Pathway in Enterprise Systems Engineering (PENS)

Pathway development example BSc Apprenticeships

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Agenda

- BSc (Hons) Professional Practice in Digital Technology

- Programme rationale

- Market research

- TLA strategy

- Assessment

- Apprenticeship programme framework

Case Study (example)

- To introduce BSc (Hons) Professional Practice in Digital Technology

  - Business Analytics
  - IT Consultancy
  - Software Engineering
  - Network Engineering

Programme rationale

- The DTSP degree apprenticeship generates the highest number a vacancies of any higher and degree apprenticeship both nationally and in London.
- The number of digital apprentices has increased by 21% over the past year.
- 89% of employers reported an apprentice as helping to improve their product or service.
- For every £1 invested in an apprentice, there is £27 economic benefit
- 96% of employers with apprentices say that their business has benefitted as a result.
- Digital apprenticeships are growing at more than double the UK average
- More than 17,000 people started digital or tech apprenticeships in the UK during 2014-15, which is a growth of 21% following on from the previous year.
- Over 80 companies in England have now taken on more than 1,250 students as 'Tech Industry Gold' digital degree apprentices.
- 28 universities now offer Tech Industry Gold accredited degree apprenticeships.

Market research

- At least 60 universities are implementing or planning to implement degree apprenticeships from 2017 onwards.
- 107 universities are now on the Register of Apprenticeship Training Providers.
- The following job titles ranked by the amount of results generated on indeed job search https://www.indeed.co.uk/jobs
- England Only
  - IT Consultant – 23,021
  - Software Engineer – 20,046
  - Business Analyst – 17,846
  - Network Engineer – 8,363
- London Only:
  - Business Analyst – 9,328
  - IT Consultant – 8,556
  - Software Engineer – 7,384
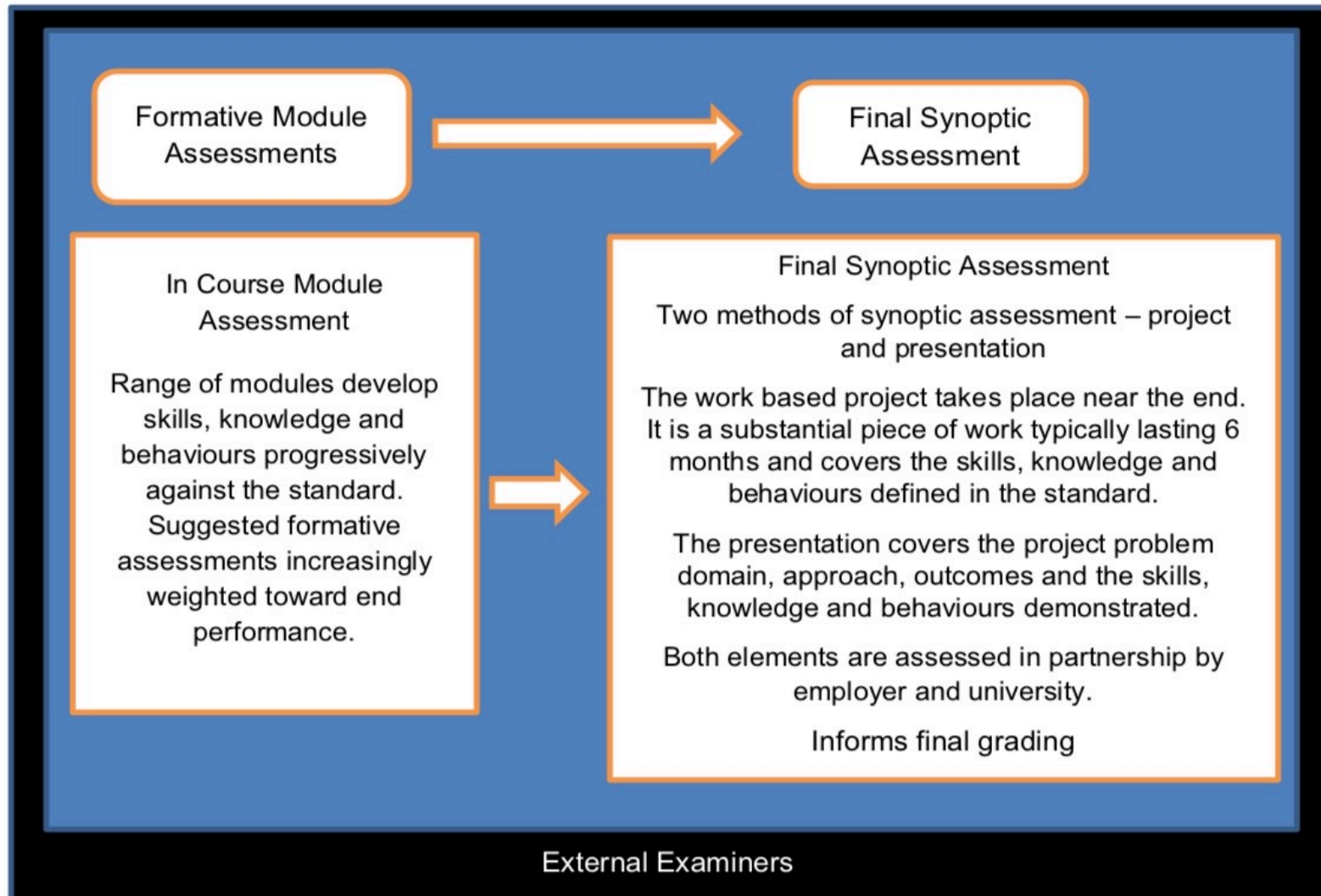 - Network Engineer – 3,300

TLA strategy

- An induction and review of progress through workshops and other events
- Computer based/online individual and group exercises
- Peer learning sets
- Simulations and role play
- Structured diagnostic exercises and activities supported by briefing notes
- Completion of learning journals
- One-to-one coaching
- Work-based learning
- Formative feedback on work from tutors through blended approaches including; face-to-face, via email, webcam, MyLearning discussion boards and workshops
- Student-led interaction via online discussion forums including MyLearning
- Self-directed learning facilitated by programme and module handbooks, MyLearning and other learning materials.

- Student Observable Behaviours
- Learning Journals
- Portfolios
- Reflective commentary
- Role play and simulation exercises
- Online 360 Feedback
- Work/practice-based projects
- Reports
- Case Study Analysis
- Presentations.

Assessment

- All apprenticeships in England are required to include an End-point Assessment (EPA) to test that apprentices have demonstrated all the knowledge, skills and behaviours required for full occupational competence as specified in the nationally approved Apprenticeship Standard.

- The requirements for EPA are as follows:

  – **Work-based project** The work-based project takes place near the end. It is a substantial piece of work typically lasting 6 months and covers the skills, knowledge and behaviours defined in the standard.

  – **Presentation** The presentation covers the project problem domain, approach, outcomes and the skills, knowledge and behaviours demonstrated.

Assessment

Formative Module Assessments → Final Synoptic Assessment

In Course Module Assessment

Range of modules develop skills, knowledge and behaviours progressively against the standard. Suggested formative assessments increasingly weighted toward end performance.

Final Synoptic Assessment

Two methods of synoptic assessment – project and presentation

The work based project takes place near the end. It is a substantial piece of work typically lasting 6 months and covers the skills, knowledge and behaviours defined in the standard.

The presentation covers the project problem domain, approach, outcomes and the skills, knowledge and behaviours demonstrated.

Both elements are assessed in partnership by employer and university.

Informs final grading

External Examiners

Apprenticeship programme framework

Level 4
Professional Portfolio 1 – 20 credits

Learning and Studying at Work 20 credits	**Digital Technology Fundamentals (BA)** 80 credits

Level 5
Professional Portfolio 2 – 20 credits

Specialist Digital Technology Project 1 **(BA)** 20 credits	**Specialist Digital Technology Project 2** **(BA)** 20 credits	**Specialist Digital Technology Project 3** **(BA)** 20 credits	**Specialist Digital** **Technology** **Project 4** **(BA)** 40 credits

Level 6

Professional Portfolio 3 30 credits	**Final Major Specialist Digital Technology Project (BA)** **(End-point Assessment)** 60 credits
Professional Practitioner Inquiry 30 credits	

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Thank you for your attention!