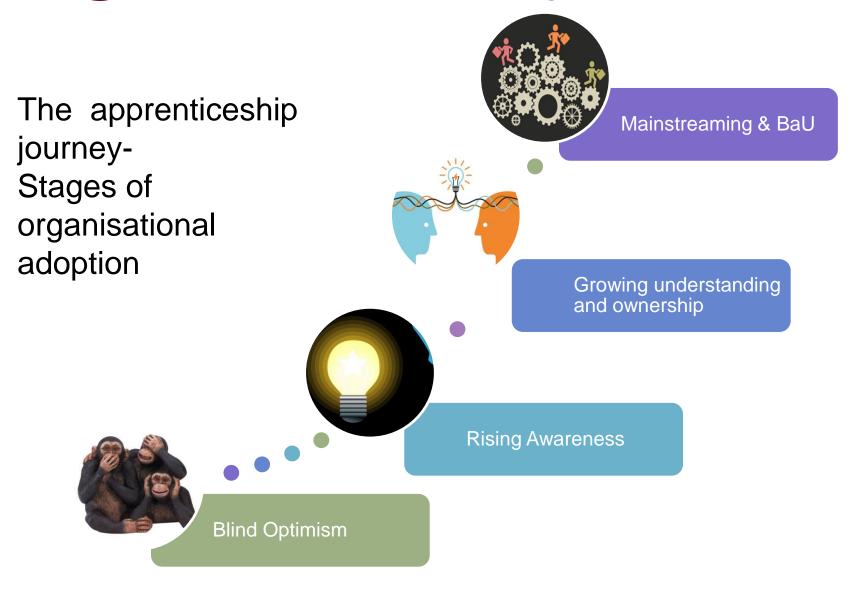


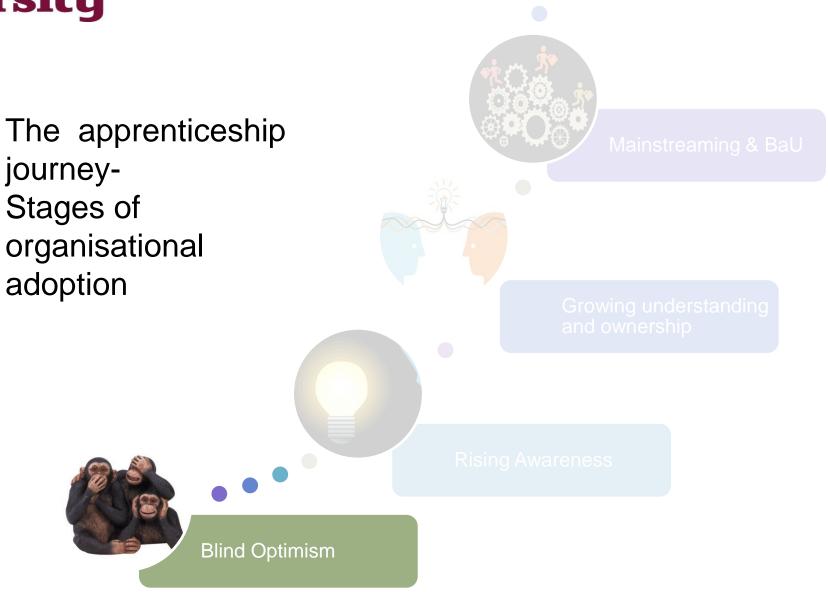
SHU's Apprenticeship Journey - Engineering Focus

Sam Moorwood Head of Work-Based Learning Directorate of Business Engagement Skills & Employability

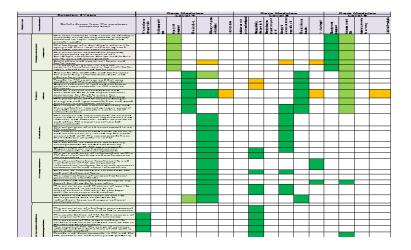
She Hall Uni

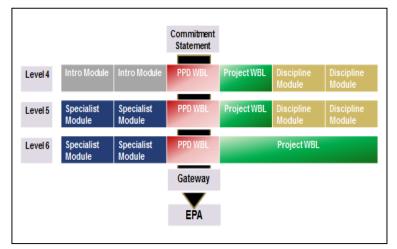
"Innovations rarely emerge from systems with high degrees of order and stability" (Pascale et al 2000)





Heritage





Work Based Learning Framework

- Responsive Design
- Flexible modules
- Bespoke employee journey.
- Robust mapping to Standard
- Support through to EPA

...Develop a high quality and efficient Apprenticeship Portfolio...

Staff Capability (WBL)

Higher and Degree Apprenticeships Teaching and Assessment Essentials

Sheffield Hallam University

Home Policy Key Guides Developing your practice Events Case Studies FAQs Contact us

• What

• Buil

Welcome to Higher and Degree Apprenticeships (HDA) at Sheffield Hallam Search University (SHU).

What is this resource for? To inform the design and delivery of courses that include HDA provision at SHU, including their Work-Based Learning (WBL) elements, to achieve the necessary compliance requirements and embed best practice.

This resource emphasis those areas where Apprenticeship courses must be designed and delivered to support compliance with the Apprenticeship funding rules. A major part of this is ensuring the apprentice is supported by the provider (SHU) and also the employer.

This resource does not attempt to provide advice on systems and process compliance and is limited to guidance on academic course design and delivery, where this relates to compliance, please review our full caveat, below.





Sheffield

Useful Links

Teaching and Assessment Essentials

Hallam University

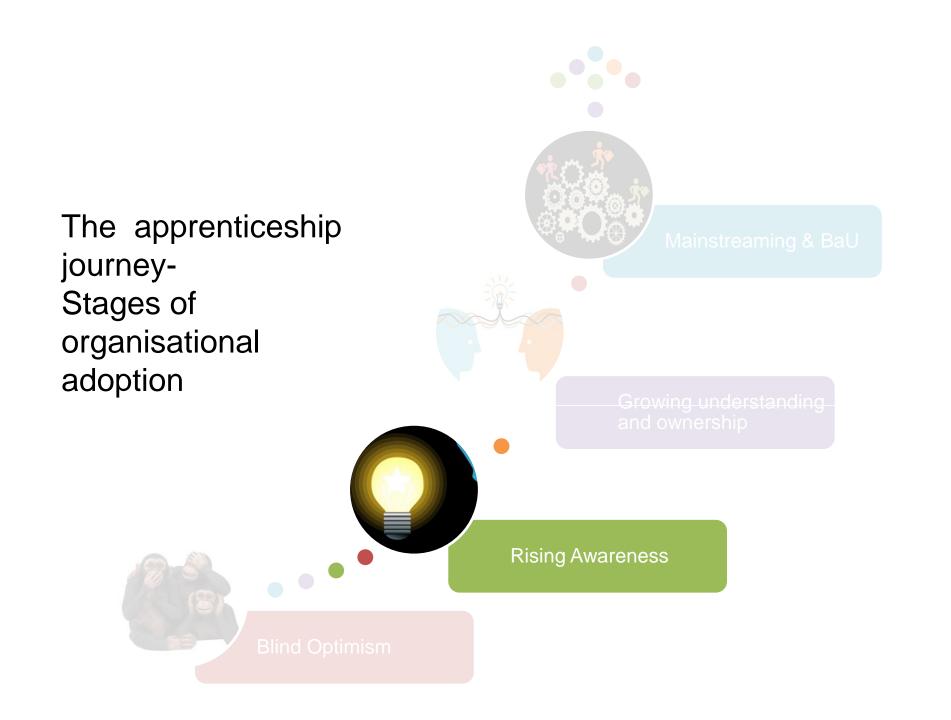
Developing our Labour Market Intelligence

Higher level skills/apprenticeship focus to support relevant programme development

Advanced manufacturing in Yorkshire and the Humber Sheffield Hallam University **Construction** in Management jobs in Yorkshire and the Humber Yorkshire and the hefce .ılı Emsi hefce hefce

Sector Focus:





Legacy



- Engineering Framework
- Employers need help
- Frameworks are squeezed
- STEM uplift (factored in)
- Funding bands and NVQs
- Subcontracting challenges

				Based on FD Eng Course fee over three	£18,000		Sam Moorwood:												
		Sam Moorwood:		Based on FD FM Fee over three years		£15,000		Need	to doublecheck n					NB.					
Search results		HU FD funded to Level				Additional		Assumes no Additional STEM uplift Assumes STEM uplift already factored in.				factored in.		Funding calculations sim		ified			
		5 against LARS - Applies to all Adv man Eng	1					from May 2017							Current				
		Pathways in bold					payments	Levy Payer	Non Levy Payer		Current Fi	unding FD	Current Fu	unding NVC					
Apprenticeship title	Pathway title	Code (data purposes only)	Level	evel Sector Subject Area	Maximum funding band value	Employer payment 16-18	Provider payment 16-18	Assuming 19+ age Employer pays: From Levy	Assuming 19+ age Employer pays:	Assuming 19+ age Employer	Assuming 19+ age Err Employer %) pays: (10%)	16-18 yr olds at 100% course fee	19+ at 50% at 50% course fee	16-18 yr olds at 100%	19+ at 50% at 50%	Assuming 50% funding Employer pays:	Sam Moorwood: Assumes NVQ funding covers the College NVQ course fees and no		
	1		'\						From Pocket	Co funded							employer o		
Anufacturing Engineering	Aerospace	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000	£13,516	£8,100	£14,416			£8,800	£4,516	£9,000			
Anufacturing Engineering	Nuclear Related Technology	550	4	Manufacturing Technologies	£12,000	£1,000	£3,400	£12,000		£10,800	£11,716	£18,000	£9,000	£8,800	£4,516	£9,000			
lanufacturing	Mechanical (pway 3)	550	4	Manufacturing Technologies	£12,000	£1,000	£3,400	£12,000	£10,516	£10,800	£11,716	£18,000	£9,000	£8,800	£4,516	£9,000			_
Manufacturing	Mechanical (pway 4)	550	4	Manufacturing Technologies	£12,000	£1,000	£3,400	£12,000	£10,516	£10,800	£11,716	£18,000	£9,000	£8,800	£4,516	£9,000			
Manufacturing	Electrical / Electronics (pwa	iy 5) 550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000	£13,516	£8,100	£14,416	£18,000	£9,000	£8,800	£4,516	£9,000			
Manufacturing	Electrical / Electronics (pwa	iy 6) 550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000	£13,516	£8,100	£14,416	£18,000	£9,000	£8,800	£4,516	£9,000			
Manufacturing Engineering	Automotive	550	4	Manufacturing Technologies	£12,000	£1,000	£3,400	£12,000		£10,800	£11,716	£18,000	£9,000	£8,800	£4,516	£9,000			
Manufacturing Engineering	Maintenance	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000		£8,100	£14,416			£8,800	£4,516	£9,000			
Manufacturing Engineering	Wind Generation	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000		£8,100	£14,416			£8,800	£4,516	£9,000			
Manufacturing Engineering	Research and Development	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000		£8,100	£14,416			£8,800	£4,516	£9,000			
Manufacturing Engineering	Marine	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000		£8,100	£14,416	£18,000	£9,000	£8,800	£4,516	£9,000			
Manufacturing Engineering	Space Engineering	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000		£8,100	£14,416			£8,800	£4,516	£9,000			
lanufacturing	Rail Engineering	550	4	Manufacturing Technologies	£9,000	£1,000	£2,800	£9,000	£13,516	£8,100	£14,416	£18,000	£9,000	£8,800	£4,516	£9,000			
acilities Management	Generic	501	5	Service Enterprises	£6,000	£1,000	£2,200	£6,000	£9,000	£5,400	£9,600	£15,000	£7,500	NA	NA	£7,500			

Transition - Engineering Standards

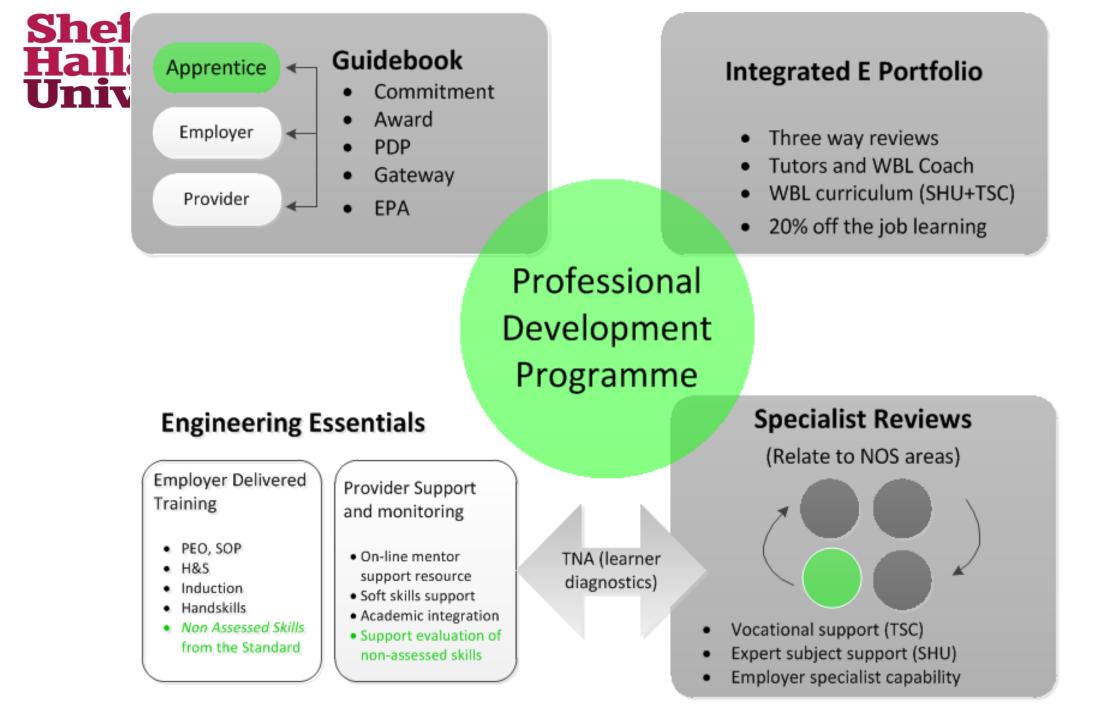
	Dicipline	Mach	anical	Manufa	acturing	Elect	trical	Electrical/ Electronic	Flectronic	Materia
	Qualification	FdEng	BEng Top-Up	FdEng	BEng Top-Up	FdEng	BEng Top-Up	BEng	BEng	FdEn
	Course Title	FdEng Integrated Engineering - Mechanical Pathway	BEng(Hons) Mechanical Engineering Top-Up	FdEng Integrated Engineering - Manufacturing Pathway	BEng(Hons) Manufacturing Engineering Top-Up	FdEng Integrated Engineering - Electrical Pathway	BEng(Hons) Electrical Engineering Top-Up	BEng (Hons) Electrical and Electronic Engineering	BEng (Hons) Electronic Engineering	FdEng Materials Engineering
Sector	Appenticeship Standard									
Automotive	Higher Apprenticeship – Product Design and Development Engineer Apprenticeship Standard	Aproved	Aproved							
Automotive	Higher Apprenticeship – Manufacturing Engineering Apprenticeship Standard			Aproved	Aproved					
Automotive	FdEng Integrated Engineering - Electrical Pathway					Aproved	Aproved			
Electronic Systems	Embedded Electronic Systems Design and Development Engineer Level 6 Degree Apprenticeship Standard					Pending Aproval 9/2/17	Pending Aproval 9/2/17	Pending Aproval 9/2/17	WIP	
Life and Industrial Sciences	Laboratory Scientist Level 5 Degree Apprenticeship Standard									WI

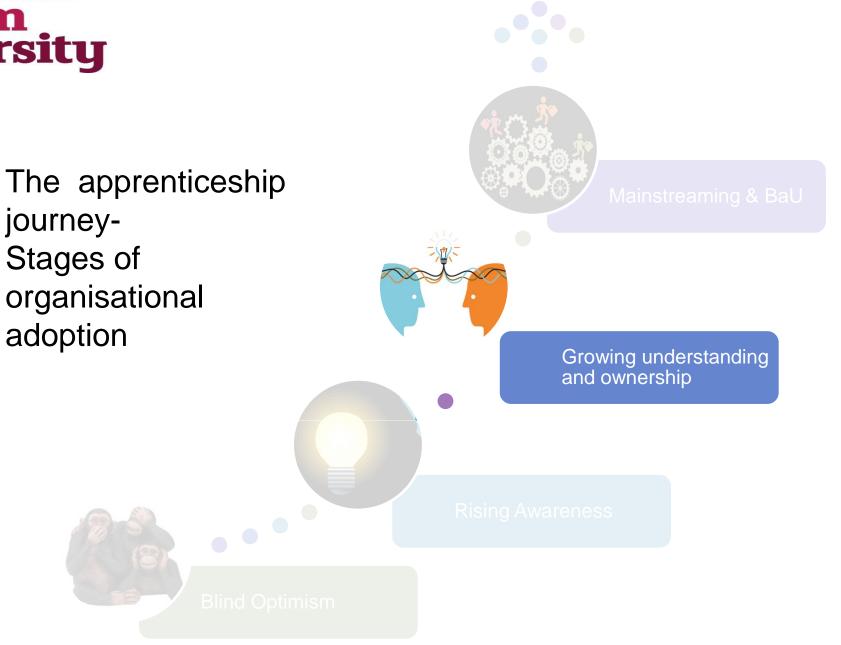
Transition - Engineering Standards

SDN CASE STUDY: NO NVQ!? RE-IMAGINING VOCATIONAL TRAINING IN STEM AREAS

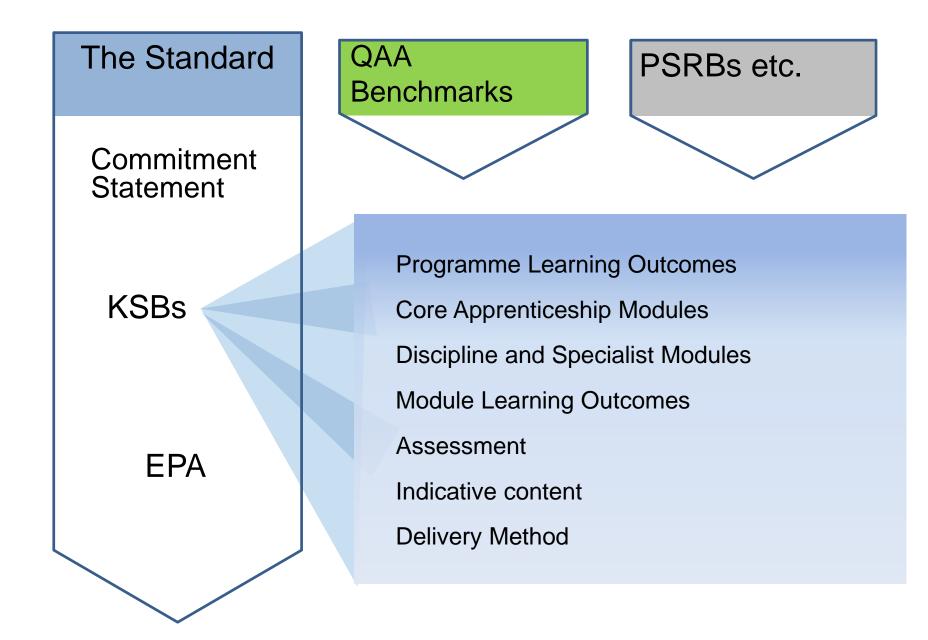
YOUR MEETING WITH THE INSTITUTE OF ENGINEERING TECHNOLOGY CONVINCED ME AGAIN THAT WE ABSOLUTELY REQUIRE A WORK BOOK THAT INSTRUCTS, GUIDES AND FORMERLY DEVELOPS THE EPA REQUIREMENTS FOR THE APPRENTICES. THIS NEEDS TO ENCOMPASS ALL THEIR KSB AND THE EXPERIENCES AND EVIDENCE THAT DRIVES IT.

NIGEL WARD - CONSULTANT

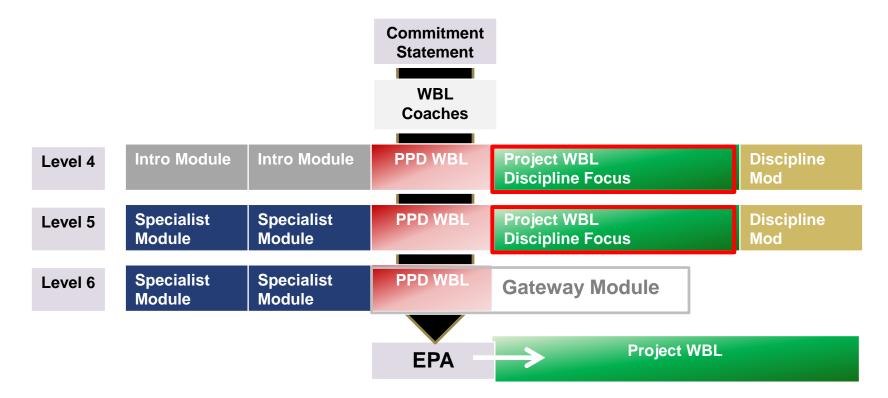




SHU Apprenticeship Design

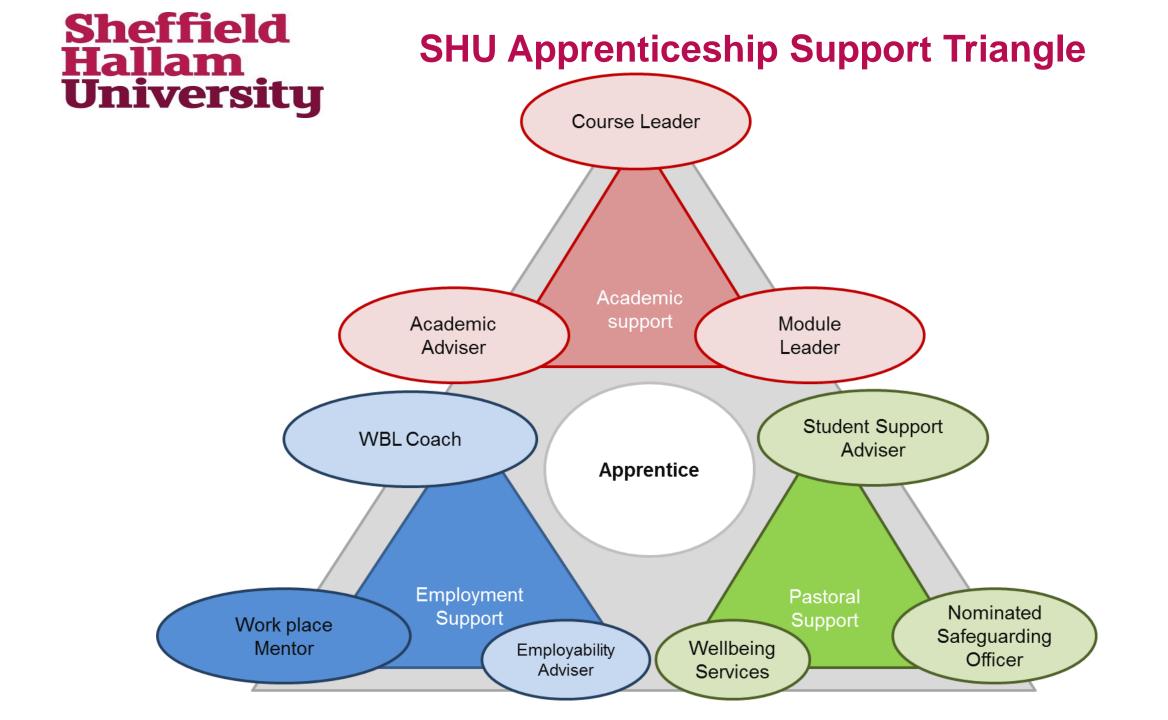


Apprenticeship Work-Based Learning Framework (Integrated EPA)



Nb. Each award is design to meet the Apprenticeship Standard and so the structure of the course and support offer will vary

PPD = Personal and Professional Development



Work-Based Learning Coaches

- Supporting the quality and efficiency of our Apprenticeship portfolio
- Works with colleagues in departments on sector-focussed programmes
- Pre-join suitability interview: skills scan; career The right programme?
- Skills Scan informs the starting position Feeds PPD module & Review1
- Manage Progress Reviews quarterly 3-way discussions to support & plan
- E-Portfolios: Focus on evidence of impact, targets for EPA and development
- Negotiation, planning and monitoring of WBL Projects
- Help employers to understand and meet their obligations
- Feedback into academic practise and workplace impact



Work-Based Learning Coaches

Every Apprentice is entitled to support from the employer and University. *Coaches ensure:*

- ✓ planning for and monitoring 20% Off-The-Job-Training
- ✓ appropriately challenging targets (individualised SMART action plans).
- \checkmark linking up to careers advice in the employer and SHU
- welfare support, including attendance, safeguarding, staying safe online - referrals
- ✓ opportunity for literacy and numeracy development
- ✓ engagement with British Values, Prevent, Equality Diversity & Inclusion

Snapshot research pilot



Leadership & Management

- Operations/Departmental Mgr
- Chartered Manager
- Senior Leader
- Supply Chain Leader

Digital & Technology

- Digital & Technology Solutions Specialist - Software Engineer
- Digital & Technology Solutions Professional
 - Software Engineer
 - Business Analyst
 - Cyber Security Analyst
 - Data Analyst
 - IT Consultant
 - Network Engineer

Food & Drink Sectors

- Food Technologist
- Food Engineering
- Packaging Professional

Academic Professional

Building & Surveying

- Quantity Surveyor
- Building Surveyor
- Commercial Property / Valuation Surveyor
- Chartered Town Planner
- Construction Site Supervisor & Manager
- Architect

Engineering

- Mechanical
- Electrical
- Manufacturing
- Materials
- Rail Engineering

Health & Social Care

- Health and Social Care
- Social Worker
- Occupational Therapy
- Physiotherapy
- Healthcare Science Practitioner

What's available?

Under development (subject to approval)

- Radiography
- Paramedic Practice
- Police Constable
- PG Engineering
- Advanced Clinical
 Practitioner

Hallam Graduate wins National Apprenticeship award

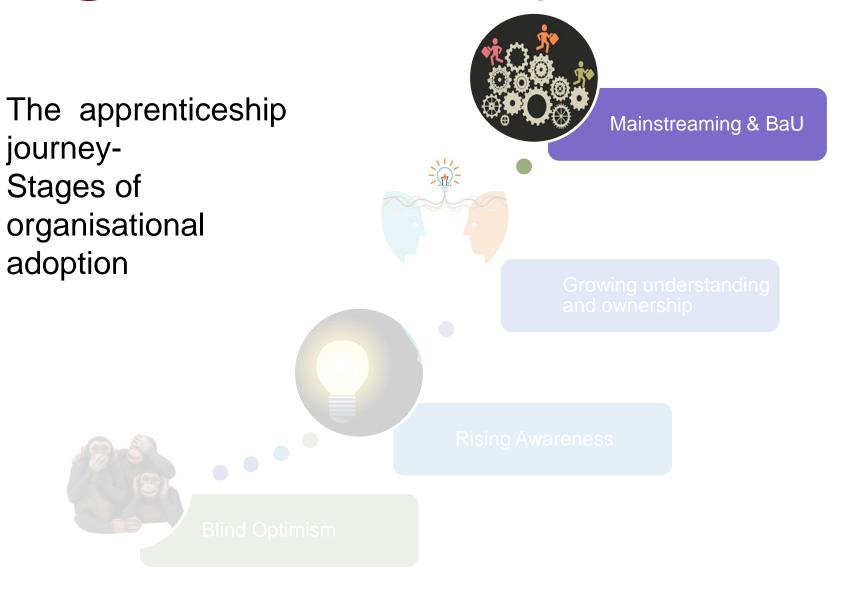


In the report inspectors said that 'too many' engineering apprentices do not value or complete the NVQ component of their programmes



Edge Research:

Apprentices were being subject to mixed messages from an "adult" work-integrated learning culture, a more traditional subjectorientated academic culture, and an audit culture that effectively treats them as children, making it difficult for them to "establish their identity"





Amey Rail Degree Apprenticeship

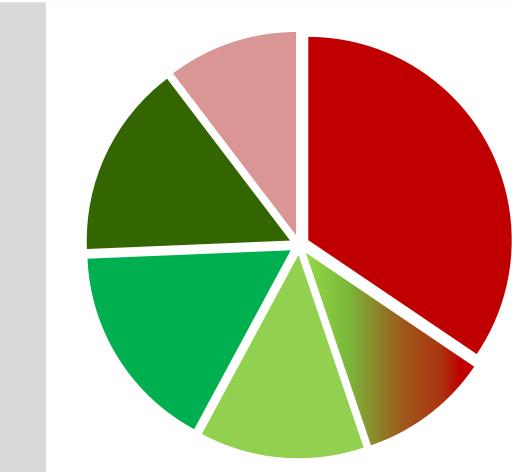
People Manager Briefing

12/2/2020



Creating **better places** to live, work and travel

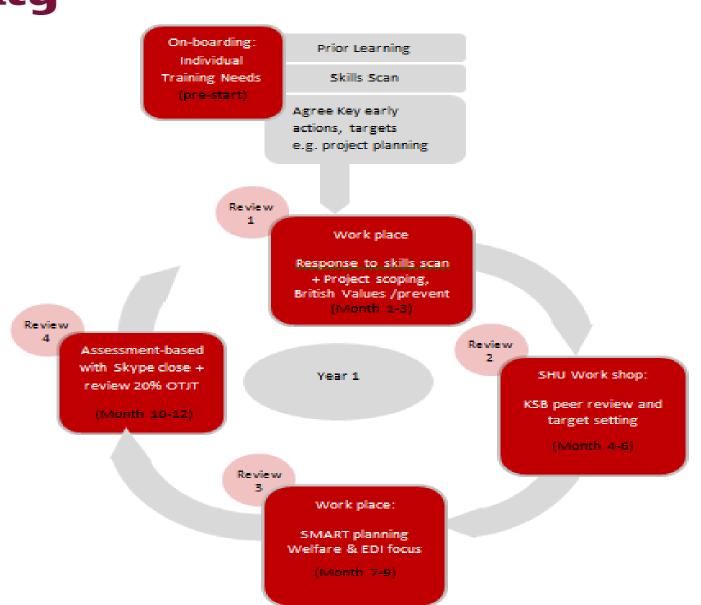




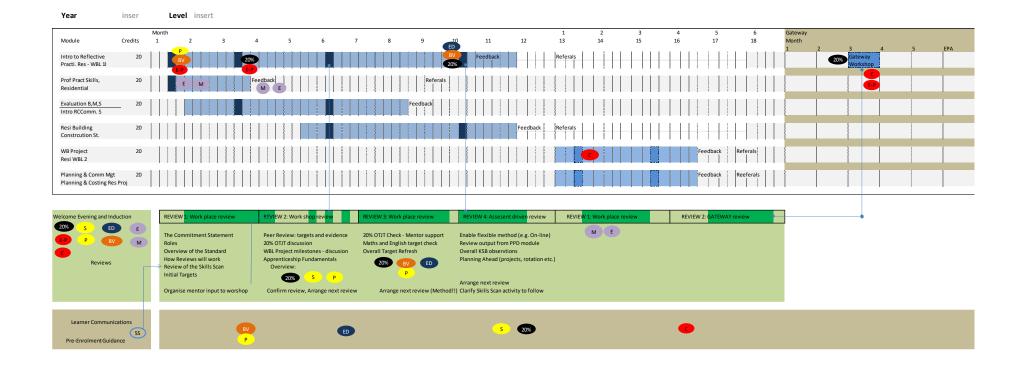
Breakdown of 20% off the job learning for the duration of the apprenticeship

- Scheduled Academic Delivery at SHU
- WBL Project L4
- Experiential in work place
- Barratt Departmental Training
- Barratt Rotations
- Assessment Preparation

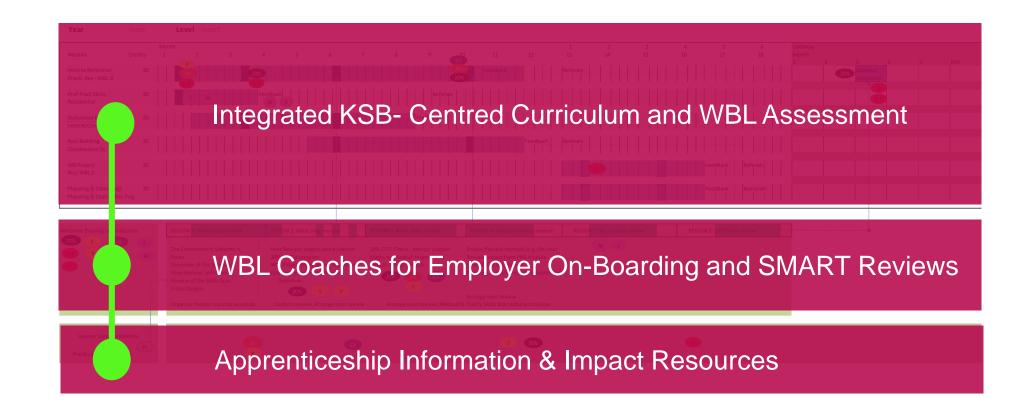
Review Cycle



Intention Implementation Impact



Intention Implementation Impact



Edge Research SHU response...

- Institutional Prioritisation: OfSTED impact and AWBL Steering Group
- Leadership, cultural, strategic, operational: MAYTAS & Coach investment
- work integrated models:: Refreshed Framework, Delivery Guide
- Planning Resources: Revised Delivery and Costing Model
- Staff Expertise: Events, refreshed portal, WBL Assessment Guide
- Scheduling Planning: Assessment Boards and 3-strand implementation
- Systemised Collaboration with employers: On-Boarding and Reviews
- On-line learning: CMDA, Rail, Occupational + Physio-therapy, AllIRs

Final thought



...Pedagogy and delivery methods for a work integrated, adult orientated and learner centred paradigm...

Bringing Apprentices to the point where they are:

"...willing to engage with the idea that they can take ownership of their effectiveness as a learner...

Once they step into that kind of identity, and realise that everything that happens everyday in the workplace is an opportunity, and everything we offer them here is simply a framework for that... the Degree Apprenticeship becomes an extremely powerful learning device".