Degree apprenticeships: Apprentice expectations and emerging perspectives
Graduate Apprenticeships

• Introduced in Scotland in 2017.
• Funded by Skills Development Scotland (initially ESF funding)
• 4 year degrees in which students are in full-time work (Scottish degree is 4 years)
• 3 frameworks: Software Development, Information Technology Management for Business, Cybersecurity
• One day on campus p/w, work-based learning within Professional Practice modules

“Edinburgh Napier has a very good reputation for IT degrees, mostly in the Security field, which is the field I am interested in the most.

Emilio Perez
HPC Systems Administrator, EPCC, University of Edinburgh”

“Employers have an unmet demand for computing graduates. These courses will be a true partnership between the tech sector in Scotland and the University attracting new talent into the sector.

Dr Sally Smith
Dean of Edinburgh Napier’s School of Computing”

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Background

• Skills Development Scotland (SDS) Technical Groups (mainly industry reps) established demand - identified deficit of computer science graduates, especially within cybersecurity
• Technical Groups developed course frameworks
• SDS issued invitation to tender for places on frameworks – colleges & universities
• Included was WBL ‘manifesto’
• Curriculum was to be employer-led
• In Scotland, no fees – can take out student loan
  – Potential for widening access to students from debt-averse backgrounds.
• Open to all ages –i.e. including established employees.
Research focus

- Students’ motivations and aspirations
- Students’ concerns
- Students’ experience of the GA
- Identity (as both employees and students)
- Identity (compared to other first year Computing students)
- WBL: interface/integration between university study and work

The aspirations and experience of the apprentices (students) is missing from much of the GA discourse.
Method for rich picture workshops with new students

• One workshop with new apprentices (n=22);
• Mirror workshop with 1st year on-campus computing students (n=20).

• Each workshop:
  – Survey (individual) about background, jobs, motivations, aims, challenges.
  – Rich Pictures (group; see right) about aims & aspirations; desired outcome; worries.
Findings: workshop survey

Demographics:
• Just over half of each group consider themselves to be middle class.
• About a third of each group: neither parent went to uni or poly.
• Apprentices more diverse in terms of age (1/3 over 26).

Paid Work:
• Half the GAs have been employed by their current employer for more than 18 months, including one employed for 28 years);
• 18.2% joined to do the apprenticeship.
• About a quarter of the on-campus group have a part-time job beyond uni (2/5 of these are relevant to their degree); most of the others are looking for one.
Findings: workshop survey

Aims
• GAs more likely to mention degree qualification and, in terms of skills, benefits to their employer.
• Both groups’ main skills objective is coding/programming.

Worries
• All: learning and understanding.
• GAs: work/study balance, academic environment, their job.
• On-campus: living away from home.

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Rich Picture themes: Hazardous Journey

• Both groups recognised that there would be challenges ahead (which is good).
• Pictured as a hazardous journey, or a game.
Rich Picture themes: material wealth

Wealth as aim, outcome and motivation, drawn by both groups.
Rich Picture themes: money worries

The GAs did not mention money worries, but the on-campus group were concerned about debt, becoming broke, paying bills.

On-campus students’ RPs

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Rich Picture themes: balance

- The GAs were particularly worried about achieving a balance between work and study (and the rest of life).
- On-campus students noted the challenge & importance of sleep, relaxation, socialising.
Method: Life narratives

- In-depth **semi-structured interviews** with our GAs.
- Questions aim to uncover chronological life narrative leading up to apprenticeship and current experience of GA.
- Focusing on **background, identity** (including transitions), and **work-based learning** (especially in terms of space).
- 8 interviews completed so far.
- Hoping to continue interviews throughout course and repeat with new cohorts.
Life narratives: initial findings

Note: the 8 interviewees so far had all been in their job for at least 18 months prior to starting the degree—they had a stable and established work identity there.

- Time in current job: 18 months to 28 years.
- Range of technical skills, e.g. from self-taught but experienced programmers to new-to-programming.
- Academic qualifications from almost none to a degree in another discipline.
- Half had done Modern Apprenticeships in IT.
Life narratives: initial findings – work-based learning

- Most interviewees had agreements to adapt their role to apply their learning for Professional Practice module (e.g. work with another department).
- GAs discussed their work systems (etc.) with each other (regarding uni modules).
- Some began to apply university learning to their work (or at least to thinking about it).
- Understanding of WBL not currently explicit. (Not assessed yet).

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Conclusions / implications

• Importance of understanding and considering the student (apprentice) perspective and situation throughout. Diverse.

• GAs expect challenging journey to get degree.

• End goal / identity skilled employee / manager, with material wealth.

• GAs have current work identity, some with extensive skills.

• GAs value uni cohort: e.g. sharing info about work and study, making friends.

• Some uni / work integration, but WBL still a bit vague.
References


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Questions?

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