

## Degree Apprenticeships

A leading apprenticeship provider for forward-thinking businesses





Education & Skills Funding Agency

## APPRENTICESHIPS IN COMPUTING

DR MALTE RESSIN



## Data Analyst level 4

Work-based learning & apprenticeships

Apprenticeship standards & conditions

Digital apprenticeships & assessment

Employer view

Apprentice view

Training provider view



## INTRODUCTION

- Dr Malte Ressin
- Course Leader UG apprenticeships, School of Computing and Engineering, University of West London
  - 2018: Apprenticeship lecturer
  - 2019: Supervisor & Independent Assessor
  - 2020: Validation committee member DTSP
  - 2021: Course leader degree apprenticeships
  - 2022: External examiner DTSP



## WORK-BASED LEARNING

- Common in both learning and knowledge management
- More than just "learning by doing" and experience gained during work
- Learning...
  - ...taking place in the workplace OR
  - OR as a consequence of working OR
  - OR structured learning as part of a role
  - AND dedicated learning outside of the professional role.



## HISTORY OF ON-THE-JOB LEARNING

- I950s: "Sandwich-courses", HEI education with placement (revival in 1990s)
- Since 1990s: Combining vocational and academic elements in foundation degrees (L3 to L6)
- 2000s:
  - Shortage of skills traditionally taught in academic setting
  - Transition to live-long learning
  - Widen HEI participation by attracting non-traditional students



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## APPRENTICESHIPS IN THE UK

- Designed by employer groups
- HE training tailored to industry needs.
- Access to HE for people who otherwise wouldn't join
- Embedded in the workplace; on-the-job and off-the-job training
- Demonstrating application of knowledge and skills in a real environment

# Apprenticeships



## APPRENTICESHIP STANDARDS

- Apprenticeships are defined in so-called Apprenticeship Standards.
- Developed in collaboration with employers, training providers, and professional bodies.
- Apprenticeship standards define:
  - Knowledge, Skills and Behaviours (KSBs) apprentices are to learn during the apprenticeship.
  - How the apprentice is assessed, usually in the form of an *End-Point Assessment* (EPA).
  - Funding bands for the HEI.





## TRIPARTITE "LEARNING CONTRACT"



The Career University

- Company:
  - commits to employ apprentice full-time and release for training (20% OTJ)
  - provides structure (mentor, projects, etc.) for duration
- Apprentice:
  - commits to attend training and work
- University:
  - provides training
- Tripartite review meetings every 12 weeks.

## APPRENTICESHIP ELIGIBILITY



- In paid employment for a minimum of 30 hours per week
- In a real job learning new knowledge, skills and behaviours
- Be a UK citizen
- or EEA nationals: they are eligible for funding if they have obtained either pre-settled or settled status under the EU Settlement Scheme; and have been ordinarily resident in the EEA, Gibraltar, or the UK for at least the previous three years before the start of the apprenticeship.
- or be from non-EEA have the right to live in the UK and have been resident in UK for 3 years before the start of the apprenticeship)
- Authorised by employer to be "off the job" (OTJ) this is usually at university- approximately 6 hours per week – day release vs block release
- An apprentice must have a workplace mentor



## FUNDING

Apprentice:

- paid as employee.
- Minimum apprenticeship salary: age-dependent, ~National Minimum Wage (age.

Organisation:

- Large organisations (payroll > £3 million): Apprenticeship levy
- Small organisations (SMEs): Government funds 95% of the cost
- Record-of-Progress (RoP) record, attendance record: Regulation by government, funding dependency
- I2-month tripartite review meetings



## DIGITAL APPRENTICESHIPS

Institute for Apprenticeships & Technical Education (IfATE) provides more than 100 apprenticeship standards:

- L3 Digital Design Technician
- L4 DevOps Engineer
- L6 Creative Digital Design Professional
- L7 Game Programmer
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- L4 Higher Apprenticeship Data Analyst (18 months 24 months + EPA)
- L6 Degree Apprenticeship BSc (Hons) Digital and Technology Solutions Professional (3 years + EPA)
- L7 Degree Apprenticeship MSc Digital and Technology Solutions Specialist (18 months + EPA)



### PATHWAYS

Pathways for BSc (Hons) Digital and Technology Solutions Professional:

- Software Engineer
- Data Analyst
- IT Consultant
- Business Analyst
- Cyber Security Analyst
- Network Engineer



## END-POINT ASSESSMENT (EPA)

- Synoptic Project
  - Capstone project
  - 6 months, I day a week
  - Must fit pathway, evidence KSBs
- Portfolio
  - Must evidence KSBs at work during apprenticeship
- Professional Discussion
  - Discuss project and portfolio, 30 120 minutes
  - independent assessor and employer representative
- Employer assessment



## **EMPLOYER VIEW**

#### Pros

- Strategic workforce training utilizing public funds
- Upskill organisation
- Apprenticeship levy recuperation
- Recruit otherwise inaccessible talent (diversity, etc.)

#### Cons

- No guaranteed apprentice retention
- No guaranteed apprenticeship completion
- Bound resources for duration of apprenticeship



## APPRENTICEVIEW

Pros

- HE degree
- Practical experience (c.f., internship)
- Get paid and gather work experience instead of paying study fees
- Get marks for your work (= apprentices do rather well compared to FT)

Cons

- No "conventional" HEI experience
- Duties of full-time job paired with duties of studying
- Committed to course and employer



## UNIVERSITY VIEW

#### Pros

Current industry professionals taking practical classes, incl. feedback

#### Cons

- Integrate apprenticeship provision with existing infrastructure, processes
- Ofsted inspections



## **KEY ROLES – SUPPORTING THE APPRENTICESHIP**



#### University Contract Level

Contract manager

#### University School/College Level

- Course Leader, responsible for the day-to-day operation of the course.
- Lecturers
- Personal tutor for Course Administrator
- Apprenticeship Support Link Tutor who will have regular meetings with apprentice and employer and reports back to both employer and course leader
- pastoral support

#### Employer Level

- Mentor designated by employer to provide vocational and pastoral support for apprentice, who may or may not be their line manager.
- A contract manager managing the relationship between the employer and the university



## COMPUTING APPRENTICESHIPS AT UWL

- L4 Higher Apprenticeship Data Analyst (18 months 24 months + EPA)
- L6 Degree Apprenticeship BSc (Hons) Digital and Technology Solutions Professional (3 years + EPA)
  - Software Engineer

Business Analyst

Data Analyst

Cyber Security Analyst

- IT Consultant
- L7 Degree Apprenticeship MSc Digital and Technology Solutions Specialist (18 months + EPA)
  - Cyber Security
  - Data Analytics



## THINGS TO CONSIDER

- Apprenticeships are employer-led:
  - Employers can put apprentices on a break-in-learning
  - Apprentices are regular employees
- Apprentice has 4-week window to change employers
- Transfer of learning institutions probably more complicated than for full-time students (where it can be difficult already)
- Apprenticeship instead of promotion/raise:
  - Going back to higher education can be challenging.



## THINGS TO CONSIDER

- Important for employer:
  - Good selection.
- Important for apprentice:
  - Large employers usually have dedicated structures around apprenticeships.



## Q & A

