



Earn as you learn: widening participation through degree apprenticeships as debt-free degrees

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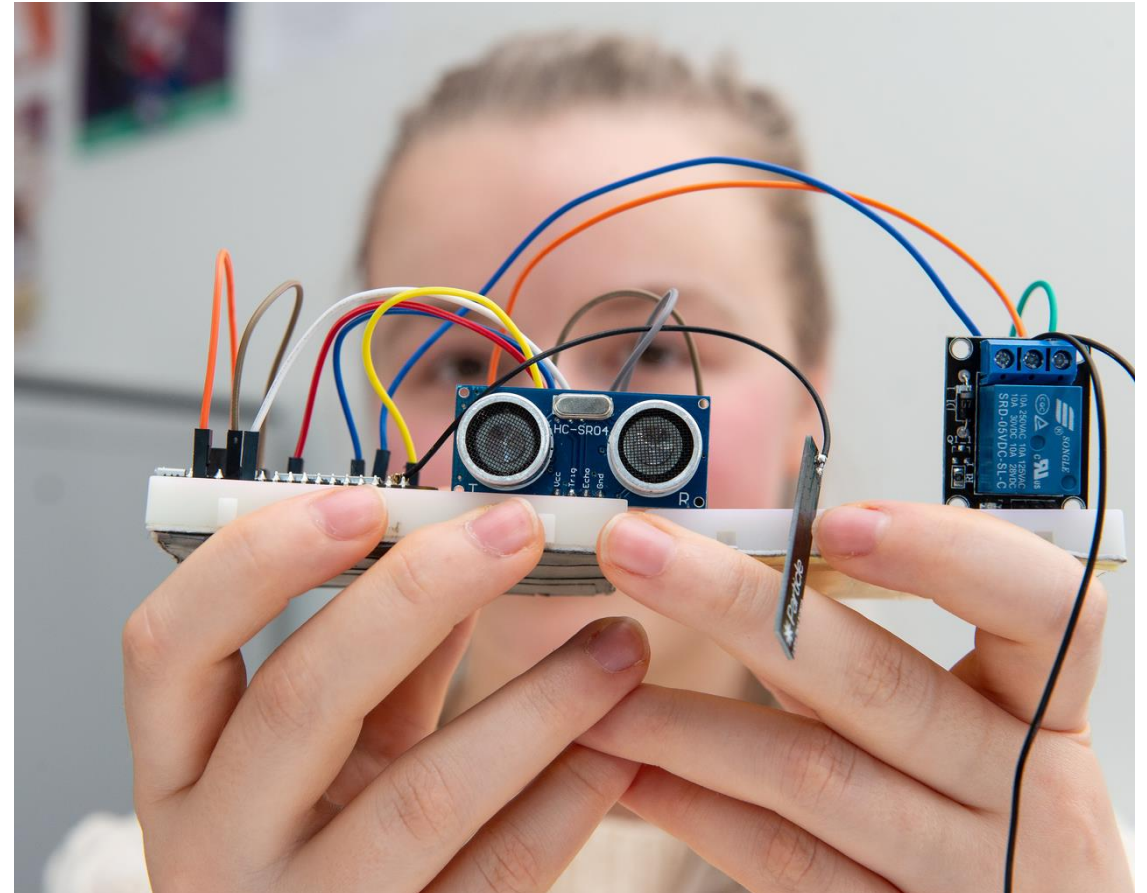
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Welcome to our workshop

1. Welcome and introduction;
2. Relevant findings from our degree apprenticeships research;
3. Share experiences of degree apprenticeships and widening participation in breakout groups;
4. Breakout groups feed back;
5. Discussion & next steps.



Degree apprenticeships and graduate apprenticeships

Graduate apprenticeships (Scotland) / *degree apprenticeships* (England, NI, Wales).

- Apprentices are paid employees, with 20% worktime for uni study; also work-based learning contributes to degree.

Quick poll:

- How many of you are involved in degree/ graduate apprenticeships?



New financial model for degree

Apprentices

- Earning throughout and don't pay fees
- Potential for debt-free degree
- Opportunity for widening access

Employers

- Paying salaries and levy;
- More control over degree content
- and recruitment.



Extract from our GA research (2017 to 2020)

Semi-structured narrative interviews

- 1st year GAs in our School of Computing
- Over 3 years.
- N=33

Survey

- 1st year computing GAs
- In 5 Scottish universities
- Over 3 years
- N=160



Interviewees identify this opportunity as a “no-brainer”

Finance a driver

- Debt free;
- No unrelated part-time job to juggle;
- Can keep job (two thirds interviewees already with employer);
- Fees paid (even for 2nd chance).

"I would say that was the big thing, yeah, earning money and getting experience, as well as actually studying"



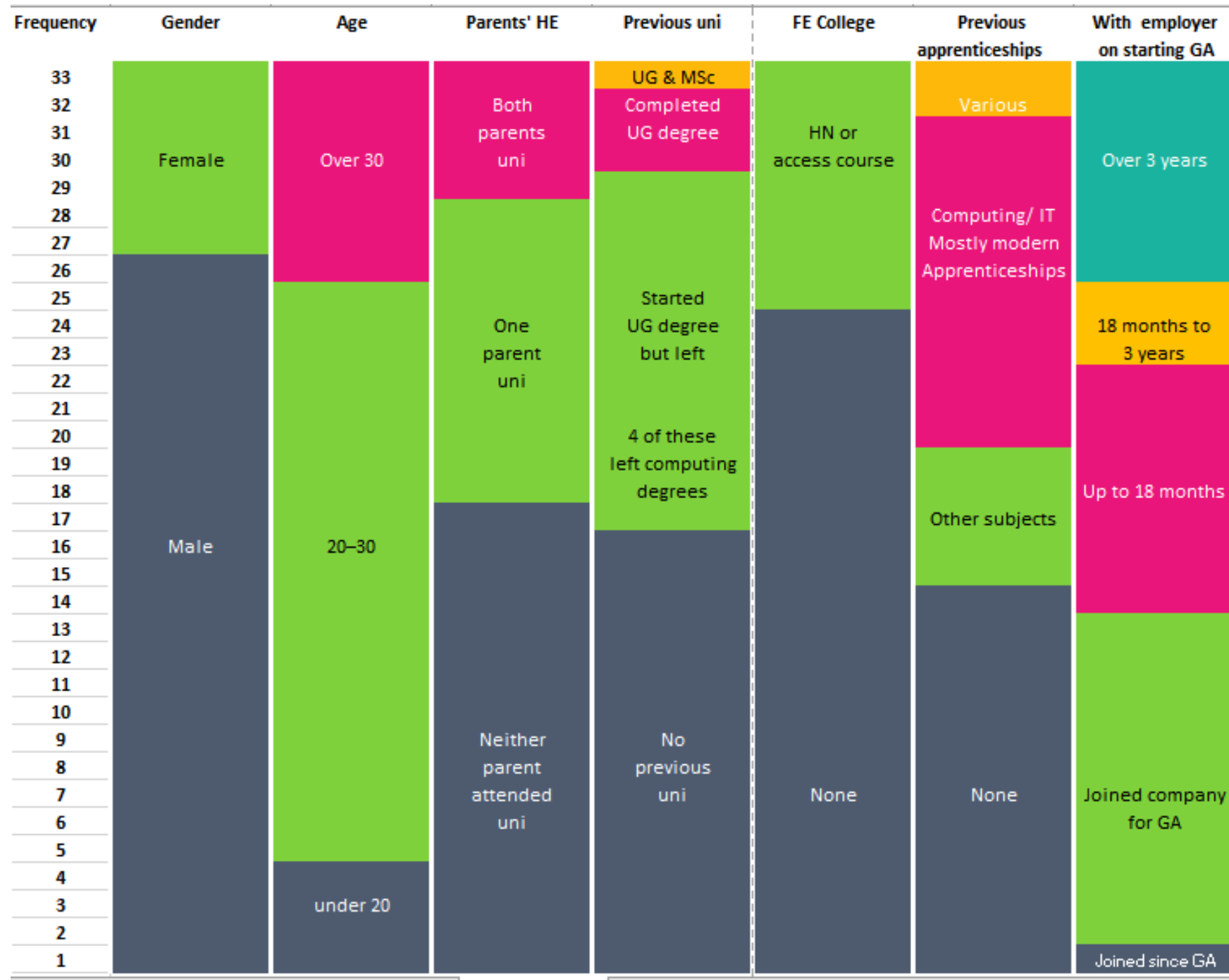
See also Taylor-Smith, E., Smith, S, Smith, CF. (2019). Identity and belonging for Graduate Apprenticeships in Computing: The experience of first cohort degree apprentices in Scotland. In *Proceedings of the 24th Annual Conference on Innovation & Technology in Computer Science Education (ITiCSE'19)*. <https://doi.org/10.1145/3304221.3319753>

Interviews

Financial model supports *diverse trajectories* in.

- No penalty for previous education;
- Integration with apprenticeships;
- Employees can upskill;
- One following kids to uni.

*Skills Development
Scotland goal to support
flexible learner journeys.*



Survey data

Why did you choose this apprenticeship degree, rather than a traditional full-time degree?

1/3 responses cite financial reasons, e.g.

- *“I could not afford to do a traditional degree”*
- *“I could not afford to stop working completely as I have family to support”*
- *“No debt, 4 years’ experience”*
- *“I could not really afford to go to university and did not want to get in debt with student loans”*
- *“Financial reason. Cannot afford to get into debt”*

NO FEES



No student loan debt
and no course fees
for you or your
employer.

GET PAID



You will be paid as
a full-time employee.

Survey data re social mobility

Looking at equality of access to apprenticeships.

Our (rough) **proxies for socio-economic background:**

- Parental education (HE)
- SIMD (apprentices' current postcode)

Access:

- How long it took
- Route in



Demographic Information	Respondents	HESA 2018/19 (Scotland data)	HESA Computing (UK data)
Age (n=160)			
21 and under	42%	48% (20 and under)	53%
22 to 30	26%	35% (21-29)	37%
31 up	33%	16% (30 years and over)	10%
Gender (n=158)			
Female	23%	19% (computing only)	16%
Male	75%	81% (computing only)	84%
Prefer not to say/Other	2%	0.2% (computing only)	.09%
Ethnicity (n=159)			
White	94%	91%	72%
BAME	6%	9%	28%
SIMD (n=118)			
Q1 (most deprived)	14%	13%	Demographics of survey respondents; Graduate apprentices Computing; Scotland; N=160
Q2	20%	15%	
Q3	20%	19%	
Q4	17%	23%	
Q5 (most privileged)	29%	30%	
Parents' education (attended HE; n=155)			
No	45%	34%	-
Yes	55%	61%	-

New starts or upskillers?

Demographic Data	Recruitment	
	Recruited for Apprenticeship	Existing Employee
SIMD (n=117)		
Q1	4.7%	18.9%
Q2	23.3%	18.9%
Q3	23.3%	17.6%
Q4	23.3%	13.5%
Q5	25.6%	31.1%
Parents' Education (Attended HE; n=153)		
No	30.2%	52.0%
Yes	69.8%	48.0%

Upskilling: good opportunity, especially for those who couldn't go to uni on leaving school.

But also, more privileged school students are more aware of this new route to degree.

See also: Taylor-Smith, E., Smith, S., Fabian, K., Berg, T., Meharg, D., and Varey, A. (2019). Bridging the Digital Skills Gap: Are computing degree apprenticeships the answer? In *Proceedings of the 24th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE'19)* <https://doi.org/10.1145/3304221.3319744>

Opportunities later / slower

Years with employer at start of the degree apprenticeship

Demographic Data	Years of employment		
	Up to one year	1-5 years	5+ years
Parents' Education			
No	6 (60.0%)	30 (46.9%)	16 (61.5%)
Yes	4 (40%)	34 (52.1%)	10 (38.5%)

Degree opportunity for established staff

- Taking up opportunities that may not have been available when younger.
- But may also be read as **having to take a slower route to a well-paid job.**

Years between school and starting the apprenticeship

Parents' HE	Mean	SD	p-value
No (n=68)	12.71	11.78	.006
Yes (n=82)	7.83	8.84	

Developing interest in IT

Interest in IT	Parents' Education		p-value
	No (Col%)	Yes (Col%)	
Childhood	4 (6.8%)	10 (14.7%)	.034
At school	18 (30.5%)	22 (32.4%)	
During HE/FE	4 (6.8%)	13 (19.1%)	
Working life	33 (55.9%)	23 (33.8%)	

Apprentices whose parents hadn't been to uni:

- less likely to develop an early interest in IT;
- most likely to develop interest at work.

From 2019 survey only;
looking at **gender**.

When did you first consider a career in this area?	Female (n=23) (Col%)	Male (n=55) (Col%)
Childhood	0 (0.0%)	5 (9.1%)
At school	5 (21.7%)	17 (30.9%)
After school / during FE or HE	4 (17.4%)	5 (9.1%)
During working life	14 (60.9%)	28 (50.9%)

Smith, S., Taylor-Smith, E., Fabian, K., Barr, M., Berg, T., Cutting, D., Paterson, J., Young, T., and Zarb, M. (2020). Computing degree apprenticeships: An opportunity to address gender imbalance in the IT sector? *Proceedings of IEEE Frontiers in Education*. <https://doi.org/10.1109/FIE44824.2020.9274144>

Ways to increase take-up for social mobility

Targeted advertising

Our advert in the Metro, left

Sutton Trust Apprenticeship Summer School

“help you make an informed decision about your future career”

Winchester's Social Mobility Pipeline to Degree Apprenticeships

- local collaboration (HEIs and employers); targeted outreach; transition support; Women in Digital Enterprise (WiDE) – attracted women running SMEs onto digital apprenticeships.



Our conclusions so far

1. For people in work, good opportunity for upskilling and gaining qualifications (which may not have been possible previously).
2. Also, opportunities through apprenticeship qualifications, rather than e.g. Highers.
3. Opportunity is there for young people to **gain degree and work experience without debt.**

Challenge = Fair distribution of opportunities



Any questions before we move into breakout groups?

Break out groups (about 10 minutes)

➤ Quick poll re diversity of cohorts

Then breakout groups to share our experiences of degree apprenticeships

- Compared to on-campus students, would you say your degree apprenticeship cohorts are more or less diverse? E.g. re backgrounds, ethnicity, gender?
- What role does your EI take in terms of recruiting apprentices and promoting apprenticeship degrees, especially in terms of widening access?
- What roles do employers play? How do you work together with employers to encourage recruitment practices which are inclusive and support equalities and social mobility?

Please nominate someone to feed back.

Feedback from groups and suggestions for progress

1. Apprenticeship cohorts –more or less diverse?
2. EI role in recruitment and widening participation?
3. Working together with employers* to promote inclusion and social mobility.

*Thanks for coming to our workshop.
Please stay in touch.*



*Fabian, K. and Taylor-Smith, E. (2021) How are we positioning apprenticeships? Society for Research into Higher Education. <https://www.srhe.ac.uk/downloads/reports-2019/Khristin-Fabian-FinalReport-SRHE.pdf>