

Perth College UHI Economic Impact Assessment

A final report to UHI
25th September 2020





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1.

Introduction

This report presents an assessment of the economic impact of Perth College UHI in 2019.

This report presents an assessment of the economic impact of Perth College UHI in 2019. This is linked to a wider commission to evaluate the collective economic contribution made by UHI and its academic partners.

The analysis is based on data provided to BIGGAR Economics by Perth College in Spring 2020, together with an interview with College Principal, Dr Margaret Cook in June 2020.

1.1 Background

Being the first capital of Scotland, Perth has a rich, cultural history and Perth College UHI is part of the area's transformation into a flourishing new city. Perth College UHI is home to over 8,000 students and over 500 staff, and delivers courses in several overseas markets including China.

Whilst being a gateway to the Highlands and Islands, Perth lies in Tayside. This location makes Perth College UHI distinct in comparison to many of the UHI's other campuses. Whilst other campuses tend to be the only further and higher education provider in the local area, Perth College UHI faces greater competition to attract students, as Dundee and Angus College and Abertay and Dundee Universities also operate in the local area and Perth is not a far commute to the larger regions of Glasgow, Edinburgh and Stirling.

Most students at Perth College UHI are taught on campus. The style of teaching delivered at Perth College UHI is practical in nature, enabling students to undertake work and volunteer placements throughout their studies to apply knowledge in real-life settings. The College has a much broader reach as it uses online teaching to deliver teaching to students in multiple locations, including across the Highland and Islands region.

1.2 Reference Year and Geography

Our analysis is intended to measure the impact created by the UHI and its academic partners over a given timeframe, in this case it is 2018/19, the most recently completed academic year for which data are available. Throughout the report this has been referred to as 2019. Graduate data relate to students who graduated in 2019.

The impacts are presented for two geographies, the Perth and Kinross Council local authority area and Scotland as a whole.

1.3 Measurement and Method

The economic impacts are assessed in terms of two commonly used measures:

- Gross Value Added (GVA), which is a measure of economic output; and
- jobs.



GVA impacts are reported to nearest whole £ million and jobs are reported to the nearest 100, or nearest 10 depending on the scale of impacts. Student numbers are rounded to the nearest 10.

A detailed description of the metrics and the methods used to calculate impacts is provided in the Methodological Appendix at the end of the main UHI report.

1.4 Report Structure

The remainder of this report is structured as follows:

- Section 2 introduces Perth College UHI's quantitative economic impacts, which result from supporting students, delivering research, employing staff and running services; and
- Section 3 reflects on the wider benefits of the college, which are the result of research and commercialisation activity, support for the labour market, and links with industry and communities.



2.

Economic Impacts

This section presents the economic impact created by Perth College UHI.

Its impacts are described according to the themes set out in the UHI's strategic plan:

- supporting students;
- focussed research; and
- a university for all the region.

The summary tables at the end of this section show the estimated total economic contribution made by the College. This should be read alongside the wider benefits supported by organisation which are described in section **Error! Reference source not found.**

A full description of the methodology used to estimate these impacts is contained in an Appendix to the UHI's main report.

2.1 Supporting Students

Engaging in education brings an opportunity for people to enhance their earnings potential over the course of their working lives. The sub-section below quantifies the lifetime productivity benefits associated with the qualifications awarded to students at Perth College UHI.

The College has a total student body of 8,383 across its further and higher education courses. The curriculum offering for students is at the heart of the College and it aims to meet the needs and expectations of a diverse and geographically dispersed student body. Its approach facilitates greater access to a range of courses that offer pathways through tertiary education, delivering qualifications at all 12 SCQF levels from access courses up to and including PhD level. For all students, especially those living in communities where tertiary education was previously limited or non-existent, this represents a step change in the local education offering.

In 2018/19, Perth College UHI had 2,280 qualifiers from its full-time and part-time courses. In cases where students achieved more than one award in the same year, the productivity premium was applied to the highest level of award received by each qualifier to avoid double counting.

The table below show the highest qualification achieved by students at Perth College in 2018/19. Qualified undergraduates were assumed to have achieved Level 10 on the SCQF scale, which assumes they have completed an honours qualification. For those that do not complete honours level, assigning this group to Level 9 does not affect the analysis below.



Table 2-1 Qualifiers from Perth College UHI by SCQF Level, 2019

SCQF	Number of Qualifiers	Examples of Awards Included
Level 1	40	National 1 Awards
Level 2	10	National 2 Awards, National Certificate, National Progression Award
Level 3	20	National 3 Awards, Skills for Work National 3, National Certificate, National Progression Award
Level 4	190	National 4, Skills for Work National 4, National Certificate, National Progression Award, SVQ 1
Level 5	420	National 5 Awards, Skills for Work National 5, Modern Apprenticeships, National Certificate, National Progression Award, SVQ 2
Level 6	330	Higher Awards, Skills for Work Higher, National Certificate, National Progression Award, Foundation Apprenticeships, Professional Development Award, SVQ 3
Level 7	570	Advanced Higher Awards, Scottish Baccalaureate, Modern Apprenticeships, HNC, Professional Development Award, SVQ 3
Level 8	240	Diploma of Higher Education, Technical Apprenticeship, HND, Advanced Diploma, Professional Development Award, SVQ 4
Level 9	10	Bachelors/ Ordinary Degree, Graduate Diploma, Technical Apprenticeship, Professional Development Award, SVQ 4
Level 10	400	Honours Degree, Graduate Diploma, Graduate Certificate, Graduate Apprenticeships, Professional Development Award
Level 11	40	Masters' Degree, Post Graduate Diploma, Professional Apprenticeship, Professional Development Award, Graduate Apprenticeship, SVQ 5
Level 12	-	Doctoral Degree, Professional Apprenticeship, Professional Development Award
Foundation Apprenticeships	10	
Total	2,280	

Source: [SCQF](#) (2020); BiGGAR Economics Analysis of Data from UHI

The analysis considers the productivity impacts associated with qualifications at Level 4 and above. Three different methodologies have been used to suit available data on earnings premia associated with different levels of education. The groupings used and a brief description of the methodology applied in each case is described below. A full description of the methodologies used is contained in the methodological appendix in the main UHI report.



2.1.1 Qualifiers at SCQF Levels 4 to 6

SCQF Levels 4 to 6 represent qualifications gained in the senior phase of formal education (typically, ages 16-19) and in the initial stages of employment up to National Certificate and SVQ3 level. Foundation Apprenticeships are included as a Level 6 qualification. Based on the data received from UHI, it was estimated that 949 people received Levels 4 to 6 qualifications at Perth College UHI in 2018/19.

The methodology applied uses data from a study for the Department for Business Innovation and Skills¹ that measured the lifetime productivity impacts realised in England from achieving qualifications that are equivalent to SCQF Levels 4 to 6 in Scotland. The resulting productivity premium applied to qualifiers at these levels is shown in Table 2-2. The economic impact associated with each study area was estimated based on qualifiers' term-time address.

Table 2-2 Earnings Premium Assumptions, SCQF Levels 4 to 6

RQF Level	Equivalent SCQF Level	Productivity Premium
Level 1	Level 4	£8,667
Level 2	Level 5	£22,444
Level 3	Level 6	£29,444

Source: BIS (2011), Measuring the Economic Impact of Further Education and BiGGAR Economics Analysis

2.1.2 Qualifiers at SCQF Levels 7 and 8

SCQF Levels 7 and 8 represent higher education, modern apprenticeships, some professional development awards, SVQ Level 3/4, HNCs and HNDs. Based on the data received from UHI and its academic partners, it was estimated that 814 people received qualifications at Levels 7 and 8 from Perth College UHI in 2018/19.

To estimate the impact for qualifiers at this level, the analysis relied on a study by London Economics on the returns from RQF Level 4 and 5 qualifications for STEM and non-STEM subjects². Based on European Commission guidance, these correspond with SCQF Levels 7 and 8 in Scotland. The study found that the premium realised was different for STEM and non-STEM subjects and also for full-time and part-time qualifiers. This is because many part-time students undertake courses at a later stage in their working lives and have less time in which to realise the benefits.

The premiums applied are shown in Table 2-3. The appropriate rate of return was applied to UHI qualifiers according to courses they graduated from and the mode of study. Impacts were allocated to each area according to where students lived.

Table 2-3 Earnings Premium Assumptions, SCQF Levels 7 and 8

Study Mode	STEM Subjects	Non-STEM Subjects
Full-time	£78,500	£28,500
Part-time	£45,200	£13,500

Source: London Economics (2017), Assessing the economic returns to Level 4 and 5 STEM-based qualifications

¹ BIS (2011), Measuring the Economic Impact of Further Education and BiGGAR Economics Analysis

² London Economics (2017), Assessing the economic returns to Level 4 and 5 STEM-based qualifications.



2.1.3 Qualifiers at SCQF Levels 9 to 12

SCQF Levels 9-12 represents higher education awards, Bachelors' degrees, Masters' degrees, PhDs and other equivalent qualifications such as Professional Development Awards. Based on the data received from UHI and its academic partners, it was estimated that 450 awards were made by Perth College UHI at Levels 9 to 12 in 2018/19.

The approach towards estimating the productivity premium associated with higher education graduates is based on research carried out by the Department for Business Innovation and Skills (BIS)³. This considers the lifetime earnings premium accruing to a graduate compared with others whose highest formal qualification is an A-level or equivalent qualification. This study also gives a breakdown of graduate premia by subject studied and highlights the considerable variation in the returns from different degree subjects. Their research implies that the average graduate premium for all first-degree qualifiers is estimated to be £108,100 over their working lives. The study also estimates the returns from postgraduate and research degrees.

The total productivity impact associated with the students who achieved Level 9 to 12 qualifications was estimated by multiplying the returns associated with each degree type and subject by the number of graduates who qualified in that subject and degree type in 2019.

To estimate the economic impact generated in each study area, a distinction was made between UK qualifiers and non-UK qualifiers, as graduates from outside the UK are less likely to remain in the UK after achieving their degrees. Based on the Destination of Leavers from Higher Education Survey⁴, it is estimated that around 84% of graduates from Scottish institutions remain in Scotland on completion of their course. The graduate premium impact for UK-domiciled qualifiers in the Highlands and Islands was then estimated based on data provided by UHI for students' postcodes. Based on research from BIS, it is further assumed that only 20% of non-UK qualifiers remain in the UK following graduation. The total graduate premium across the Highlands and Islands and Scotland was then estimated by summing up these impacts.

2.1.4 Summary Productivity Impacts of Qualifications

Using these methods, the productivity impact associated with students receiving awards from Perth College UHI in 2019 is estimated to be £64 million GVA in Perth and Kinross and £88 million GVA across Scotland. A breakdown of impact by qualification level is provided in the table below.

Table 2-4 Earnings Premium by Level of Qualification – Perth College UHI

	GVA (£ million)	
	Perth and Kinross	Scotland
SCQF Levels 4-6 (Further Education)	18	21
SCQF Levels 7-8 (Higher Education)	29	33
SCQF Levels 9-12 (Higher Education)	18	34
Total	64	88

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

³ Department for Business Innovation & Skills (BIS) (2011), The Returns to Higher Education Qualifications.

⁴ Higher Education Statistics Agency (HESA) (2018), Destination of Leavers from Higher Education 2016/17.



2.2 Focused Research and Knowledge Exchange

The growing slate of research and knowledge exchange activity at UHI and its academic partners differentiates it as a University and supports its original purpose of creating a transformational impact on the economy and communities of the Highlands and Islands.

The key focus at Perth College UHI is on teaching. However, based on data provided, impacts can be quantified for knowledge transfer partnerships and from other knowledge exchange activity, such as contract research and consultancy. As a result of the research income generated by Perth College UHI, a portion of its core impact can also be attributed to focused research.

Research at Perth College UHI is conducted on several topics. The College hosts the Centre for Mountain Studies (CMS), established in 2000. The CMS undertakes research at all scales from the globe to Scotland and has organised many conferences. Since 2004, it has also run an online MSc in Sustainable Mountain Development.

The Centre hosts the UNESCO Chair for Sustainable Mountain Development. It delivers research, consultancy and knowledge exchange, with impacts in Scotland, Europe and around the world.

The combined impact of the quantifiable research and knowledge exchange activity at Perth College UHI is estimated to generate £700,000 GVA and support 20 jobs in the Perth and Kinross council area in 2019.

Table 2-5 Quantifiable Research & Knowledge Exchange Activity Impact

	GVA (£)	
	Perth and Kinross	Scotland
Total	700,000	800,000
	Employment	
Total	20	20

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

2.3 A University for All of the Region

2.3.1 Core Impact

The core impact of an organisation is the economic contribution it makes through its main activities. The core impacts associated with Perth College UHI include:

- **direct impact** –the value that it adds to the economy through its own operations which can be estimated as the difference between total income and total supply spending. In 2018/19, the College had a total income of £28 million and spent £6 million on supplies;
- **supply spending impact** – which measures the contribution made throughout the organisation’s supply chain by its expenditure on goods and services. This amounted to £2 million in 2018/19;
- **staff spending impact** –staff at the College create an impact on the economy by spending their wages and salaries in the areas where they live. In 2018/19 staff at Perth College UHI received around £19 million in salaries and wages; and



- capital spending impact** - this contributes to economic activity by supporting businesses in the construction sector and the amount spent can fluctuate from year to year. Based on spending over the past five years and taking future plans into account for the next five years, it is estimated that Perth College UHI spends around £3 million per year on capital investment. Around 60% of capital spending benefitted businesses in Perth and Kinross.

Summing up the economic impact generated by core activities, it is estimated that, in 2018/19, Perth College supported £25 million GVA and 600 jobs in Perth and Kinross. Across Scotland, the College created an economic impact of £30 million GVA and 700 jobs. A summary of impact by source is provided in Table 2-6.

Table 2-6 Core Impact – Perth College UHI

	GVA (£ million)	
	Perth and Kinross	Scotland
Direct Impact	22	22
Supply Spending Impact	1	2
Staff Spending Impact	3	6
Capital Spending Impact	<1	1
Total	25	30
	Employment	
Direct Impact	530	530
Supply Spending Impact	20	40
Staff Spending Impact	50	120
Capital Spending Impact	<10	10
Total	600	700

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

2.3.2 Student Community

In 2018/19, there were 3,757 full-time students enrolled at the College on all further and higher education courses. The student community at the College creates an economic contribution in four ways: through their spending patterns, through working part-time in their local communities, through placements and through voluntary work. Each of these impacts is explained below:

- Student spending** – students’ spending habits during term time supports turnover and employment in the businesses where purchases are made. Student spending is estimated based on where they live and on their spending patterns which are informed by the “Student Income and Expenditure Survey 2014 to 2015”⁵ published by the Department for Education (DfE). It is estimated that the full-time student community at Perth College UHI spend £39 million in the local economy each year.
- Student part-time work** - students also make an economic contribution by working part-time during their studies, most commonly in the hospitality and retail sectors. Based on national data it was estimated that around 33% of full-time students worked during term time⁶ for around 14 hours each week.
- Student placements** - students at the College contribute to local employment by carrying out work placements. As well as giving students valuable experience,

⁵ Department for Education (2018), Student Income and Expenditure Survey 2014 to 2015.

⁶ Office for National Statistics (2019), Labour Force Survey.



they also support the activities of businesses and organisations where they are placed. Data provided by the College indicate that around 146 students took part in placements in 2018/19.

- **Student volunteering** – this makes an economic contribution to a range of organisations and helps to make services possible that may not happen otherwise. Based on the evidence from a study by the National Union of Students⁷ (NUS), it was estimated that around 31% of students take part in volunteering activities and that each volunteer spends around 44 hours volunteering per year.

By summing the economic impacts generated by the College's student community, it is estimated that it contributed £23 million GVA and supported 630 jobs in Perth and Kinross in 2018/19.

Table 2-7 Student Community Impact – Perth College UHI

	GVA (£ million)	
	Perth and Kinross	Scotland
Student Spending Impact	16	24
Student Part-Time Work Impact	7	9
Student Placements Impact	<1	<1
Student Volunteering Impact	1	1
Total	23	34
	Employment	
Student Spending Impact	330	520
Student Part-Time Work Impact	260	370
Student Placements Impact	10	10
Total	630	930

Source: BiGGAR Economics Analysis (Note, figures may not sum due to rounding)

2.3.3 Tourism from Conferences and Events

The College attracts visitors to its students and staff and through organising conferences, events and graduations. This creates short-term tourist spending impacts in the local economy.

It is estimated that, in 2018/19, the economic impact associated with tourism-related activities at Perth College UHI was £0.3 million GVA and 10 jobs in Perth and Kinross.

2.3.4 Summary

The College is a significant part of the community's fabric. It is estimated that it generated an economic contribution that was worth £113 million GVA and 1,250 jobs throughout Perth and Kinross in 2018/19.

In addition to its impact which is measured here at a Scottish level, the College also has a wider impact internationally, particularly through courses in aviation, which was beyond the scope of the current study.

⁷ National Union of Students Connect (2014), The Student Volunteering Landscape.



Table 2-8 Total Impact – Perth College UHI

	GVA (£ million)	
	Perth and Kinross	Scotland
Student Lifetime Earnings Impact	64	88
Research Impact*	1	1
Operational Impact	48	64
Total	113	152
		Employment
Research Impact*	<10	<10
Operational Impact	1,240	1,640
Total	1,250	1,640

Source: BiGGAR Economics Analysis, * Part of the research impact has been estimated based on the research income received by the College which is also included as part of its core impact. However, this element has only been counted once in the total impact for the College to avoid double counting. (Note, figures may not sum due to rounding).

Beyond its economic contribution, the College also makes an important contribution to the social, industrial and cultural fabric of life in the Perth and Kinross. These wider impacts are described in the following section.



3.

Wider Benefits

In addition to its economic impact, Perth College UHI brings a suite of wider benefits which support essential services, businesses and communities across Perth and Kinross.

There are several ways in which Perth College UHI creates economic and wider benefits for the communities it serves. Routes to impact include support for the labour market through skills and other labour market development work, and links that directly support businesses and sectors, and the various ways the college engages with and supports the community of which it is part.

3.1 Labour Market

Perth College UHI has a central place in skilling and reskilling people in the local labour market throughout their careers. Its offer ranges from employability skills, core skills, transferable skills to high level technical skills. From its campus in Perth, the college delivers school provision through to PhDs.

Like all colleges, Perth College UHI delivers across a wide range of subject areas, reflecting local need. In recent years, the Flexible Workforce Development Fund has enabled the College to widen its customer base across the Perth and Kinross region. Its continued engagement with regional businesses delivering Foundation and Modern Apprenticeships along with a responsive and flexible curriculum to support in-work progression enables it to play a vital role to support regional workforce development needs and increased productivity. This is further cemented through the provision of almost 50 scholarships for students supported by regional businesses.

The College also has some niche areas, which match the needs of the local economy as well as attracting students from further afield. These include new degree courses to support specific industry needs and the development of an Aviation Academy for Scotland.

Introductions of new degree courses include the BA Hons Food, Nutrition and Textiles Education to address the demand for Home Economics teachers and the BSc Hons Sports Therapy and Rehabilitation to support sport and leisure industry skills needs.

2018/19 saw the announcement of funding for a Perth College led project, the 'Aviation Academy for Scotland' as part of the Tay Cities Deal fund. This will provide a potential £6.03m capital funding for of a new facility to deliver Aircraft Engineering skills and qualifications through the College and from its subsidiary company, Air Service Training (Engineering) Limited ("AST").

3.2 Industry Relationships

Perth College UHI has strong industrial links contributing in a range of sectors, with placements allowing businesses and potential recruits to develop relationships. The quality of the college's industry links makes a difference to quality of placement. For example, one of the College's scholarships is with the Balmoral Hotel in Edinburgh, providing rare experience that helps to distinguishing Perth College's students.



Aviva

Aviva has been in Perth for over 330 years.

Aviva is a global company, one of the biggest employers in Perth and Kinross with a workforce of almost 1,500 people. Most employees live within 20 miles of Perth, so it is predominantly a local employer. Aviva's Perth workforce delivers a wide variety of activity, requiring a range of skills and qualifications.

Aviva and Perth College have built up their relationship and joint activities over recent years and have several projects running:

- Aviva hosts Foundation Apprenticeships, with young people usually in S6 at school when they carry out the work placement element of the course. It also works with Graduate Apprenticeships.
- In addition to participating in apprenticeship programmes, Aviva has developed a working relationship with computing sciences specialists at Perth College UHI, feeding in to course content, offering technical input on the type of modules to run and methodologies the company would like to see covered. It has offered guest speakers when this course goes live in September 2020 and will also offer projects as the course develops into year 2 and 3 and work placements.
- Aviva has supported course content for an HND and HNC as well as a pipeline to recruitment.
- Finally, Aviva has worked with Perth College on its employability programme, helping with mock interviews and support to CVs.

Aviva reports that Perth College UHI helps talented young people to stay in the area. The College is prepared to listen to what the business requirements are, and this is a key strength.

3.3 Community and Civic Role

Sport is a key strength of Perth College with the Academy of Sport and Wellbeing (ASW) integrating the curriculum across a range of health and wellbeing areas and providing an important sports facility in the community.

There are over 40 commercial partners, 1,300 gym members and around 3,500 registered climbers. What is most pleasing is the impact ASW has on the health and wellbeing of our students, staff and the community of Perth with 10,000 visits per month using ASW commercial facilities. The commercial strand of ASW has seen good growth, particularly the gym at 83% growth with 59% overall income growth in financial year 2018/19.

As one of Perth's larger employers, with significant reach into the community and industry, the college is an anchor institution in Perth. It plays an important role in the hospitality and tourism sector, which is at particular risk in the post-Covid economy. It plays an important civic role, with active membership of key bodies including the Perth and Kinross Community Planning Partnership and the Perth City Development Board, for which it leads on education issues, as well as close relationships with several community organisations and Perth and Kinross Council.

BiGGAR Economics, Pentlands Science Park,
Bush Loan Penicuik, Midlothian, Scotland EH26 0PZ

info@biggareconomics.co.uk

biggareconomics.co.uk

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