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T Levels - concepts and current state of content development within the Engineering and Manufacturing Route.

Mike Westlake UK & CEE Manager Autodesk Education Experiences
Chair Design Development and Control Panel

Peter Winebloom
Chair Manufacturing and Process Panel

NFEC National Conference Nov 2018

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What's the problem?

There are thousands of qualifications that are publically funded…

- Excluding GCSEs and A/AS levels, there are approximately **11,900** qualifications at level 3 or below approved for public funding for students aged less than 19 years old.

…and many of those are poor quality, and don't prepare students to progress into higher education or employment

- Competition between awarding organisations can lead to a 'race to the bottom' on standards.
- The current system has limited employer engagement in defining content.

Reforms to the system have been made before (e.g. following the Wolf Review), but have never properly addressed underlying problems in the system: too many poor quality qualifications that don't meet the needs of employers.

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Some further context…

Since the 1980s:

28

major pieces of legislation related to vocational, FE and skills training

6

different ministerial departments with overall responsibility for education

49

secretaries of state with relevant responsibilities

… and no organisation set up to reform technical education has survived longer than a decade

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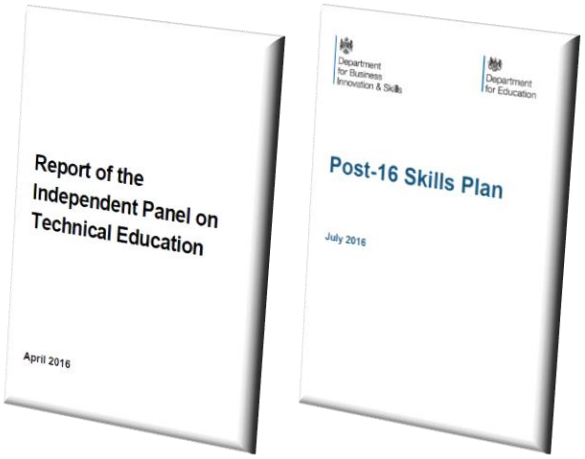
The response from Government…

The Government sought advice from an independent panel led by Lord Sainsbury, whose **final report** was published in April 2016.

The Government response, set out in the **Post-16 Skills Plan** in July 2016, accepted all 34 of the Panel's recommendations.

The **Technical and Further Education Act 2017** set out the legislative basis for delivering the reforms, including the extension of the remit of the Institute for Apprenticeships to cover technical education.



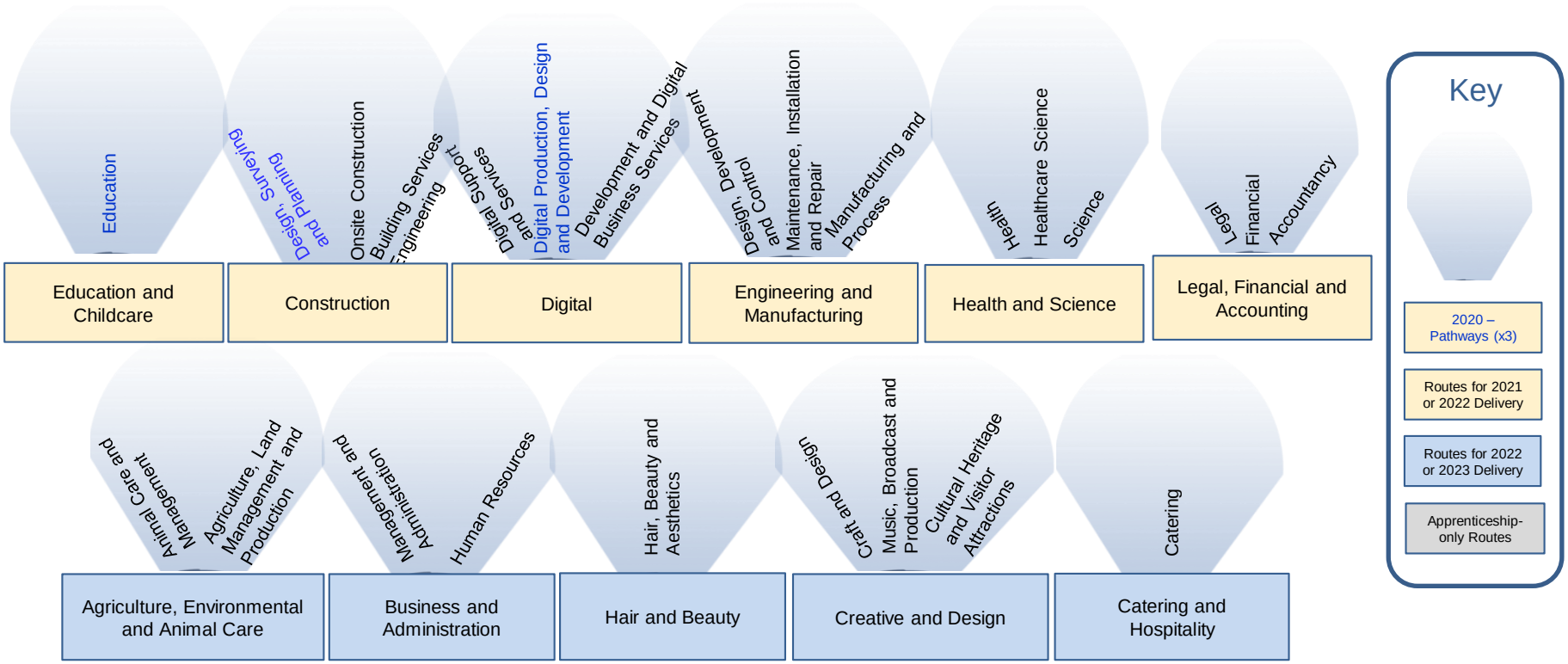
KEY PRINCIPLES:

To ensure the skills system responds to the changing labour market, employers, providers and other partners need to be involved in both design and delivery.

Co-creation: shaping occupational standards and designing wider T Level content.

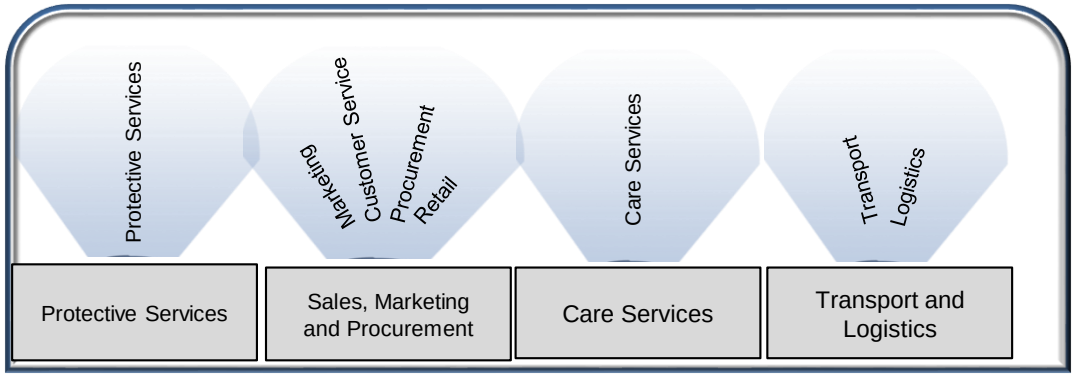
Co-delivery: employers offering industry placements to T Level students so they can apply the knowledge and skills they have learnt in college.

Introducing 15 technical routes



The following pathways are Apprenticeship only.

Route	Pathway
Health & Science	Community Exercise, Fitness & Health
Catering & Hospitality	Hospitality



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Engineering and Manufacturing

- Three Panels:
- **Design Development and Control**

  - Chair Mike Westlake UK & CEE Manager Autodesk Education Experiences

- **Maintenance, Installation and Repair**

  - Chair Olive Raymond Army Headquarters

- **Manufacturing and Process**

  - Chair Peter Winebloom

- Approx. twelve members on each panel
- Led by Relationship Manager from DFE/IfA supported by an Educational Consultant

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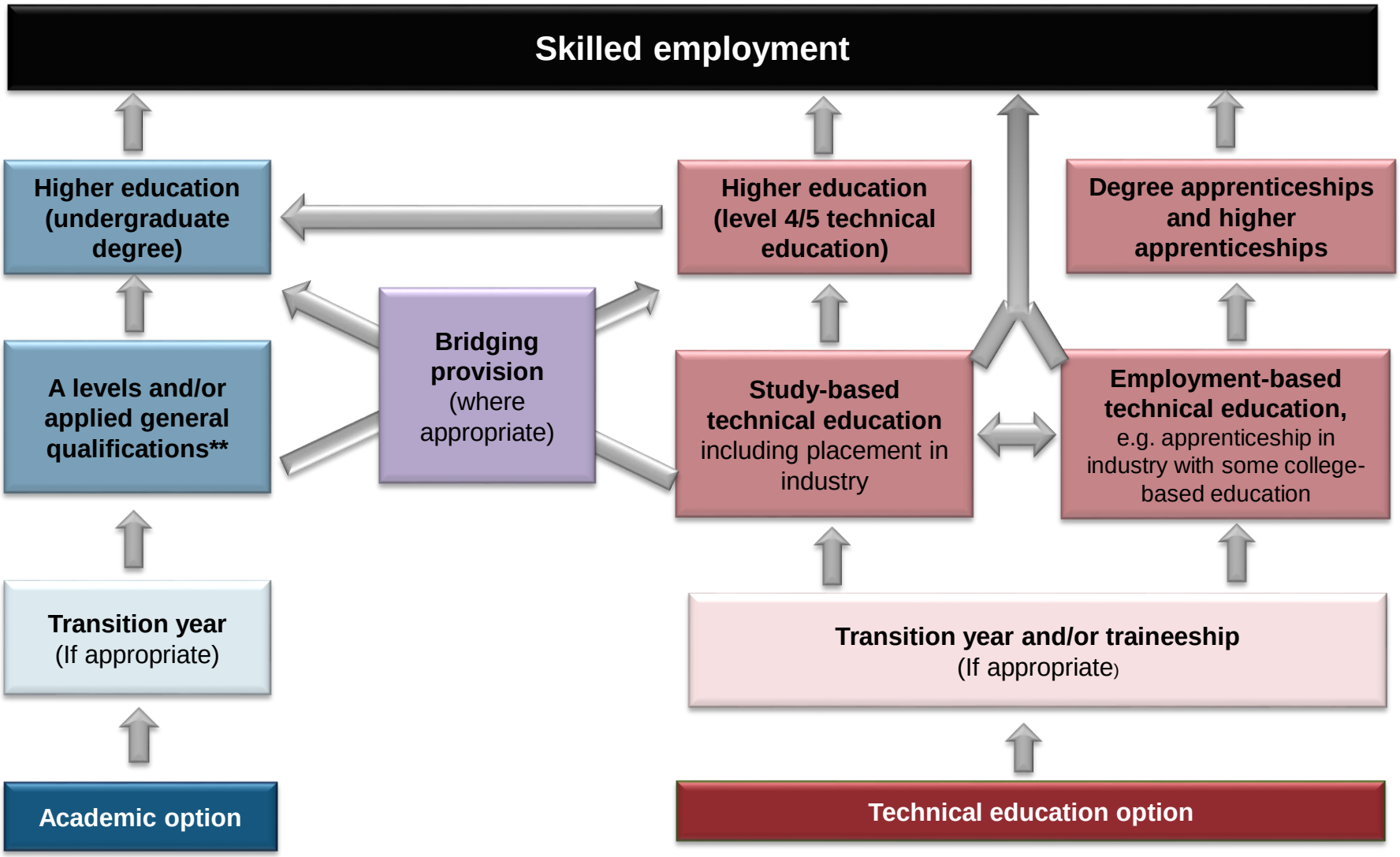
Clear academic and technical options



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So…what actually is a T Level?

- T Levels are new 2 year, level 3 study programmes that will include the following mandatory elements:
  - a ‘core’ set of underpinning knowledge, concepts and skills, tailored for their chosen industry and occupation: ‘core content’
  - specialist training covering occupational or industry-specific skills: ‘occupational specialist content’
  - an industry placement with an employer, which will last for 45 working days.
- The purpose of the T Level is to ensure students have the knowledge and skills needed to progress into skilled employment or higher level technical training relevant to the T Level.
- Each of the 11 technical routes for which T Levels will be delivered is underpinned by an occupational map, which sets out the occupations covered by each pathway. This sets the scope for each T Level.

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Put another way…

T Level programme

1800 hours over two years (with flexibility)

Subject content is set by T Level panels and approved/managed by the Institute for Apprenticeships

Technical Qualification (TQ)

Between 900-1400 hours

Core

20% - 50% of the total TQ time

- Knowledge and understanding of the concepts, theories and principles relevant to the T Level and the broader route
- Core skills relevant to the T Level

- Assessed through an external examination and a substantial, employer-set project

Occupational specialisms (min. 1 per TQ)

50% - 80% of the total TQ time

- Knowledge, skills and behaviours required to achieve threshold competence in an occupational specialism
- Maths, English and digital skills integrated where they are necessary to achieve threshold competence

- Assessed synoptically through rigorous practical assignments.

T Level Industry Placement

Between 315-420 hours

- Undertaken with an external employer
- Minimum of 45 days
- Students develop technical skills and apply their knowledge in a workplace environment
- Provider should pay for/contribute to travel and subsistence costs, if not covered by the employer
- Employers not expected to pay students

Maths and English requirements

- Students are expected to achieve a level 2 in maths and English. This can be achieved through GCSEs (grade 4 and above) or level 2 Functional Skills (pass)
- T Level panels are free to set higher maths and English requirements, where necessary

Other requirements set by T Level panels

- Occupation-specific requirements included, where possible, if they are essential for skilled employment e.g. licence to practice qualification or professional registration

Employability, enrichment and pastoral requirements

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Employer groups involved

Trailblazer Group

- Self-convening
- Identify need for new standard
- Creation of proposal, standard and EPA

T Level Panel

- Convened by Gov't
- Uses standard to create outline content
- 1 panel for each T Level

Route Panel

- Approval of standards and outline content
- Ownership of occupational maps

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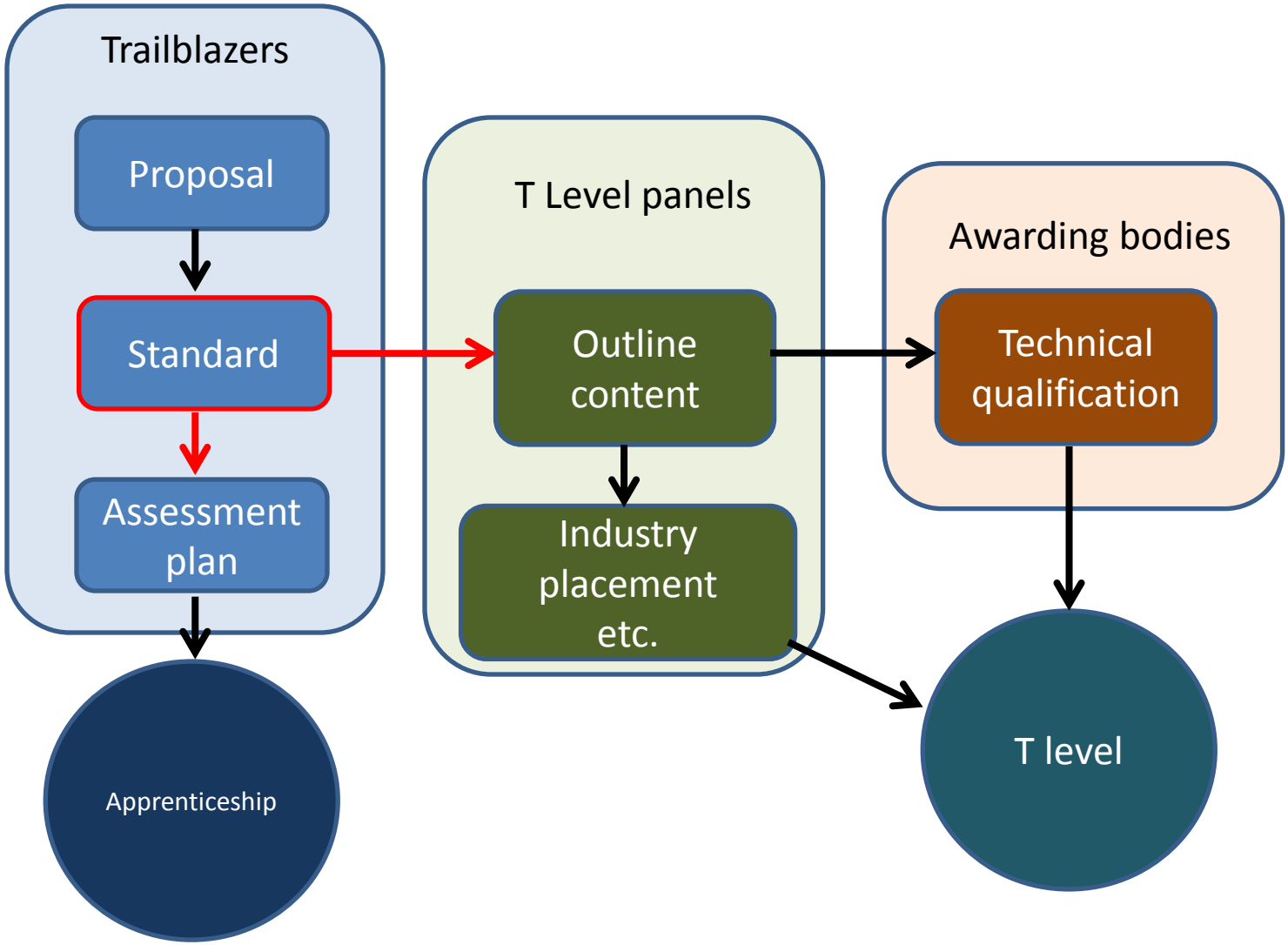
Alignment with apprenticeships



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What are industry placements?

Very different from work experience….but both vital

Work experience

- 1 – 2 weeks
- Aim to help students gain **general 'employability skills'**
- More of a 'work taster' – the first exposure to a working environment

Industry placements

- Minimum of **45 working days**
- **Occupationally specific –** focussed on developing practical and technical skills
- **External –** placement should be with an external employer in a real life working environment

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Key Challenges – what the sector is saying

- Support for providers to ensure understanding and effective implementation
- Clear, direct support for employers to deliver high quality placements
- Flexibility is needed – no one size fits all
- Equality of access to placements (ex. rural or isolated areas)

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Government response - so what are they doing?

Support for providers

- Providing Capacity and Delivery funding for providers to build capacity and deliver placements from this September 2018
- Developing guidance for providers and employers to support implementation of placements – first set of resources online now!
- Providing support to providers from ESFA field force alongside more intensive support where needed

Clear, direct support for employers

- Working with employers to explore how government can best support employers to deliver high quality industry placements
- Expanding the remit of the National Apprenticeship Service in 18/19 to offer an advice and support service to employers, promote awareness and develop a simple referral and matching service for providers
- Working with other government departments to ensure government leads from the front in offering placements, and uses public sector levers to encourage employers to do the same.
- Producing guidance for employers and clarity on paying learners

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Government response - so what are they doing?

Flexibility is needed – no one size fits all

21 providers piloting industry placements in 2017/18 to learn lessons and identify how to overcome challenges.

Working with specific industries and with providers to determine the best models and approaches, with detailed guidance and templates for different scenarios nearer to roll-out.

Working with relevant stakeholders to develop appropriate models and guidance to ensure SEND students can access quality placements.

Equality of access to placements

Working with DEFRA to better understand how to ensure that students in rural areas can access placements.

Providing additional bursary funding in the 2018/19 academic year to help students travel to industry placements.

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Example of outline content for: Construction: On-Site Construction

Component	Occupational Specialist Content	Performance Outcomes
Core Content	Carpentry and joinery	PO I: Prepare for the production of complex timber-based building products and structures PO 2: Produce complex timber-based components PO 3: Assemble complex timber-based products PO 4: Install complex timber-based products into complex structures
	Plastering	PO I: Prepare backgrounds for plastering PO 2: Apply plastering systems PO 3: Fix plaster casted from moulds PO 4: Repair plastering systems
	Bricklaying	PO I: Prepare for the construction of complex masonry structures PO 2: Construct complex masonry structures PO 3: Renovate masonry structures
	Painting and Decorating	PO I: Prepare for the application of surface coatings and wallcoverings PO 2: Apply specialist surface coatings in complex environments PO 3: Apply specialist wallcoverings in complex environments

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Example of outline content for:

Construction: Design, Surveying and Planning

Component	Occupational Specialist Content	Performance Outcomes
Core Content	Surveying and design for construction and the built environment	PO I: Measure the built environment PO 2: Analyse the built environment PO 3: Design the built environment PO 4: Verify delivery of the built environment
	Civil engineering	PO I: Analyse civil engineering solution PO 2: Design civil engineering solutions PO 3: Verify delivery of civil engineering solutions
	Building services design	PO I: Analyse building services solutions PO 2: Design building services solutions PO 3: Verify delivery of building services solutions
	Hazardous materials analysis and surveying	PO I: Inspect the built environment PO 2: Identify hazardous materials PO 3: Analyse hazardous materials PO 4: Monitoring of hazardous materials

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Questions/ Additional information?

www.instituteforapprenticeships.org