbeing. The goal is to help students manage stress, anxiety, and other mental health issues that could impact their academic performance.

- **Evidence:** Cognitive-behavioural therapy (CBT) and counselling are effective in reducing symptoms of depression and anxiety in Higher Education learners. The most common type of intervention targeting learners with mental health difficulties is peer support however, there is not enough substantial evidence for the effectiveness of peer support. Accessible mental health support can significantly improve learner retention, highlighting the importance of mental health services in HE settings.
- **Reflections and suggested research pathways:** Increase mental health support and closely monitor and evaluate its impact to see whether types of mental health and wellbeing support have a direct impact on participant attainment.

6. Academic Readiness:

- **Objective:** Academic readiness programmes focus on preparing students for the academic challenges of HE and entering the labour market. This can include foundation courses, tutoring, and skills workshops to build the necessary knowledge and confidence for success in higher education.
- **Evidence:** Vocational education, foundation courses and an apprenticeship offer that align the curriculum with labour market needs as part of VET increased participation and completion rates in further education. Increased engagement levels as learners found the learning more compatible with their intended future career and the employers reported higher satisfaction with the readiness of VET graduates.
- **Reflections and Suggested Research Pathways:** Align curriculum with labour market needs and provide tailored support to build learners' confidence.

7. Digital Learning, inclusion and Pedagogical Innovations

- **Objective:** Digital learning involves using online platforms, digital tools, and resources to provide flexible and accessible education whilst enhancing pedagogical innovations. This can include online courses, virtual classrooms, digital learning materials that cater to diverse learning needs and schedules and the use of AI to connect with learners about assignments, course information and to also offer encouragement.
- **Evidence:** Mixed; digital learning increases flexibility but requires investment in infrastructure. The covid-19 pandemic prompted an acceleration of digital integration

in education; there is emerging evidence of both the opportunities and challenges relating to participation.

- **Reflections and suggested research pathways:** Invest in professional development for educators and ensure digital content is inclusive.

Summary of Reflections

The review highlights reflections borne out from research conducted in the UK and internationally.

The main reflections and suggested research pathways are:

1. **Monitoring and evaluation:** It is essential that the monitoring and evaluation plan for an intervention aligns with the aim of that intervention, to ensure outcomes and impacts can be measured and resource is allocated to collect and analyse information. For example, if an intervention is primarily aimed at increasing participation of, HE and FE then this needs to be measured through enrolment of FE and HE alongside soft outcomes of increased aspiration levels. This includes longer term monitoring to assess the impact of interventions and activities further down the line on disadvantaged learners, and specific learner groups including mature learners, carers, care leavers, ethnic minority learners and vocational learners.
2. **Parental Involvement:** Evidence shows parents have a direct influence on the learner's decision making around HE and parents of disadvantaged learners are more likely to question the value and cost of HE. Interventions should therefore incorporate activities focused on family and parent engagement and understanding of Tertiary Education options.
3. **Holistic Support:** For those universities that have used contextualised admissions it does have a positive effect on increasing enrolment of disadvantage groups in HE. However, once enrolled, there is a need for holistic, ongoing support to ensure learners from diverse backgrounds can thrive once they are in HE. This includes academic advising, mentoring, and financial aid to support retention and success.
4. **Tailored Mentorship:** Develop mentorship programmes that address the specific needs of learners. Academic coaching and targeted support for struggling learners, are crucial in preventing dropouts in FE. Relatable role models can significantly boost learner's confidence, aspirations, and understanding of HE especially when the mentors have similar backgrounds to the learners they are supporting
5. **Mental Health Services:** The evidence suggests a need for an expansion of mental health support services and to monitor the impact on learner retention and success. There is a demand for mental health and wellbeing support in HE, however there is a

lack of robust evidence identifying the impact of types of mental health support on increasing students' participation in HE.

6. **Academic readiness:** Ensure that the curriculum is aligned with labour market needs and offers practical training as part of VET, to increase participation and completion rates in further education. Incorporating vocational and technical qualifications, motivates learners to continue through education by making their learning relevant to future careers.
7. **Digital Infrastructure:** Evidence suggests a need to invest in digital learning infrastructure and professional development for educators to enhance learner engagement and success.

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