

End-point assessment plan for Education Technician apprenticeship standard

Apprenticeship standard number	Apprenticeship standard level	Integrated end-point assessment
ST0666	3	No

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Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Education Technician apprenticeship standard. It explains how EPA for this apprenticeship must operate.

This document provides the EPA design requirements for end-point assessment organisations (EPAOs) for this apprenticeship standard. It will also be useful for apprentices undertaking this apprenticeship, their employers and training providers.

EPA must be conducted by an EPAO approved to deliver EPA for this apprenticeship standard. Each employer should select an approved EPAO from the Education & Skills Funding Agency's Register of end-point assessment organisations (RoEPAO).

Education technician is a core and options apprenticeship standard. Apprentices must be trained and assessed against the core and one option:

1. Higher education assistant technician.
2. Simulation-based education technician.

Full-time apprentices will typically spend 24 months on-programme (before the gateway) working towards this occupational standard. All apprentices must spend a minimum of 12 months on-programme. All apprentices must spend a minimum of 20% of on-programme time undertaking off-the-job training.

Before starting EPA, an apprentice must meet the gateway requirements. For this apprenticeship they are:

- the employer must be content that the apprentice is working at or above the occupational standard
- apprentices must have compiled and submitted a portfolio of evidence to underpin the professional discussion
- apprentices must have achieved English and mathematics at Level 2¹

The EPAO must confirm that all required gateway evidence has been provided and accepted as meeting the gateway requirements. The EPAO is responsible for confirming gateway eligibility. Once this has been confirmed, the EPA period starts.

This EPA should then be completed within an EPA period lasting typically for 3 months.

This EPA consists of 2 discrete assessment methods.

It will be possible to achieve the following grades in each end-point assessment method:

Assessment method 1: Observation with questions

- fail
- pass
- distinction

Assessment method 2: Professional discussion underpinned by a portfolio of evidence.

- fail
- pass
- distinction

Performance in the end-point assessment methods will determine the overall apprenticeship standard grade of:

- fail
- pass
- distinction

¹ For those with an education, health and care plan or a legacy statement, the apprenticeship's English and mathematics minimum requirement is Entry Level 3. British Sign Language (BSL) qualifications are an alternative to English qualifications for those who have BSL as their primary language.

EPA summary table

On-programme (typically, 24 months)	<p>Training to develop the knowledge, skills and behaviours (KSBs) of the occupational standard.</p> <p>Training towards English and mathematics Level 2¹, if required.</p> <p>Compiling a portfolio of evidence.</p>
End-point assessment gateway	<p>The employer must be content that the apprentice is working at or above the level of the occupational standard.</p> <p>Apprentices must have achieved English and mathematics at Level 2¹.</p> <p>Apprentices must submit:</p> <ul style="list-style-type: none"> • A portfolio of evidence to underpin the professional discussion
End-point assessment (typically, 3 months)	<p>End-point assessment method 1: Observation with questions, graded:</p> <ul style="list-style-type: none"> • fail • pass • distinction <p>End-point assessment method 2: Professional discussion underpinned by a portfolio of evidence, graded:</p> <ul style="list-style-type: none"> • fail • pass • distinction <p>Overall EPA/apprenticeship graded:</p> <ul style="list-style-type: none"> • fail • pass • distinction
Professional recognition	<p>Aligns with recognition by:</p> <ul style="list-style-type: none"> • Professional Body 1: Institute of Science and Technology - RSci Tech or Registered Practitioner (Higher education assistant technician) • Professional Body 2: Association for Simulated Practice in Healthcare - RSci Tech (Simulation-based education technician)

Length of EPA period

The EPA will be completed within an EPA period lasting typically for 3 months, starting when the EPAO has confirmed that all gateway requirements have been met.

Order of end-point assessment methods

The assessment methods can be delivered in any order.

The result of one assessment method does not need to be known before starting the next.

EPA gateway

The apprentice should only enter the gateway once the employer is content that the apprentice is working at or above the occupational standard. In making this decision, the employer may take advice from the apprentice's training provider(s), but the decision must ultimately be made solely by the employer.

The EPAO determines when all gateway requirements have been met, and the EPA period will only start once the EPAO has confirmed this.

In addition to the employer's confirmation that the apprentice is working at or above the level of the occupational standard, the apprentice must have completed the following gateway requirements prior to starting EPA:

- achieved English and mathematics at Level 2.
For those with an education, health and care plan or a legacy statement, the apprenticeship's English and mathematics minimum requirement is Entry Level 3. British Sign Language (BSL) qualifications are an alternative to English qualifications for those who have BSL as their primary language.

For the professional discussion underpinned by a portfolio of evidence the apprentice will be required to submit:

- A portfolio of evidence

The portfolio of evidence requirements are as follows:

- apprentices must prepare a portfolio of evidence during the on-programme period of the apprenticeship.
- the format and structure of the portfolio must be agreed between the employer and apprentice and will be presented electronically.
- it must contain evidence related to the KSBs that will be assessed by the professional discussion.
- the portfolio of evidence will typically contain 18 discrete pieces of evidence
- evidence may be used to demonstrate more than one KSB; a qualitative as opposed to quantitative approach is suggested.
- evidence sources may include:
 - video/audio extracts (these should be a maximum of 5 minutes in length for each clip and a maximum of 3 clips)
 - written statements
 - project plans
 - reports; minutes
 - observation reports
 - presentations

- feedback from managers, supervisors or peers (any employer or peer contributions should focus only on direct observation of evidence (for example witness statements) rather than opinions)
- papers or reports written by the apprentice
- performance reviews

This is not a definitive list; other evidence sources are allowed.

- It should not include reflective accounts or any methods of self-assessment.
- The content must be sufficient to evidence the apprentice can apply the knowledge, skills and behaviours required as mapped to assessment method 2 (professional discussion). There must be at least one piece of evidence relating to each knowledge, skill and behaviour mapped to assessment method 2.
- The evidence provided must be valid and attributable to the apprentice; the portfolio of evidence must contain a statement from the employer confirming this.
- The portfolio of evidence must be submitted to the EPAO at the gateway.

The portfolio of evidence is not directly assessed. It underpins the professional discussion and therefore should not be marked by the EPAO. EPAOs should review the portfolio of evidence in preparation for the professional discussion but are not required to provide feedback after this review.

For the observation the employer will be required to submit:

- All relevant local regulations, policies and protocols in order for Skill 3 to be assessed.

End-point assessment methods

The apprentice will be assessed against the KSBs assigned to the assessment methods outlined below, as shown in the mapping section of this EPA plan.

End-point assessment method 1: Observation with questions

Overview

This assessment method has 1 component.

An observation with questions involves an independent assessor observing an apprentice undertaking work as part of their normal duties in the workplace and asking questions. This allows for a demonstration of the KSBs through naturally occurring evidence. The observation must be of an apprentice completing their usual work. Apprentices must be observed by the independent assessor completing work under normal working conditions.

The independent assessor will ask questions in relation to KSBs that have not been observed although these should be kept to a minimum.

The rationale for this assessment method is:

- This is a practical role, best demonstrated through completing tasks in a real work setting.
- Observation makes use of employer resources and equipment, which will be familiar to the apprentice and thus allow them to perform at their best.
- Tasks completed during the observation should contribute to workplace productivity and are valid.
- It is a holistic assessment method.

Delivery

The observation with questions must take 3 hours in total. The observation will typically last for 2.5 hours followed by 30 minutes of questioning.

The observation can be split across two sessions (these may be on separate days where necessary) with 15 minutes of questioning taking place after each observed session. Comfort breaks can be taken as necessary or breaks to allow the apprentice to move from one location to another as required. Where breaks occur, they will not count towards the total assessment time.

EPAOs must manage invigilation of apprentices during breaks in order to maintain security of the assessment in line with their malpractice policy.

The independent assessor has the discretion to increase the time of the observation with questions by up to 10% to allow the apprentice to complete a task or respond to a question.

The independent assessor may observe only one apprentice at any one time, to ensure quality and rigour.

Apprentices must be provided with information on the format of the observation with questions, including the timescales they will be working to, 1 week before the start of the observation with questions.

The following activities must be observed during the observation:

1. Preparing and setting up equipment for either:
 - A training session/scenario using simulation-based education
 - An academic teaching session for higher education students
 - An academic led piece of research
2. Clearing equipment away for either:
 - A training session/scenario using simulation-based education
 - An academic teaching session for higher education students
 - An academic led piece of research
3. Supporting a learning/research activity for either:
 - A training session/scenario using simulation-based education
 - An academic teaching session for higher education students
 - An academic led piece of research
4. Demonstrate the current and relevant emerging technologies and techniques used for a specialist piece of equipment relevant to their area of responsibility.

The independent assessor must be unobtrusive whilst conducting the observation.

Questions must be asked to assess the apprentice's breadth and depth of competence against the grading descriptors. The independent assessor must ask a minimum of six questions, across all tasks.

They may ask follow-up questions where clarification is required. The questions can be asked by the independent assessor after completion of the observation. As only naturally occurring work is observed, those KSBs that the apprentice did not have the opportunity to demonstrate can be assessed via questioning, although these should be kept to a minimum.

KSBs observed and responses to questions will be assessed holistically.

The time for questions asked during the observation is included in the overall assessment time.

Questioning occurring at the end of the observation will have a fixed the duration of 30 minutes (and will be in addition to the 2.5 hours for the observation). The independent assessor has the discretion to increase the duration by up to 10% to allow the apprentice to respond to a question. The independent assessor must use the full time available for questioning to allow the apprentice the opportunity to evidence occupational competence at the highest level available.

KSBs observed, and answers to questions, must be recorded by the independent assessor.

The independent assessor will make all grading decisions.

Assessment location

The observation with questions should take place in:

- the apprentice's workplace – the questions element should take place in a quiet room.

The employer is responsible for ensuring that all necessary tools and equipment required for the observation are available and are in good working order.

Question and resource development

EPAOs will create and set open questions to assess KSBs mapped to this assessment method. Each EPAO must develop a question bank of sufficient size to prevent predictability and review them regularly (and at least once a year) to ensure the questions they contain are fit for purpose. Independent assessors must use the question bank as a source for questioning and are expected to use their professional judgment to tailor those questions appropriately. Independent assessors are responsible for generating suitable follow-up questions in line with the EPAOs training and standardisation process. The questions relating to underpinning KSBs must be varied yet allow assessment of the relevant KSBs.

EPAOs must ensure that an apprentice has a different set of questions if they re-sit/re-take.

EPAOs will produce the following material to support this assessment method:

- independent assessor training materials
- grading guidance
- question banks
- outline of the assessment method's requirements
- marking materials
- guidance document for employers and apprentices on the process/timescales for the observation with questions as well as a description of the purpose
- guidance document for independent assessors on how to carry out the assessment

End-point assessment method 2: Professional discussion underpinned by a portfolio of evidence (This assessment method has 1 component.)

Overview

A professional discussion is a two-way discussion which involves both the independent assessor and the apprentice actively listening and participating in a formal conversation. It gives the apprentice the opportunity to make detailed and proactive contributions to confirm their competency across the KSBs mapped to this method.

The rationale for this assessment method is:

Due to the nature of the work undertaken within the sector some KSBs cannot be reliably assessed in the observation and a professional discussion is the most appropriate way to assess those KSBs that will not naturally occur during the observation, allowing the apprentice to draw on their experience to demonstrate competence.

Delivery

This assessment will take the form of a professional discussion which must be appropriately structured to draw out the best of the apprentice's competence and cover the KSBs assigned to this assessment method. The purpose of the questions will be to give the apprentice the opportunity to make detailed and proactive contributions to confirm their competency across the KSBs mapped to this method.

The independent assessor will conduct and assess the professional discussion.

The professional discussion must last for 60 minutes. The independent assessor has the discretion to increase the time of the professional discussion by up to 10% to allow the apprentice to complete their last answer.

During this method, the independent assessor must ensure that the following topics and themes must be covered:

- Contribute to and support the development of new techniques
- Organisation protocols
- Supporting events
- Identifying needs and evaluating outcomes
- Research and analysis
- Use and maintenance of equipment
- Supporting the delivery of teaching, learning or research

The professional discussion will be conducted as follows:

Evidence must be captured using documentation produced by the EPAO. The independent assessor will ask a minimum of 8 open questions taken from an EPAO question bank and

those generated by the assessor. Follow-up questions can be used to draw out further evidence.

The apprentice should be encouraged to refer to their portfolio of evidence during the professional discussion to support their responses. The apprentice will be notified at the start of the EPA period of the date of the professional discussion. The independent assessor will have a minimum of 2 weeks to review the contents of the portfolio prior to the professional discussion in order to generate appropriate questions.

The independent assessor must use the assessment tools and procedures that are set by the EPAO to record the professional discussion.

KSBs met, and answers to questions, must be recorded by the independent assessor.

The independent assessor will make all grading decisions.

Assessment location

The professional discussion should take place in a quiet room, free from distractions and influence. Video conferencing can also be used to conduct the professional discussion, but the EPAO must have processes in place to verify the identity of the apprentice and ensure the apprentice is not being aided.

The professional discussion can take place in any of the following:

- employer's premises
- a suitable venue selected by the EPAO (for example a training provider's premises)
- video conferencing

Question and resource development

A question bank must be developed by EPAOs. The question bank must be of sufficient size to prevent predictability and the EPAO must review it regularly (at least once a year) to ensure that it, and its content, are fit for purpose. The questions relating to the underpinning KSBs, must be varied yet allow assessment of the relevant KSBs. Independent assessors must use the question bank as a source for questioning and are expected to use their professional judgment to tailor those questions appropriately. Independent assessors are responsible for generating suitable follow up questions in line with the EPAO's training and standardisation process.

EPAOs must ensure that apprentices have a different set of questions in the case of re-sits/re-takes.

EPAOs will produce the following material to support this assessment method:

- Outline of the assessment method's requirements
- Data capture form for evidence and gaps
- Bank of questions to be maintained and meet current rules

- Assessment recording documentation
- Guidance document for employers and apprentices on the process / timescales for the discussion as well as a description of the purpose of the discussion
- Guidance document for independent assessors on how to carry out the assessment

Reasonable adjustments

The EPAO must have in place clear and fair arrangements for making reasonable adjustments to the assessment methods for the EPA for this apprenticeship standard. This should include how an apprentice qualifies for reasonable adjustments and what reasonable adjustments will be made. The adjustments must maintain the validity, reliability and integrity of the assessment methods outlined in this EPA plan.

Overall EPA grading

All assessment methods are weighted equally in their contribution to the overall EPA grade.

Performance in the EPA will determine the apprenticeship grade of fail, pass or distinction.

Independent assessors must individually grade each assessment method, according to the requirements set out in this plan.

EPAOs must combine the individual assessment method grades to determine the overall EPA grade.

Apprentices who fail one or more assessment method will be awarded an overall EPA 'fail'.

In order to gain an overall EPA 'pass', apprentices must achieve a pass in all the assessment methods.

In order to achieve an overall EPA 'distinction', apprentices must achieve distinction in all the assessment methods.

Grades from individual assessment methods should be combined in the following way to determine the grade of the EPA as a whole:

Assessment method 1 Observation with questions	Assessment method 2 Professional discussion (underpinned by a portfolio of evidence)	Overall grading
Fail	Fail	Fail
Fail	Pass	Fail
Pass	Fail	Fail
Fail	Distinction	Fail
Distinction	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Pass
Distinction	Pass	Pass
Distinction	Distinction	Distinction

Re-sits and re-takes

Apprentices who fail one or more assessment method will be offered the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action.

An apprentice who fails an assessment method, and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment methods only. If the apprentice fails the observation they will be required to undergo a further observation in line with the independent assessor's feedback. If the apprentice fails the professional discussion, they will not have to resubmit a new portfolio of evidence.

The timescales for a re-sit/re-take are agreed between the employer and EPAO. A re-sit is typically taken within 3 months of the EPA outcome notification. The timescale for a re-take is dependent on how much re-training is required and is typically taken within 6 months of the EPA outcome notification. All assessment methods must be taken within a 6-month period, otherwise the entire EPA will need to be re-sat/re-taken, unless in the opinion of the EPAO exceptional circumstances apply outside the control of the apprentice or their employer.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

Where any assessment method has to be re-sat or re-taken, the apprentice will be awarded a maximum EPA grade of pass, unless the EPAO determines there are exceptional circumstances requiring a re-sit or re-take.

Roles and responsibilities

Role	Responsibility
Apprentice	<p>As a minimum, apprentices should:</p> <ul style="list-style-type: none"> • participate in and complete on-programme training to meet the KSBs as outlined in the occupational standard for a minimum of 12 months • undertake 20% off-the-job training as arranged by the employer and EPAO • understand the purpose and importance of EPA • undertake the EPA including meeting all gateway requirements
Employer	<p>As a minimum, employers should:</p> <ul style="list-style-type: none"> • select the EPAO and training provider • work with the training provider (where applicable) to support the apprentice in the workplace and to provide the opportunities for the apprentice to develop the KSBs • arrange and support a minimum of 20% off-the-job training to be undertaken by the apprentice • decide when the apprentice is working at or above the occupational standard and so is ready for EPA • ensure that all supporting evidence required at the gateway is submitted in accordance with this EPA plan • remain independent from the delivery of the EPA • confirm arrangements with the EPAO for the EPA (who, when, where) in a timely manner (including providing access to any employer-specific documentation as required, for example company policies) • ensure that the EPA is scheduled with the EPAO for a date and time which allow appropriate opportunity for the KSBs to be met • ensure the apprentice is well prepared for the EPA • ensure the apprentice is given sufficient time away from regular duties to prepare for and complete all post-gateway elements of the EPA, and that any required supervision during this time (as stated within this EPA plan) is in place

	<ul style="list-style-type: none"> • where the apprentice is assessed in the workplace, ensure that the apprentice has access to the resources used on a daily basis • for the observation the employer will be required to submit all relevant local regulations, policies and protocols in order for Skill 3 to be assessed • pass the certificate to the apprentice
EPAO	<p>As a minimum, EPAOs should:</p> <ul style="list-style-type: none"> • conform to the requirements of this EPA plan and deliver its requirements in a timely manner • conform to the requirements of the Register of End-Point Assessment Organisations (RoEPAO) • conform to the requirements of the external quality assurance provider (EQAP) for this apprenticeship standard • understand the occupational standard • make all necessary contractual arrangements, including agreeing the price of the EPA • develop and produce assessment materials including specifications and marking materials (for example mark schemes, practice materials, training material) • appoint suitably qualified and competent independent assessors • appoint administrators (and invigilators where required) to administer the EPA as appropriate • provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading • provide adequate information, advice and guidance documentation to enable apprentices, employers and training providers to prepare for the EPA • arrange for the EPA to take place, in consultation with the employer • where the apprentice is not assessed in the workplace, ensure that the apprentice has access to the required resources and liaise with the employer to agree this if necessary • develop and provide appropriate assessment recording documentation to ensure a clear and auditable process is in place for providing assessment decisions and feedback to all relevant stakeholders

	<ul style="list-style-type: none"> • have no direct connection with the apprentice, their employer or training provider. In all instances, including when the EPAO is the training provider (i.e. HEI), there must be no conflict of interest • have policies and procedures for internal quality assurance (IQA), and maintain records of regular and robust IQA activity and moderation for external quality assurance (EQA) purposes • deliver induction training for independent assessors, and for invigilators and/or markers (where used) • undertake standardisation activity on this apprenticeship standard for all independent assessors before they conduct an EPA for the first time, if the EPA is updated and periodically as appropriate (a minimum of annually) • manage invigilation of apprentices in order to maintain security of the assessment in line with the EPAO's malpractice policy • verify the identity of the apprentice being assessed • use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard • provide details of the independent assessor's name and contact details to the employer • have and apply appropriately an EPA appeals process • request certification via the Apprenticeship Service upon successful achievement of the EPA
Independent assessor	<p>As a minimum, independent assessors should:</p> <ul style="list-style-type: none"> • have the competence to assess the apprentice at this level and hold any required qualifications and experience in line with the requirements of the independent assessor as detailed in the IQA section of this EPA plan • understand the occupational standard and the requirements of this EPA • have, maintain and be able to evidence up-to-date knowledge and expertise of the subject matter • deliver the end-point assessment in-line with the EPA plan • comply with the IQA requirements of the EPAO • have no direct connection or conflict of interest with the apprentice, their employer or training provider; in all instances, including when the EPAO is the training provider (i.e. HEI) • attend induction training

	<ul style="list-style-type: none"> • attend standardisation events when they begin working for the EPAO, before they conduct an EPA for the first time and a minimum of annually on this apprenticeship standard • assess each assessment method, as determined by the EPA plan, and without extending the EPA unnecessarily • assess against the KSBs assigned to each assessment method, as shown in the mapping of assessment methods and as determined by the EPAO, and without extending the EPA unnecessarily • make all grading decisions • record and report all assessment outcome decisions, for each apprentice, following instructions and using assessment recording documentation provided by the EPAO, in a timely manner • use language in the development and delivery of the EPA that is appropriate to the level of the occupational standard • mark open (constructed) test answers accurately according to the EPAO's mark scheme and procedures
Training provider	<p>As a minimum, training providers should:</p> <ul style="list-style-type: none"> • work with the employer and support the apprentice during the off-the-job training to provide the opportunities to develop the knowledge, skills and behaviours as listed in the occupational standard • conduct training covering any knowledge, skill or behaviour requirement agreed as part of the Commitment Statement (often known as the Individual Learning Plan). • monitor the apprentice's progress during any training provider led on-programme learning • advise the employer, upon request, on the apprentice's readiness for EPA • remain independent from delivery of the EPA. Where the training provider is the EPA (i.e. a HEI) there must be procedures in place to mitigate against any conflict of interest

Internal Quality Assurance (IQA)

Internal quality assurance refers to the strategies, policies and procedures that EPAOs must have in place to ensure valid, consistent and reliable end-point assessment decisions. EPAOs for this EPA must adhere to all requirements within the Roles and Responsibilities section and:

- have effective and rigorous quality assurance systems and procedures that ensure fair, reliable and consistent assessment across employers, places, times and independent assessors
- appoint independent assessors who have recent relevant experience of the occupation/sector gained in the last 3 years or significant experience of the occupation/sector
- appoint independent assessors who are members of relevant professional bodies
- appoint independent assessors who are competent to deliver the end-point assessment and who meet the following minimum requirements:
 - Be independent of the apprentice, their employer and training provider i.e. there must be no conflict of interest
 - Hold a recognised assessment qualification e.g. A1 or have been trained in assessment practice by their EPAO
 - Complete 5 days of recorded CPD per year.
- operate induction training for independent assessors, markers and invigilators
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- where appropriate:
 - provide ongoing training for invigilators
- undertake standardisation activity on this apprenticeship standard for all independent assessors:
 - before they conduct an EPA for the first time
 - if the EPA is updated
 - periodically as appropriate (a minimum of annually)
- conduct effective moderation of assessment decisions and grades
- conduct appeals where required, according to the EPAO's appeals procedure, reviewing and making final decisions on assessment decisions and grades

Value for money

Value for money of the EPA will be aided by using at least some of the following practices:

- Use of technology – for example video conferencing where applicable
- Location – for example use of employer premises
- Making maximum use of each typical 7.5 hour working day
- Observation of naturally occurring evidence in the workplace

Professional body recognition

This apprenticeship standard is designed to prepare successful apprentices to meet the requirements for registration as an Education Technician with:

- **Professional Body 1:** Institute of Science and Technology - RSci Tech or Registered Practitioner (Higher education assistant technician)
- **Professional Body 2:** Association for Simulated Practice in Healthcare - RSci Tech (Simulation-based education technician)

The experience gained and responsibility held by the apprentice on completion of the apprenticeship standard will either wholly or partially satisfy the requirements for registration with the professional body. For more details on the requirements and application process, please contact the professional body directly.

Mapping of knowledge, skills and behaviours (KSBs)

End-Point Assessment method 1: Observation with questions

Knowledge
K1: Core: Which materials, equipment / machinery / tools, are needed for teaching, learning or research activities.
K2.1: Core: The relevant protocols and Standard Operating Procedures for teaching, learning or research activities, why they are using them and the context in which they are using them. This includes procedures for laying out materials for practical and/or research activities and K2.2: Core: Protocols and standard operating procedures related to clearing up following practical and / or research activities.
K3: Core: The relevant health and safety legislation, environmental regulations and practice, the context in which they are applied and how and when to escalate concerns.
K5: Core: The different approaches and techniques required to demonstrate or facilitate for different audiences.
K12: Core: Communication techniques and approaches to interact with a range of key stakeholders in order to meet their requirements including the ways that current and emerging technologies can support communication.
K16; Core: Safe working practices such as manual handling, risk assessment and infection control audits.
Higher education assistant technician option
K24: Option 1: Techniques and sequences associated with experiments, research and other activities such as setting up, assembling and providing guidance on standard or bespoke equipment or resources for research or teaching.

Skills
S1: Core: Identify, prepare and lay out/set up relevant required materials/ equipment /machinery /tools using relevant protocols/Standard Operating Procedures for the purposes of teaching, learning or research activities within their area of responsibility.
S2: Core: Clearing up materials/ equipment /machinery /tools using relevant protocols and Standard Operating Procedures specific to clearing up.
S3: Core: Work safely, complying with relevant Health and Safety and local regulations or policies and protocols, escalating issues where relevant.
S4: Core: Demonstrate or facilitate and supervise the use of materials/ equipment /machinery /tools and equipment to meet the needs of the audience.
S12: Core: Prepare documentation and materials for all types of wider teaching or learning or research activities and events as required.

S13: Core; Communicate with key stakeholders (such as students, academics, clinicians or research staff, the general public, businesses, professional services staff and technical colleagues) using a range of techniques such as email, visual posters, verbal instructions to support teaching, research, wider activities.
S14: Core: Use and apply current and emerging technologies and techniques such as microscopy, 3D printing, robotics, use of lasers or light to create a range of images, automated screen printing, or virtual reality to support teaching, learning and research.
S17: Core: Organising own work and achieving required results within deadlines.
S18: Core: Apply safe working practices such as manual handling, risk assessments and infection control audits.
Higher education assistant technician option
S26: Option 1: Provide technical support for higher education activities such as experiments and demonstrations.

Behaviours
B2 Works collaboratively with others.
B3 Work safely at all times prioritising health and safety good practice.
B4 Accountability and ownership of their tasks and workload

Assessment method 2: Professional discussion underpinned by a portfolio of evidence

Knowledge
K4: Core: How their role fits into the organisation and the impact that it has.
K6: Core: How to troubleshoot situations, systems, equipment or apparatus and when and how to escalate issues related to situations or systems or equipment or apparatus.
K7: Core: The principles of housekeeping and its purpose including the implications of non-compliance, the need to maintain accurate records and the appropriate channels available to address an issue.
K8: Core: The purpose of the monitoring and maintenance schedule, how regulations, systems and procedures support the activity and the implications of non-compliance.
K9: Core: Protocols and Standard Operating Procedures specifically in place for basic repairs to equipment, when to escalate repairs that are more complex and the appropriate place to escalate them to. This includes an understanding of why it is important to keep accurate records of equipment with their repair and service history and the correct channels to use when addressing issues identified through monitoring and maintenance.
K10: Core: Local operational systems and the software that is required to support them including stock control management, budgeting and maintenance of records.
K11: Core: The importance of the range of activities that support events and key activities related to internal or external events such as conferences, exhibitions, public engagements and open days.
K13: Core: The principles of evaluation and the channels for continuous improvement.
K14: Core: Data protection, confidentiality, informed consent and safeguarding.
K15: Core: Research process, including ethical and governance processes, and the principles and governance of audit.
Higher education assistant technician option
K22: Option 1: The variety of equipment and resources used in their area of responsibility within the higher education sector and the different ways in which they support students and researchers.
K23: Option 1: The potential needs and requirements of different stakeholders within their area of responsibility of higher education such as student groups and researchers.
K25: Option 1: How representations of information are used for teaching and research in higher education.
K26: Option 1: The process of collating appropriate information, such as experimental data or realistic visualisations, derived from academic led experimental work or creative process, and the principles behind how to manipulate them into appropriate formats (tables, figures, catalogues, indices, and portfolios) for publication.
Simulation-based education technician option

K17: Option 2: Interpret learning outcomes for simulation-based education, including clinical skills courses such as Life Support and the role simulation and the environment plays in achieving these outcomes.
K18: Option 2: The techniques, equipment and materials used and ensuring their safe use to create moulage/special effects make-up applications to mannequins and actors working as simulated patients.
K19: Option 2: Interpret learning outcomes and their relevance to programming and running of scenarios using various modes of simulation.
K20: Option 2: Scenario programming and operation of relevant hardware and software for differing modes of simulation such as operation of human patient simulators, part task trainers etc.
K21: Option 2: The underpinning principles of the role of simulation, how to design clinical skills training programmes including programme aims, learning outcomes, teaching plans, and how learning outcomes link to assessment.

Skills
S5: Core: Respond to specific enquiries about appropriate protocols and Standard Operating Procedures, basic techniques and equipment and their safe use and being able to escalate to senior technical colleagues when further clarification is required.
S6: Core: Manufacture, construct or assemble both standard or bespoke components and demonstrate how these components integrate into larger teaching, learning and research systems and equipment.
S7: Core: Use creative thinking and problem solving to build on existing or new ideas in the teaching, learning or research environment based on expertise and context.
S8: Core: Monitor and deliver key activities such as reactive maintenance and where required repair of equipment, safety compliance, infection control during a practical class and completing accurate records in relation to the activity.
S9: Core: Identifying the needs and then fulfil the needs of a person or group requiring information, documentation or resource - such as a student unsure of a piece of equipment during a laboratory, studio or workshop teaching session.
S10: Core: Carry out basic repairs in line with specified protocols/Standard Operating Procedures and keep accurate records where appropriate. Refer more complex or critical repairs where appropriate.
S11: Core: Planning, monitoring and maintaining appropriate stocks of materials and equipment including budgeting and costing as required.
S15: Core: Working at times under time pressure to raise and resolve areas of concern such as malfunctioning equipment, always working safely and to best practice.
S16: Core: Being able to adapt to changing priorities related to both their own work and to the organisation, showing the flexibility to maintain high standards in a changing environment.
S19: Core: Facilitate, support and participate in internal or external events such as conferences, exhibitions, public engagements and open days.

S20: Core: Evaluate the delivery of demonstrations or facilitation for relevant activities such as setting up bespoke equipment for a practical demonstration by getting feedback from students, colleagues and make changes to practise as identified and appropriate.
S21: Core: Undertake data collection, data analysis, data presentation and date storage, in line with legislation, local policies and procedures, such as room usage, student footfall, inventories of equipment or experimental data.
S22: Core: Use of IT technologies such as management information systems.
Higher education assistant technician option
S25: Option 1: Deliver end to end equipment and resource management processes in order to identify the resource needs for their area of responsibility for higher education teaching and research activities.
S27: Option 1: Attention to detail when collating or producing information for higher education activities such as teaching and research.
Simulation-based education technician option
S23: Option 2: Identify, prepare, and apply the relevant moulage/special effects make-up to achieve the required results.
S24: Option 2: Demonstrates scenario coding (programming and running of scenarios using the appropriate hardware and software.)

Behaviours
B1 Seeks out opportunities for Continuing Professional Development (CPD).
B5 Be open to change, amend working practices in response to feedback or changes in process.

Grading Descriptors

End-point assessment method 1: Observation with questions

KSBs	Fail	Pass The apprentice must meet all of the pass descriptors below	Distinction The apprentice must meet all of the pass descriptors and all of the distinction descriptors below
Core KSBs			
Preparing and clearing away for teaching, learning or research K1 K2.1 K2.2 S1 S2 S12 B4	Does not meet the pass criteria	Identifies, prepares and sets up the documentation, materials, equipment and tools for a teaching, learning or research activity. Follows relevant protocols and procedures, taking ownership and accountability of their tasks and workload (K1, K2.1, S1, S12, B4) Clears up materials/ equipment /machinery /tools following a teaching, learning and/or research activity using relevant protocols and Standard Operating Procedures (K2.2 S2)	Evaluates how they set up and prepare for activities in order to facilitate a stronger learning environment (K1, S1) Justifies the protocols and standard operating procedures they used while clearing away materials, equipment or tools. (K2.2, S2)
Communication K5 K12 S4 S13	Does not meet the pass criteria	Applies different approaches and techniques in order to demonstrate, facilitate or supervise the use of equipment, materials or tools to meet the needs of their different audiences (K5, S4) Communicates using a range of techniques to interact with key stakeholders. Ensures stakeholders needs are met and activities are fully supported including the ways that current and emerging technologies can support communication (K12, S13)	Justifies their selection of communication method for their audience and how they adapt these in order to meet activity and stakeholder requirements (K12, S13)
Support for delivering	Does not meet the	Demonstrates the use and application of current and emerging technologies and	Justifies why they select specific technologies and why they would recommend their use (S14)

teaching, learning or research S14 S17	pass criteria	techniques to support teaching, learning and research (S14) Organises their work in order to achieve the required results within the given deadlines (S17)	
Working safely K3 K16 S3 S18 B2 B3	Does not meet the pass criteria	Prioritises safe working practices that comply with relevant local regulations, policies and protocols for health and safety, escalating issues where necessary so activities are safe and free from hazards (K3, S3, B3) Works collaboratively to apply safe working practices such as manual handling, risk assessments and infection control audits (K16, S18, B2)	Justifies the actions they took and the protocols they followed to work safely (K3, S3)
Higher education assistant technician			
Supporting the delivery of teaching, learning and research K24 S26	Does not meet the pass criteria	Provides technical support for higher education activities following the techniques and sequences associated with experiments or demonstrations (K24, S26)	

Assessment method 2: Professional discussion underpinned by a portfolio of evidence

KSBs	Fail	Pass	Distinction
		The apprentice must meet all of the pass descriptors below	The apprentice must meet all of the pass and all of the distinction descriptors below
Contribute to, and support development of, new techniques K4 K6 S7 S22 B5	Does not meet the pass criteria	Defines how their role fits into their organisation and what impact this role has (K4) Explains how they use creative thinking and problem solving to build on existing or develop new ideas to integrate into activities including how they amend their	Justifies their problem-solving technique when integrating solutions into activities (S7)

		<p>practices in response to changes in process or feedback from others (S7, B5)</p> <p>Describes the processes for troubleshooting situations, systems equipment or apparatus and when to escalate issues and how they use IT technologies to support their work (K6, S22)</p>	
<p>Organisation protocols K7 K8 K9 K10 K14 S5</p>	Does not meet the pass criteria	<p>Explains the principles of housekeeping standards including the implications of non-compliance and why it is important to keep accurate records of equipment repair service history. Explains the correct channels to escalate or address issues (K7, K9)</p> <p>Explains how regulations, systems and procedures support a monitoring and maintenance schedule and the implications of non-compliance to the schedule. Explains how to respond to specific enquiries on protocols, operating procedures, techniques and the safe use of equipment, and when they would escalate concerns to senior colleagues (K8, S5)</p> <p>Describes the local operational systems and the software that is required to support them including stock control management, budgeting and maintenance of records (K10).</p> <p>Explains the requirements and need for data protection, confidentiality, informed consent and safeguarding (K14)</p>	Evaluates different actions to mitigate risk with recording repairs and maintenance and how they support improvements to organisational practice (K7, K14)
<p>Supporting events K11</p>	Does not meet the	Describes when they have facilitated, supported and participated in internal or external events and explains the	

S19	pass criteria	importance of having a range of activities (K11, S19)	
Identifying needs and evaluating outcomes K13 S9 S20 B1	Does not meet the pass criteria	Identifies how they seek out opportunities for continual professional development, and how evaluation supports continuous improvement (K13, B1) Describes when they have determined the needs of a person or group and the approach they have adopted to fulfil these needs (S9) Outlines how they use feedback from students and colleagues to evaluate delivery of demonstrations or facilitation and when they have made changes to practice as a result of feedback (S20)	
Research and analysis K15 S21	Does not meet the pass criteria	Explains the research process, principles and governance of audit and how this affects how they undertake data collection, analysis, presentation and storage of information in line with legislation, local policies and procedures (K15, S21)	Justifies the recommendations they have made to the organisation following data analysis (K15, S21)
Use and maintenance of equipment S6 S8 S10 S11 S15 S16	Does not meet the pass criteria	Summarises when they have shown flexibility and adapted to changing priorities related to both their own work and to the organisation, maintaining high standards in a changing environment. (S16) Illustrates how they plan, monitor and maintain appropriate stocks of materials and equipment including budgeting and costing as required (S11) Outlines when they have worked under time pressure to raise and resolve areas of concern such as malfunctioning	Justifies the decisions they made and the actions they took when manufacturing, constructing or assembling standard or bespoke components (S6)

		<p>equipment, always working safely and to best practice (S15)</p> <p>Outlines how they monitor and deliver key activities relating to the use, maintenance and repair of equipment in line with protocols and procedures. Ensures that accurate records are kept and more complex repairs or critical repairs are referred (S8, S10)</p> <p>Explains how they have manufactured, constructed or assembled standard or bespoke components and how these were integrated into larger activities or equipment (S6)</p>	
Higher education assistant technician			
<p>Identifying needs and evaluating outcomes</p> <p>K23 K25</p>	Does not meet the pass criteria	<p>Explains how representations of information are used for teaching and research in higher education (K25)</p> <p>Describes how they identify stakeholder needs and requirements within their area of responsibility in higher education (K23)</p>	
<p>Research and analysis</p> <p>K26</p> <p>S27</p>	Does not meet the pass criteria	Explains how they collate or produce information for higher education activities ensuring attention to detail (K26, S27)	Justifies the process taken to ensure attention to detail when collating and producing information for higher education activities (S27)
<p>Supporting the delivery of teaching, learning and research</p> <p>K22</p> <p>S25</p>	Does not meet the pass criteria	Outlines the process they use when they deliver end to end equipment and resource management to meet the resource needs for their area of responsibility (K22, S25)	Justifies why they have selected a specific piece of equipment or resource to meet the needs of a teaching, learning or research activity (K22, S25)
Simulation-based education technician			

<p>Identifying needs and evaluating outcomes K17 K19 K21</p>	<p>Does not meet the pass criteria</p>	<p>Summarises how to interpret learning outcomes for simulation-based learning, their relevance to the programming and running of scenarios and the role that the environment plays in achieving the outcomes (K17, K19)</p> <p>Outlines the underpinning principles of the role of simulation in designing clinical skills training programmes and how the learning outcomes link to the assessment of it (K21)</p>	
<p>Supporting the delivery of teaching, learning and research K18 K20 S23 S24</p>	<p>Does not meet the pass criteria</p>	<p>Describes when they have identified, prepared, and applied the relevant moulage/special effects make-up to achieve the required results within a simulation-based learning environment (K18, S23)</p> <p>Outlines when they have demonstrated scenario coding for simulation using the appropriate hardware and software (K20, S24)</p>	<p>Justifies why they selected a specific scenario programme and how they evaluated the activity to ensure that the correct programme had been selected (K20, S24)</p> <p>Justifies the techniques, equipment and materials used when they identified, prepared and applied moulage/special effects make-up (K18, S23)</p>