



## End-point assessment plan (integrated) for the Dental Technician apprenticeship standard at level 5

Apprenticeship standard reference number	Level of this end-point assessment (EPA)	Integrated
ST0108	5	Yes

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## Introduction and overview

This document sets out the requirements for end-point assessment (EPA) for the Dental Technician apprenticeship standard. It is for end-point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to Dental Technician apprentices, their employers and training providers.

Full time apprentices will typically spend 36 months on-programme (before the gateway) working towards the occupational standard, with a minimum of 20% off-the-job training. All apprentices will spend a minimum of 12 months on-programme.

This is an integrated assessment ie the EPA will form the final part of the qualification. All other on-programme activity must be complete prior to the apprentice sitting the EPA. The EPA period should only start, and the EPA be arranged, once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, all of the pre-requisite gateway requirements for EPA have been met and that they can be evidenced to an EPAO.

All pre-requisites for EPA assessment methods must also be complete and available for the independent assessor as necessary.

As a gateway requirement and prior to taking the EPA, apprentices must complete all approved qualifications mandated in the Dental Technician standard.

These are:

- Completed the on-programme components, including assessments to meet the knowledge, skills and behaviours, of 220 credits of the Level 5 Foundation Degree Science in Dental Technology qualification. The final 20 credits of the degree will be attributed to end-point assessment.
- English and mathematics at level 2. For those with an education, health and care plan or a legacy statement, the apprenticeship's English and maths minimum requirement is Entry Level 3. A British Sign Language (BSL) qualification is an alternative to the English qualification for those whose primary language is BSL.

The apprentice must also produce a log book of the devices they have made on-programme and post gateway that logs the end to end process for each device.

The log book must include one of each device:

1. Removable prosthetic device (eg dentures)
2. Conservation device (eg crown or bridge)
3. Orthodontic device (eg removable orthodontic appliance [braces])

The EPA must be completed within an EPA period lasting a maximum of 3 month(s), beginning when the apprentice has passed the EPA gateway.

The EPA consists of 2 discrete assessment methods.

The individual assessment methods will have the following grades:

**Assessment method 1:** Showcase of custom-made devices. Graded pass, distinction and fail.

**Assessment method 2:** MCQ Exam. Graded pass, distinction and fail.

Performance in the EPA will determine the overall apprenticeship standard and grade of: pass, distinction and fail.

## EPA summary table

<b>On-programme</b> (typically 36 months)	Training to develop the occupation standard's knowledge, skills and behaviours.
<b>End-point Assessment Gateway</b>	<ul style="list-style-type: none"> <li>• Employer is satisfied the apprentice is consistently working at, or above, the level of the occupational standard.</li> <li>• English/mathematics Level 2</li> </ul> <p>Apprentices must complete the following approved qualifications mandated in the standard:</p> <p>Completed the on-programme components, including assessments to meet the knowledge, skills and behaviours, of 220 credits of the Level 5 Foundation Degree Science in Dental Technology qualification. The final 20 credits of the degree will be attributed to end-point assessment.</p>
<b>End-Point Assessment</b> (which would typically be carried out within 3 months of reaching gateway)	<p>Assessment Method 1: Showcase of custom-made devices</p> <p>Assessment Method 2: MCQ exam</p>
<b>Professional recognition</b>	<p>Aligns with recognition by: The General Dental Council</p> <p>On completion of the apprenticeship the apprentice can apply to register with the General Dental Council as a Dental Technician, by virtue of an acceptable qualification accredited by the GDC.</p> <p>Note: To meet the requirements for registration the competencies and associated curriculum will be used in conjunction with the learning outcomes detailed in the GDC document 'Preparing for Practice.' Please refer to the General Dental Council website.</p> <p>The education and training providers must be compliant with the GDC Standards, Student fitness to practice and requirements for providers of education and training programmes.</p>

## Length of end-point assessment period:

The EPA must be completed within an EPA period lasting a maximum of 3 month(s), beginning when the apprentice has passed the EPA gateway.

## Order of assessment methods

The assessment methods can be delivered in any order.

## Gateway

The EPA period should only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the occupational standard, that is to say they are deemed to have achieved occupational competence. 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.

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

- English and mathematics at level 2.
- For those with an education, health and care plan or a legacy statement the apprenticeships English and mathematics minimum requirement is Entry Level 3 and British Sign Language qualification are an alternative to English qualifications for whom this is their primary language.
- Completed the on-programme units of the qualification

Apprentices must complete the following approved qualifications as mandated in the standard:

- 220 credits of the Level 5 Foundation Degree Science in Dental Technology (the remaining 20 credits will be assigned to end-point assessment).

# Assessment methods

## Assessment Method 1: Showcase of custom-made devices

### Overview

Apprentices will prepare and deliver a showcase of custom-made devices, supported by a log book that appropriately covers the KSBs assigned to this method of assessment. During their on-programme training, the apprentices will have made a series of custom-made devices that are used in real life by patients which will be used to underpin this assessment method. The purpose of the showcase is to show how the apprentice was involved in the manufacture and design of these and that the resulting device was made in line with the prescription and to the required standards. A final device will be made post-gateway to show that the apprentice is able to complete the end to end manufacturing process.

### Showcase of custom-made devices

The showcase is a holistic assessment that covers the mapped KSBs (see appendix 1).

The apprentice will present 3 custom made devices made to the prescription of a dentist or a clinical dental technician (if a complete denture). Two of these will have been made by the apprentice on-programme. The third device will be made post-assessment gateway. The end to end process for all three devices will be evidenced via the log book, demonstrating appropriate design procedures and material selection.

The custom made devices will be as follows:

1. Removable prosthetic device (eg dentures)
2. Conservation device (eg crown or bridge)
3. Orthodontic device (eg removable orthodontic appliance [braces])

It is up to the apprentice to choose which devices will be shown from their on-programme work and which will be made post-EPA gateway. The apprentice will agree the post gateway device with the employer and EPAO. The key focus of the work undertaken in the apprentice's normal workplace will also inform this decision.

Using the actual device/s during the showcase would be encouraged but it is not necessary to show the actual device as in most instances this will already have been sent to the prescribing dentist (or in the case of dentures a clinical dental technician) and be in use by the patient.

The apprentice will give a verbal presentation which will be underpinned with video and photographic evidence to showcase the devices. This will be followed by the opportunity for the independent assessor to lead a question and answer session to clarify what has been shown.

The showcase will be presented to an independent assessor, either face-to-face or via online video conferencing. If using an online platform, EPAOs must ensure appropriate measures are in place to prevent misrepresentation and ensure that the apprentice is not being aided in any way, e.g. using a 360 degree camera.

During the EPA period the apprentice will make the final device, prepare, complete and submit photos, video and other presentation materials to be used during the showcase and an electronic copy of the log book. The apprentice will have access to the log book during the showcase. The apprentice will submit their electronic and supporting materials to the assessor at least 10 working days before the showcase. The rationale for this assessment method is:

A showcase is a good way of showing all aspects of the apprentice's journey whilst manufacturing custom-made devices. As the devices they have manufactured will be in use by patients it will normally not be possible to show the actual device which is why visual evidence has been selected to accompany the showcase.

## Delivery

The showcase will last a total of 90 minutes including questioning. The apprentice will showcase each of the three devices, two made on-programme and one made post-gateway. The showcase will demonstrate the apprentice's competence in the manufacturing process from start to finish against each device. The log book will be used to demonstrate evidence of their work and professional development. The assessor will question the apprentice about each device and the apprentice's wider experience as evidenced via the log book. The independent assessor has the discretion to increase the time of the showcase by up to 10% to allow the apprentice to complete their last point or to complete the questioning of the apprentice.

The apprentice will prepare visual evidence taken or made during the manufacturing process of each device (eg photos, video, multimedia etc) of each key stage in the manufacturing process. If video is used, it must last no longer than 5 minutes for each device. They must be signed off by the employer so that they represent the apprentices own work. The apprentice can use other supporting mediums for the showcase eg poster or slideshow presentation. Evidence from the prescriber that the appliance is clinically acceptable must also be provided to support the showcase.

The independent assessor will ask at least ten questions to clarify what they have been shown and this must fall within the total allocated time of 90 minutes for the showcase. The independent assessor may ask their own questions or draw them from the 'bank' supplied by the EPAO, who should produce an exemplar set of questions to assess the KSBs assigned to this assessment method. This will allow the independent assessor to confirm their understanding of the showcase and how it demonstrates the relevant knowledge, skills and behaviours.

## Log book

A logbook, gives the apprentice the opportunity to demonstrate competence against the occupational standard for those KSBs assigned to the showcase. The logbook itself is not assessed, it is used to inform the questioning for the showcase. The logbook is a **compulsory** requirement and must contain at least one piece of evidence mapped clearly to each of the knowledge, skills and behaviours (KSBs) relating to the showcase. Although each piece of evidence may map to more than one KSB, this will typically result in evidence to cover all KSBs assigned to the showcase. Log books will normally contain in the region of 10 to 15 pieces of evidence. The employer must sign off the logbook, thereby authenticating it and confirming the demonstration of competence against the KSBs assigned to the showcase.

Employers/training providers are free to devise their own version of the logbook, but the it would typically contain the following information:

- The name of the apprentice
- Details of the apprentice's workplace
- Sufficient evidence to support each of the KSBs assigned to the showcase.
- Confirmation from the apprentice's line manager that the tasks were completed to the required standard of the organisation

The log book must include a record of the three devices made by the apprentice, two made on-programme and one post gateway :

1. Removable prosthetic device (eg dentures)
2. Conservation device (eg crown or bridge)
3. Orthodontic device (eg removable orthodontic appliance [braces])

Against each device in the log book there should be:

1. Details of Prescription from Dentist/CDT
2. Observations on Prescription, how they will proceed to design and construct device
3. Review of the construction stages; preparation of impression, casting model; special tray; try-in; retry; final stage and polish; any alterations/modifications
4. Reflection feedback from apprentice
5. Prescriber feedback
6. Supporting photographs
7. Additional evidence

In the log book evidence can be provided through a range of sources; for example performance review documentation, witness statements, training records/certificates and work products such as risk assessments, reports, meeting records, plans etc.

For behavioural competencies, the logbook cannot include self-assessment narrative, other than records of learning activities targeting their own professional development (B1); instead feedback from line managers, customers, stakeholder etc should be provided. Ideally, any employer contributions should focus on direct observation of evidence (e.g. witness statements) of competence rather than opinions.

## Bank

A structured bank of questions must be developed by EPAOs. The bank must be of sufficient size to prevent predictability. It must be reviewed regularly (and at least once a year) to ensure that it, and its content, are fit for purpose. The questions relating to the underpinning knowledge, skills and behaviours, must be varied yet allow assessment of the relevant KSBs.

The showcase of each device should include as a minimum:

- The outline specification based on the dentist's prescription
- Identification of the individual customer needs
- Method of manufacture
- Process and procedures followed (including video evidence)
- Challenges faced and how they were overcome
- Quality checks
- Feedback from the prescribing dentist and/or customer

During the showcase the apprentice will:

- Demonstrate how they have worked with the dentist and the dentist's prescription to evaluate and respond to the patient's needs.
- Demonstrate how design of custom-made devices can contribute to restoration of functionality as well as prevention of oral disease/further decline.
- Give examples of indications of other possible designs that might have provided different solutions to the case
- Give examples of designing, manufacturing, assessing, repairing, modifying and providing biomechanically sound custom-made dental devices
- Describe specific learning points achieved during the manufacturing or during self-assessment of the appliance
- Explain how other materials and manufacturing processes might have been effectively used in manufacturing the case
- Demonstrate how they take responsibility and integrity for completed work
- Show that they are able to practice safely including minimising risk of infection

## Materials

The EPAO will ensure the following are available for the apprentice to use as part of the showcase:

- Video
- PowerPoint
- Flip charts
- Work products
- Notes
- Computer
- Projector

The EPAO will ensure the sound and visual equipment is available to show visual evidence, as well as a laptop, projector and flip chart for the apprentice to use if they wish to during their showcase.

The showcase should be conducted as follows:

- The End-Point Assessment Organisation will advise the employer and apprentice of submission deadlines.
- The apprentice will submit their showcase evidence including photos, videos, evidence from the prescriber and any electronic materials, such as a slideshow and electronic copy of the log book, to the Independent Assessor 10 working days before the showcase date as agreed by the End-Point Assessment Organisation. Evidence to prove that the work is the apprentices own will be required to support the showcase.
- The apprentice will conduct their showcase followed by a question and answer session over 90 minutes.

The independent assessor will make all grading decisions.

### Venue

The showcase is undertaken by the independent assessor in the apprentice's normal place of work or at suitable premises organised by the End-Point Assessment Organisation. The showcase should take place in a quiet room, free from distractions. The EPAO is responsible for ensuring the venue can facilitate the EPA.

EPAOs must ensure that the showcase and questioning elements are conducted in a suitable controlled environment in any of the following:

- employer's premises
- other suitable venue selected by the EPAO

### Other relevant information

An observer may be present from the EPAO for quality assurance purposes. If this is the case the apprentice will be advised beforehand that the assessment will be observed.

### Support material

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

- Outline of the showcase requirements to be sent to the apprentice at least four weeks before the showcase date
- Recording documentation for the independent assessor to use for managing the assessment to ensure consistency and to record the evidence and gaps
- Grading documentation for the independent assessor to use to ensure consistency and allow for moderation
- Guidance documentation the employer and the apprentice on how the assessment will be conducted.

EPAOs will also

- Ensure an appropriate controlled environment is provided for the assessment.

## Assessment Method 2: MCQ Exam

### Overview

This assessment will take the form of a Multiple Choice Question Exam, which must be appropriately structured to draw out the best of the apprentice's competence and excellence and cover the KSBs assigned to this assessment method.

The exam paper will be 60 minutes duration under invigilated examination conditions. The MCQ exam will assess the KSBs mapped to this assessment method (see Page 25). The exam consists of 40 single-response questions.

The exam may be online or paper-based. The results of online exams will be delivered immediately. The results of paper-based exams will be returned to the apprentice within two weeks.

The detailed requirements of the exam are as follows:

### Questions

- A total of 40 single-response questions.
- Each question will have four options. The apprentice will select one option.
- It must include 5 diagram based questions.
- Each question answered correctly must be assigned 1 mark. Incorrect or missing answers will be assigned 0 marks.
- Each exam paper will have a good distribution of questions across all the KSBs mapped to this method to ensure that all the areas are covered.

### Time and conditions

- 60 minutes. Further time may be granted for apprentices with appropriate needs, in-line with the EPAOs Reasonable Adjustments Policy.
- The exam must be delivered in controlled conditions, free from interruption and distractions
- The exam can take place at the apprentices workplace or any other venue determined as appropriate by the EPAO. The EPAO is responsible for ensuring the venue can facilitate the EPA.

### Invigilation and marking

- The exam must be invigilated and marked in line with the EPAO invigilation and marking policy
- The exam is closed book (ie the apprentice cannot refer to reference books or materials)
- Marking will be carried out by EPAO administrators/examiners following a marking guide produced by the EPAO. Electronic marking is also permissible.

### Grading

- The following grading boundaries will apply
  - Distinction: 32 or more correct answers
  - Pass: 20 to 31 correct answers
  - Fail 19 or below correct answers

### Additional requirements

- It is recommended that EPAOs develop exam questions by working with representative employers and experts in the field. Where they do this, measures must be put in place to protect the security and confidentiality of the assessment materials.
- EPAOs must ensure the examination is available for apprentices within the set EPA period, allowing for both assessments and marking to take place
- EPAOs must develop question banks of sufficient size to prevent predictability and review them regularly (at least once a year) to ensure they are fit for purpose.
- EPAOs must ensure that apprentices have different questions in the case of re-sits or re-takes.
- The EPAO is responsible for setting and marking the MCQ exam and constructing an answer marking guide.
- The exam will be marked by the independent assessor who will indicate a pass, distinction or fail.
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The rationale for this assessment method is:

A MCQ exam is a well-recognised method of assessing underpinning knowledge and understanding. This method is widely used within the health sector and forms an appropriate companion to the other method selected to ensure that the apprentices are given the best opportunity to demonstrate the full range of KSBs.

## Weighting of assessment methods

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

## Grading

### Assessment method 1: Showcase

KSBs	Fail	Pass	Distinction
<b>K3 K4</b>  <b>S1 S2</b> <b>S3 S4</b> <b>S5 S6</b> <b>S7 S8</b> <b>S9</b> <b>S11</b> <b>S13</b> <b>S14</b> <b>S15</b> <b>S16</b>  <b>B1 B2</b> <b>B3 B4</b>	The Apprentice does not meet the pass criteria	<p>The apprentice will:</p> <ol style="list-style-type: none"> <li>1. Demonstrate how they act within GDC standards, ethical guidance, information governance and relevant laws (B2)</li> <li>2. Demonstrate an understanding of alternative manufacturing solutions for the devices, including how CAD, CAM and IT solutions could be used and the procedures followed. (K3, S3)</li> <li>3. Demonstrate how, for each device, they have designed, manufactured, assessed, repaired and modified to the prescription including the processes and procedures followed. (K4, S3, S11, S16, B4)</li> <li>4. Justify why specific materials have been selected for the devices they manufacture. (K4)</li> <li>5. Demonstrate when they have effectively communicated with the appropriate member of the dental team, when advising on dental devices and discussing the need for more complex treatment, taking consideration of customer needs in both instances. (S1, S2, S13)</li> <li>6. Explain how removable prosthesis, substructures</li> </ol>	<p>The apprentice will achieve all the pass criteria plus:</p> <ol style="list-style-type: none"> <li>1. Demonstrate that they find solutions to a manufacturing problem and can give an example of doing so independently whilst still acting within the limits of their competence and the boundaries of their role. (K4, S3, S11, B1, B4)</li> <li>2. Consider the different material and manufacturing options that they could have taken with a device, and justify why they took the approach that they did, evaluating its effectiveness. (K4)</li> <li>3. Critically evaluate alternative modern manufacturing solutions identifying the benefit to patients. (K3, S3)</li> <li>4. Evidences how they have communicated effectively with members of the dental team to solve problems and make suggestions for improvements, in order to meet treatment plan objectives. (S1, S2, S13)</li> <li>5. Are proactive in their own development, following GDC enhanced CPD practices for example independently finding</li> </ol>

		<p>for bridgework and orthodontic appliances are made and the procedures used. (S4, S6, S7, S9)</p> <ol style="list-style-type: none"> <li>7. Demonstrate when they have produced accurate models for orthodontic case study purposes and appliance construction and dies for conservation work. (S5, S8)</li> <li>8. Demonstrate how they have practised safely, including minimising the risk of infection. (S15)</li> <li>9. Demonstrate a commitment to their own professional development (B1)</li> <li>10. Give an example of when they have made an improvement to their own work practice on feedback from a supervisor or colleague and explain the impact of that improvement. (B1, B3)</li> <li>11. Give an example of when they have given feedback to a colleague and explain the impact of that feedback. (B1, B3)</li> <li>12. Explain the benefits of networks that they have established with other dental professionals or the wider healthcare team. (B3)</li> <li>13. Give an example of when they have proposed an alternative in-line with the patient's prescription and explain how these decisions are recorded. (S11)</li> </ol>	<p>opportunities to reflect on and review their own practice. (B1)</p>
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		14. Gives an example of how they have handled a complaint and explains the outcome of this (S14)	
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## Assessment method 2: MCQ exam

KSBs	Fail	Pass	Distinction
<b>K1 K2 K3 K4 K5 K6 S10, S12</b>	19 or less correct or missing answers	20 to 31 correct answers	32 to 40 correct answers

### Overall EPA grading

All EPA methods must be passed for the EPA to be passed overall.

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	Assessment method 2	Overall grading
Fail	Fail	Fail
Fail	Pass	Fail
Fail	Distinction	Fail
Pass	Fail	Fail
Pass	Pass	Pass
Pass	Distinction	Pass
Distinction	Fail	Fail
Distinction	Pass	Pass
Distinction	Distinction	Distinction

## Roles and responsibilities

Role	Responsibility
Apprentice	<ul style="list-style-type: none"> <li>• participate in development opportunities to improve their knowledge skills and behaviours as outlined in the standard</li> <li>• meet all gateway requirements when advised by the employer</li> <li>• understand the purpose and importance of EPA and undertake EPA</li> </ul>
Employer	<ul style="list-style-type: none"> <li>• support the apprentice to achieve the KSBs outlined in the standard to their best ability</li> <li>• determines when the apprentice is working at or above the level outlined in the standard and is ready for EPA</li> <li>• select the EPAO</li> <li>• ensure all EPA gateway requirements have been met</li> <li>• confirm arrangements with EPAO for the EPA (who, when, where) in a timely manner</li> <li>• ensure apprentice is well prepared for the EPA</li> </ul>
EPAO	<p>As a minimum EPAOs should:</p> <ul style="list-style-type: none"> <li>• understand the occupational role</li> <li>• appoint administrators/invigilators and markers to administer/invigilate and mark the EPA</li> <li>• provide training and CPD to the independent assessors they employ to undertake the EPA</li> <li>• provide adequate information, advice and guidance documentation to enable apprentices, employers and providers to prepare for the EPA</li> <li>• deliver the end-point assessment outlined in this EPA plan in a timely manner</li> <li>• prepare and provide all required material and resources required for delivery of the EPA in-line with best practices</li> <li>• use appropriate assessment recording documentation to ensure a clear and auditable mechanism for providing assessment decision feedback to the apprentice</li> <li>• have no direct connection with the apprentice, their employer or training provider i.e. there must be no conflict of interest</li> <li>• maintain robust internal quality assurance (IQA) procedures and processes, and conducts these on a regular basis</li> <li>• conform to the requirements of the nominated external quality assurance body</li> </ul>

	<ul style="list-style-type: none"> <li>• organise standardisation events and activities in accordance with this plan's IQA section</li> <li>• organise and conduct moderation of independent assessors' marking in accordance with this plan</li> <li>• arrange for certification with the relevant training provider</li> </ul>
Independent assessor	<ul style="list-style-type: none"> <li>• As a minimum an Independent assessor should:</li> <li>• understand the standard and assessment plan</li> <li>• deliver the end-point assessment in-line with the EPA plan</li> <li>• comply to the IQA requirements of the EPAO</li> <li>• be independent of the apprentice, their employer and training provider(s) i.e. there must be no conflict of interest</li> <li>• satisfy the criteria outlined in this EPA plan</li> <li>• hold or be working towards an independent assessor qualification e.g. A1 and have had training from their EPAO in terms of good assessment practice, operating the assessment tools and grading</li> <li>• have the capability to assess the apprentice at this level</li> <li>• attend the required number of EPAOs standardisation and training events per year (as defined in the IQA section)</li> <li>• Assess if the apprentice has met all the KSBs assigned to each method and make all grading decisions</li> <li>• Check the controlled environment is suitable and has the required equipment for the apprentice to demonstrate the KSBs mapped to the assessment</li> <li>• Use the structured template provided by the EPAO to conduct the assessment</li> <li>• Use the grading documentation provided by the EPAO to collate the grades</li> </ul>
Training provider	<ul style="list-style-type: none"> <li>• As a minimum the training provider should:</li> <li>• work with the employer to ensure that the apprentice is given the opportunities to develop the KSBs outlined in the standard and monitor their progress during the on-programme period</li> <li>• advise the employer, upon request, on the apprentice's readiness for EPA prior to the gateway</li> <li>• plays no part in the EPA itself</li> </ul>

## Internal Quality Assurance (IQA)

Internal quality assurance refers to the requirements that EPA organisations must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPA organisations for this EPA must:

- appoint independent assessors who are occupationally competent across the whole occupational standard i.e. a GDC registered dental technician with post-qualifying experience
- appoint independent assessors who have recent relevant experience of working in a dental lab as a GDC registered practitioner in the last two years or who have significant experience of the occupation. This should be at least at the same level as the standard.
- appoint independent assessors who hold or are working towards an assessor qualification and have experience of assessing at level 5
- provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- have robust quality assurance systems and procedures that support fair, reliable and consistent assessment across the organisation and over time.
- operate induction training and standardisation events for independent assessors when they begin working for the EPAO on this standard and before they deliver an updated assessment method for the first time

## 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 any failed assessment methods only. The apprentice must resit/retake the failed assessment method(s), typically within 3 months of the fail notification.

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.

## Affordability

Affordability of the EPA will be aided by using at least some of the following practice:

- use of electronic marking as required
- use of own work premises

## Professional body recognition

This apprenticeship is designed to prepare successful apprentices to meet the requirements for registration as Dental Technician with the General Dental Council

## Reasonable adjustments

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

# Appendix 1

## Mapping of knowledge, skills and behaviours (KSBs)

### Assessment method 1: Showcase

Knowledge
<b>K3</b> The procedures used in design and manufacture of custom-made devices - dentures, crowns, bridges, orthodontic (including Computer Aided Design (CAD)/ Computer Aided Manufacturing (CAM) & IT Solutions).
<b>K4</b> The principles regarding the selection and use of materials for use in custom made dental devices.

Skills
<b>S1</b> Advise the prescribing dentist on appropriate dental devices based on dentist input, while recognising oral limitations and their effect on devices.
<b>S2</b> Evaluate, for individual patients, the need for more complex treatment and seek advice from the dentist or more experienced Dental Technicians as appropriate.
<b>S3</b> Design, manufacture, assess, repair, modify and provide biomechanically sound custom- made dental devices in the following three areas: Prosthetic (Dentures), Conservation (Crown/Bridge), Orthodontic (Braces) device manufacture.
<b>S4</b> Design and manufacture complete and partial removable prosthesis, including the provision of custom-made impression trays
<b>S5</b> Produce models and dies for conservation work
<b>S6</b> Design and manufacture single metallic and tooth coloured restorations
<b>S7</b> Create substructures for bridgework and apply tooth coloured materials for permanent restorations
<b>S8</b> Produce models for Orthodontic case study purposes and appliance construction
<b>S9</b> Design and manufacture removable, functional and fixed orthodontic appliances
<b>S11</b> Assess impressions, models and finished devices as well as the fitness for purpose of devices and propose alternatives where necessary, in line with patient prescription, and formally record these decisions as for MDD requirements
<b>S13</b> Communicate effectively with and about patients, their representatives and the rest of the dental team.
<b>S14</b> Handle complaints effectively and within GDC guidelines.
<b>S15</b> Manage safety, infection control and decontamination risks around the dental laboratory in keeping with current regulations
<b>S16</b> Can review and Quality Assure the devices

Behaviours
<b>B1</b> Proactive in their own development, willing to commit to lifelong learning by use of a Personal Development Plan (PDP), personal reflection and continuous improvement.
<b>B2</b> Recognise and act within GDC standards, ethical guidance, information governance and relevant laws.
<b>B3</b> Willing to give and receive feedback effectively and tactfully within the wider dental team; takes responsibility for establishing personal networks with dental professionals, specialists and other relevant individuals and organisations.
<b>B4</b> Ready to take responsibility for integrity of completed work.

## Assessment method 2: MCQ Exam

Knowledge
<b>K1</b> Normal dental/oral anatomy and physiology.
<b>K2</b> How design of custom-made devices can contribute to restoration of functionality as well as prevention of oral disease/further decline.
<b>K3</b> The procedures used in design and manufacture of custom-made devices - dentures, crowns, bridges, orthodontic (including Computer Aided Design (CAD)/ Computer Aided Manufacturing (CAM) & IT Solutions).
<b>K4</b> The principles regarding the selection and use of materials for use in custom made dental devices.
<b>K5</b> The role of the Dental Technician and other dental team members in management and leadership, professionalism and communication
<b>K6</b> Compliance with the Medical Devices Directive Council 93/42/EEC (MDD), GDC standards for Dental Team, Scope of Practice

Skills
<b>S10</b> Aware of the basic procedures used in design and manufacture of custom-made devices (including CAD/CAM & IT Solutions).
<b>S12</b> Aware of basic procedures for the use of implants, milling and precision attachments as used with various forms of custom-made dental restorations