Department for Education

T level Consultation Annex

The Technical Qualification[1]

Each T level will include a new substantial technical qualification based on content devised by T level panels. We set out our proposals for the design of the technical qualifications below. The proposals cover some technical detail, but we welcome responses from all interested parties, including providers, employers and professional bodies as well as awarding organisations. This Annex should be read in conjunction with the main consultation document.

The role of the technical qualification

We propose that the role of the technical qualification is to:

- set out the knowledge, skills and behaviours that must be learned in order to secure skilled employment relevant to the T level
- signal what a student knows and can do as a result of attaining the qualification
- ensure the minimum standard of performance required for attainment meets employer expectations
- ensure comparable standards of performance are maintained over time and across providers for the same technical qualification
- support fair access to attainment for all students who take the qualification, including those with SEND

Technical qualification components

In designing a technical qualification, the approved awarding organisation will need to ensure the outline content produced by T level panels is properly covered by the qualification. Awarding organisations may need to elaborate further on the outline content, to ensure providers are clear what needs to be taught and what will be assessed.

[1]The technical education qualification forming part of the T level programme, approved by the Institute under section A2DA of the Apprenticeships, Skills, Children and Learning Act 2009.

We propose that the content for each technical qualification is assessed through separate components:

- A core component focussed on developing underpinning knowledge, skills and behaviours relevant to the T level
- One or more occupational specialist components focussed on developing occupationally specific knowledge, skills and behaviours relevant to the T level

Core component

We propose that the core component has two compulsory parts.

Core 1

- Focuses on students' knowledge and understanding of contexts, concepts, theories and principles relevant to the T level. This could include assessment of knowledge and understanding relevant to the route, the pathway and occupational cluster(s)
- Students develop an understanding of the wider context to working in their chosen occupation, including, for example, the impacts on society and the environment and how people in different occupations often work together in multidisciplinary teams
- Learning this breadth of knowledge and underpinning theory helps to ensure students are able to apply their skills in a variety of contexts and for a variety of different purposes

Core 2

- Focuses on developing students' overall employability, and assess how well they can apply a minimum breadth of transferable skills, and selected numeracy, literacy and digital skills, to achieve purposes relevant to the T level
- This ensures all students are equipped with a coherent set of employability skills, to support progression and movement between different job roles once in work

For students who have not yet made their choice of specialist study, understanding more about their chosen pathway and being clearer about their capabilities and interests, should help them to make an informed choice.

The planned hours specified for the core component across T levels is likely to vary as the content requirements for each T level will be different. We propose that the core is no less than 20% and is no more than 50% of the total qualification planned time. T level panels will recommend the planned hours needed, within these set parameters, for the core component. In exceptional circumstances, the total time for the core may fall outside these parameters.

The minimum time specified should ensure the contribution of the core to the overall qualification is proportionate to the demand on students. The maximum time should ensure an appropriate balance between underpinning and specialist learning.

We propose that the title of the core component corresponds to the T level programme title, which will be determined by T level panels.

Occupational specialist components (occupational specialisms)

We propose that specialist content is defined and assessed separately through occupational specialist components. Each occupational specialism would ensure students develop the knowledge, skills and behaviours necessary to achieve threshold competence in the occupational specialism. Achievement of threshold competence signals that a student is well-placed to develop full occupational competence, with further support and development, once in work.

Threshold competence is as close to full occupational competence as can be reasonably expected of students studying the qualification in a classroom-based setting (e.g. in the classroom, workshops and simulated working environments).

Although the qualification is not exclusively for 16 to 19 year old students, we propose that threshold competence is attainable in the time specified in the qualification, by students starting the technical qualification aged 16.

The content of each occupational specialism directly links to the corresponding standard(s) used for an apprenticeship. Therefore, in the same way that different apprenticeships take varying amounts of time to complete, we propose that the time required to deliver and assess each occupational specialism varies depending on how long it will typically take students to develop threshold competence.

To ensure employers recognise which roles a student is qualified to start work in, we propose that the title of an occupational specialism is linked to the title of the corresponding standard.

We propose that the knowledge, skills and behaviours for each occupational specialism ensure students can achieve one or more ‘performance outcomes’. These indicate what the student will be able to do as a result of learning and applying the specified knowledge, skills and behaviours.

In essence, they describe, at a high level, what the student ‘can do’ to have achieved threshold competence in an occupational specialism. T level panels will specify the performance outcomes for each occupational specialism. Indicative examples include:

- Plan and conduct laboratory experiments to achieve scientifically valid results
- Evaluate systems to find faults and recommend appropriate solutions
- Plan and lead activities, purposeful play opportunities and educational programmes

- Plan and carry out suitable physical care routines
- Deliver planned activities to meet additional needs, working in partnership with others

We propose that transferable skills, numeracy, literacy and digital skills are only included in occupational specialisms (i.e. outside Core 2) if they are essential to achieving a performance outcome.

Like the core component, T level panels will determine the planned hours for each occupational specialism. It is likely that students will need a significant amount of time to achieve threshold competence. Therefore, occupational specialisms will be substantial; much larger than traditional vocational qualification component units. Our current expectation is that students will typically undertake one or two occupational specialisms within a single T level.

We recognise that for some technical qualifications, occupational specialisms may be very large, and there may be too many to allow a student to study successfully all specialisms in the time available. For example, it would take longer than two years to learn all the trades in construction. Therefore, we propose that, where necessary, students are able to select one or more occupational specialisms from a defined set of optional occupational specialisms.

To ensure the selection is coherent and supports students' progression opportunities, we propose that, where necessary, technical qualifications may specify 'rules of combination' for optional specialisms.

Being able to offer students a range of options, from which they must select at least one, should also allow the provider to tailor their provision to local employer needs i.e. where particular occupational specialisms are in demand.

In designing courses, to ensure students are well placed to achieve threshold competence, we would encourage providers to ensure much of the core is delivered before students are assessed on their occupational specialism(s). Depending on the requirements of the T level, we may also expect students to start developing practical technical skills early in the course - even if occupational specialisms are assessed later in the second year.

Assessment

In developing the assessment proposals set out below we consider that assessment in T level qualifications will need to find the right balance of assessment principles. Special attention will need to be paid to mitigation of known risks (for example, relating to malpractice and the reliability of assessment) and other factors which may have adverse effects on the qualification.

The type of content (e.g. knowledge, skills, behaviours, attitudes, understanding) will inform the method of assessment used. Where the same type of content is found in different qualifications, we would expect to see a similar type of assessment method.

Assessment principles

In devising and delivering assessment, to secure public confidence in the technical qualification, awarding organisations will be required to meet the following assessment principles:

Validity – The extent to which assessments allow students to produce assessment evidence which clearly corresponds to the content, i.e. content is not under-represented or misrepresented.

Reliability - Reliability is about consistency and so concerns the extent to which the various stages in the assessment process generate outcomes which would be replicated were the assessment repeated. The reliability of an assessment is affected by a range of factors, such as the sampling of assessment tasks and inconsistency in marking by human assessors. Reliability is central to the extent to which standards of attainment are equivalent over time (comparable performance).

Comparable Performance - The extent to which the same award (e.g. grade), for a qualification/qualification component with the same title signals the same level of student performance across providers (nationally) and over time.

Minimising Bias - Minimising bias is about ensuring that an assessment does not produce unreasonably adverse outcomes for students who share a common attribute. The minimisation of bias is related to fairness to all students and is also closely related to statutory equality duties.

Minimising malpractice - Minimising malpractice is about ensuring the design and processes relating to the delivery of assessment limit opportunity for malpractice to occur. This may include anything from attempts by candidates to communicate with each other during an exam, to failures by school or college staff to comply with awarding organisation instructions regarding storage of work.

Appropriate Demand - The level of difficulty in assessment tasks and requirements of content to be assessed, is appropriate to ensure outcomes are in line with expected standards of attainment.

Manageability - Manageability relates to the feasibility of carrying out particular assessment processes. A manageable assessment process is one which places reasonable demands on students, providers and awarding organisations. This will be based on the scale of the assessment process on the participants, balanced by the usefulness of the outcomes.

Assessment of the core component

We propose that the core is assessed through compensatory assessment methods, i.e. where high performance in one aspect of assessment compensates for lower performance in another - resulting in an overall 'average' score.

To secure valid and reliable assessment, we propose Core 1 is assessed separately to Core 2, but the scores for each are combined to produce a single overall score for the core component.

Although compensation would apply across both parts of the core, to avoid a circumstance where students can attain the component without having made a genuine attempt at each part, we would expect students to have achieved a defined minimum for each part.

Core 1

To ensure the breadth of knowledge and understanding required by Core 1 can be reliably assessed in sufficient depth we propose this is assessed through external examination, set and marked by the awarding organisation.

An external examination will need to:

- include a range of different question types, including longer answer questions, to ensure they can effectively differentiate across the full range of level 3 attainment
- effectively sample across the full breadth of assessed content so that the assessment can cover the content to an appropriate depth
- if necessary, include optional questions or sections, to accommodate underpinning knowledge relevant to sub-pathways or clusters within the T level

For logistical reasons, it may be that Core 1 assessments take place just once a year, for example during the traditional summer examination period.

Core 2

To build on established good practice, and ensure a motivating and work-relevant focus for the development and assessment of employability skills, we propose that Core 2 is assessed through a practical employer-set project, potentially devised in conjunction with the provider and quality assured by the awarding organisation.

Depending on the breadth of the technical qualification, to accommodate differences in students' specialist interests within the T level, providers and awarding organisations may need to offer more than one employer project from which students may choose. Although the same content would be assessed (using the same or very similar assessment criteria) the purposes, context and type of assessment evidence

may vary, depending on the focus of the employer set project. There is no expectation for employers to be involved in assessing the students' work.

In developing the full qualification and assessments for the core component, we acknowledge that:

- awarding organisations may determine that some underpinning knowledge and understanding from Core 1 would be more validly and reliably assessed through Core 2
- some transferable skills, numeracy, literacy and digital skills cited in occupational specialisms may be better assessed through Core 2 and vice versa

We would expect an awarding organisation's assessment strategy to explain why, in designing the full qualification and assessments, it has been necessary to move outline content from one component to another. These changes would be subject to the Institute's approval.

Assessment of occupational specialisms

For occupational specialisms, students will need to demonstrate that they have threshold competence. As such, we propose that assessment methods should be used, which ensure students demonstrate that have met each performance outcome to a defined minimum level of performance. This could be through practical assignments to for example, find and fix faults in an electrical system, deliver a learning plan or creatre a software application. As long as minimum requirements for threshold competence are met, we propose that some degree of compensation between assessment criteria for performance outcomes would be needed to secure validity and reliability.

Synoptic assessment

To ensure validity, we propose that the assessment of Core 2 and each occupational specialism is practical and synoptic[2] and is designed to avoid a 'tick box' approach. Where appropriate, for occupational specialisms, awarding organisations would be encouraged to review approaches to assessment of the corresponding apprenticeship standard.

Question: Do you agree with the proposed approach to assessing technical qualifications? Yes/No – please give reasons for your response.

[2] Synoptic assessment requires students to bring their learning together and demonstrate their ability to independently select and apply knowledge and skills to achieve a meaningful purpose.

Further assessment requirements

Following the consultation, to ensure effective implementation of these high level assessment requirements, separate more detailed requirements may be produced, to ensure that:

- awarding organisations put systems, plans and controls in place to mitigate known risks (for example relating to malpractice, authentication and the reliability of assessment) and minimise other factors which may have adverse effects on the qualification
- any assessment requirements and controls specific to a technical qualification are clear, for example related to assessment timings or proportions of internal and external assessment methods

We would expect awarding organisations' assessment strategy to demonstrate how their qualification specification, systems and assessments would meet these requirements.

Grading

A key purpose of the technical qualification grading is to enable employers and higher-level education and training providers to make effective recruitment decisions through clearly differentiating student performance.

As the same recruiters may select students from a range of T levels, we propose that the same naming system is used for technical qualification grades. We also propose that technical qualifications have component grades rather than a single overall grade.

This means that grades for the core and each occupational specialist component would be recognised separately on the T level programme certificate.

As the core includes a knowledge-based exam and a separate employer-set project, there is likely to be a wide range of overall achievement. To be fair to students, grading will need to clearly show this range and so we propose this component is graded **E - A***. A* being the highest grade.

Each specialism will assess whether a student has threshold competence. Grading will need to show whether it has been achieved, and so we propose this component is graded **Pass, Merit, Distinction**. Merit and Distinction would show increasing levels of performance above the threshold (Pass) and support providers' efforts to stretch and challenge more able students.

The alternative – to have a single overall grade for the whole qualification – would signal attainment across both the core, and potentially more than one occupational specialism. Grades would be based on a minimum requirement to pass each occupational specialism, and components weighted, so their contribution to the overall grade is relative to their size/value. A single grade would show 'average'

attainment, and would mean that excellence in one occupational specialism would be effectively 'cancelled out' by lower performance in other qualification components, for example, just passing another specialism or lower performance in the core component.

This would mean that middle overall grades (e.g. C/D or Merit) would attest to very different profiles of student performance which, given the need for threshold competence, may undermine the perceived value of the qualification. Furthermore, as a necessary consequence of compensation across components, the distribution of grades for a cohort would tend to bunch towards the middle of the grading scale, making it harder for recruiters to differentiate candidates.

In essence, as technical qualifications will be substantial – the size of at least 2 or 3 A levels, we believe that one overall grade would over-simplify students' attainment and a component grading model will better enable recruiters to identify the jobs or further training for which a student may be best suited. An example of a T level certificate is included as an annex to the main consultation document.

In order to achieve a T level and be awarded a certificate, students must attain:

- an E or above in the core component of the technical qualification
- a Pass or above in each occupational specialism (if more than one is required) of the technical qualification

If a student's performance is below that required to achieve an E grade for the core or a Pass grade for each required occupational specialism, their assessment evidence for the component will be ungraded. Ungraded components will be listed on the student's transcript as still required to attain a T level certificate.

Question: Do you agree with the approach to grading technical qualification components? Yes/No – please give reasons for your response.

Qualification size

T level programmes will differ in length to reflect the requirements of different occupations. To accommodate these differences we propose that the total planned hours specified for each technical qualification will vary. T level panels will determine the overall planned hours for the technical qualification to be developed by the relevant awarding organisation(s).

T level programmes are expected, on average, to be 1800 hours over two years. To accommodate legitimate differences in content across T levels, we propose that:

- the total planned hours for the technical qualification will fall within a defined range of between 900 and 1400 hours and
- is no less than 50% of the time for the T level programme as a whole
- is no more than 75% of the total time for the programme as a whole

In exceptional circumstances, the total time for the qualification may fall outside the set parameters.

Comparable standards of performance

In devising outline content, employers and other interested parties will help set the minimum standard of threshold competence for each occupational specialism. To ensure grades are awarded in line with employer expectations, we propose that employers should also have a role in supporting standardisation of assessor judgement and grade awarding.

To ensure fairness to students, and clarity for employers, we propose that a grade for a technical qualification component (e.g. a pass) with the same title should be consistent with the grades awarded to other students (by the same and different training providers) in the year it was awarded and in other years.

To ensure that attainment of technical qualifications with the *same title* signal a comparable level of achievement overall, we propose that the total planned hours (the time for core and specialism(s) added together), for a technical qualification with the same title, fall within defined parameters.

Passing an occupational specialism will signal what a student can do to the level of competence required to secure employment. Therefore, to ensure the continued currency of the qualification, comparable standards of *actual student performance* will need be maintained at the pass grade threshold. To that end we propose that statistical approaches which focus on controlling outcomes, such as using predictions about cumulative % grade outcomes, are not used to inform the award of occupational specialism pass grades.

Question: Do you agree with the approach to maintaining comparable standards of performance for technical qualifications? Yes/No – Please give reasons for your response.

Prior attainment

We recognise that in some instances students may want to switch to another T level, either within the same route or in a completely different route.

To support students' progression chances, if they choose to switch from one T level to another, we propose that they would still need to complete the minimum required occupational specialisms and meet the assessment requirements for that T level, irrespective of what they have attained in another T level's technical qualification.

However, based on provider analysis of the level of prior learning we propose that, as now, it will be at the provider's discretion, how to allocate planned contact hours

for the component; i.e. it may take students with significant prior learning less time to complete the components.

To support flexibility, we propose that if the content of Core 1 or 2 is the same (or only has marginal differences) across T levels within a route, attainment of this could count towards attainment of the common core for any T level within the route. However, this principle would only apply within the route, not across routes.

Question: Do you agree that prior attainment of the core could count if students switch to another T level within the same route? Yes/No – Please give reasons for your response.

Recognising partial attainment and re-taking components

We believe it is important that students who do not complete the qualification are able to use evidence of their partial attainment if they choose to continue technical education.

We propose that, where a student does not meet the minimum requirements to be awarded a qualification or exits the course part way through, they will instead receive a transcript which registers the assessment components which they have achieved. This should enable them to progress more easily onto a related area of study or apprenticeship or to return to their T level at a later date. An example transcript is included as an annex in the main consultation document.

As the technical qualification comprises different components, we propose that students can retake separate components, i.e. they do not need to retake the whole qualification. The better grade for the component will be listed on their final T level certificate.

Updates to technical qualification content

Given the pace of change in many industries, to ensure the continued currency of the qualifications, we propose that when apprenticeship standards are updated, if the Institute deemed it necessary, they would also re-develop the relevant outline content. This would trigger an update process for the approved awarding organisation to amend the corresponding occupational specialist component(s).

If entirely new standards and outline content are developed, the Institute may commission the awarding organisation to develop a new occupational specialism. This would mean that the suite of specialist components available in the first year of delivery may change over time - as new apprenticeship standards and corresponding qualification outline content is developed.

Technical qualification summary

T level programmes will differ in length to reflect the requirements of different occupations, but are expected to last 1800 hours over two years.

To accommodate legitimate differences in content across T levels, we propose that:

- the total time for the technical qualification will fall within a defined range of between 900 and 1400 hours and
- is no less than 50% of the time for the T level programme as a whole
- is no more than 75% of the total time for the programme as a whole

Component	Content	Assessment	Grading	Planned Hours
Core Component Students complete one.	**Core 1** focuses on students' knowledge and understanding of contexts, concepts, theories and principles relevant to the T level. **Core 2** focuses on developing students' overall employability, and assesses how well they can apply a minimum breadth of transferable skills, numeracy, literacy and digital skills.	**Core 1:** Assessed through examination **Core 2:** Assessed synoptically through employer-set project	**E - A*** (Below E ungraded).	Between 20% and 50% of qualification time.
Occupational Specialisms Students must complete one, and typically no more than 2, depending on the specific minimum requirements of the qualification.	Knowledge, skills and behaviours needed to achieve threshold competence.	Synoptic assessment of performance outcomes, to determine whether a student meets the minimum requirements for threshold competence.	**Pass, Merit, Distinction** (Below pass ungraded).	Between 50% and 80% of qualification time.