

Research Scientist

Level 7

Toolkit

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# Introduction

DSW is your End Point Assessment Organisation (EPAO) for this Apprenticeship and we have created this Toolkit to help the Apprentice, Apprenticeship Training Provider (ATP) and Employer to understand what is needed to successfully achieve End Point Assessment for this Standard and complete the Apprenticeship programme.

All End Point Assessment Organisations must carry out End Point Assessments in line with the Assessment Plan published by the Institute for Apprenticeships and Technical Education. The Assessment Plan includes details such as the form the assessments can take, the environment in which they must be undertaken, what is to be assessed and the grading criteria. End Point Assessment must be carried out under examination conditions.

The requirements and content of this Toolkit come directly from the Research Scientist Assessment Plan with additional clarification provided by Institute for Apprenticeships and Technical Education, who are the External Quality Assurer for this Apprenticeship Standard. Published assessment plans are available on the Institute for Apprenticeships and Technical Education website: <https://www.instituteforapprenticeships.org/>

# Key Steps

|  |
| --- |
| **Pre-Gateway period – minimum of 12 months** |
| * Delivery of On-programme training * Delivery of Functional Skills Maths and English (unless exemptions apply) * Collection of Portfolio evidence * Project completed * Employer provides the title and scope for the Project Report |
| **Gateway Ready** |
| * Employer and Apprenticeship Training Provider (ATP) agree that the Apprentice is demonstrating competence against the knowledge, skills and behaviours in the Standard * Employer confirms that Apprentice is ‘Gateway-ready’ * Gateway documents submitted to DSW’s EPA Pro portal for approval, including proof of English and Maths level 2 achievement * Submission of a Portfolio of Evidence with evidence mapped to each of the Knowledge, Skills and Behaviours descriptor assessed by the Professional Discussion * Title and scope for the Project Report provided to DSW |
| **End Point Assessment period – typical duration 3 months** |
| * DSW will review Project title and scope and confirm if appropriate within 1 week of gateway approval * Training Provider continues to support the Apprentice in preparing for the assessments * DSW will administer the two assessments that together form this EPA: * Project Report, Presentation and Questioning * Professional Discussion underpinned by portfolio of evidence * Results will be issued via email to the ATP five working days after the completion of each assessment |

# What is End Point Assessment?

End Point Assessment (EPA) is the name given to a series of assessments an Apprentice must take to prove their ability to do the job for which they have been training. The assessments take place at the end of an Apprenticeship following a period of training and development, often referred to as the ‘On-programme’ period. The assessment, which accounts for 100% of the assessment of the Apprenticeship, must be carried out by an independent End Point Assessment Organisation. DSW is the selected End Point Assessment Organisation for this Apprenticeship.

When the On-programme phase of the Apprenticeship has been completed, any required Professional and Functional Skills qualifications have been achieved and the Apprenticeship Training Provider (ATP), Assessor and Apprentice have agreed that the Apprentice has met the On-programme requirements of the Standard, the Apprentice moves into the End Point Assessment period.

Once the Apprentice has met the Gateway criteria, DSW will liaise with the ATP, Employer and Apprentice to schedule in dates for each assessment. It should typically take no more than 3 months to complete this final assessment.

During the End Point Assessment phase, the Apprentice completes the required assessments with continued support from their Employer and ATP. All assessments must be passed for the Apprentice to be deemed competent.

On successful completion of all End Point Assessment activities DSW will request the Apprentice’s certificate from the Education and Skills Funding Agency. This be sent to the Employer’s address marked for the attention for the Apprentice. It can take up to eight weeks for certificates to arrive.

# End Point Assessment Overview

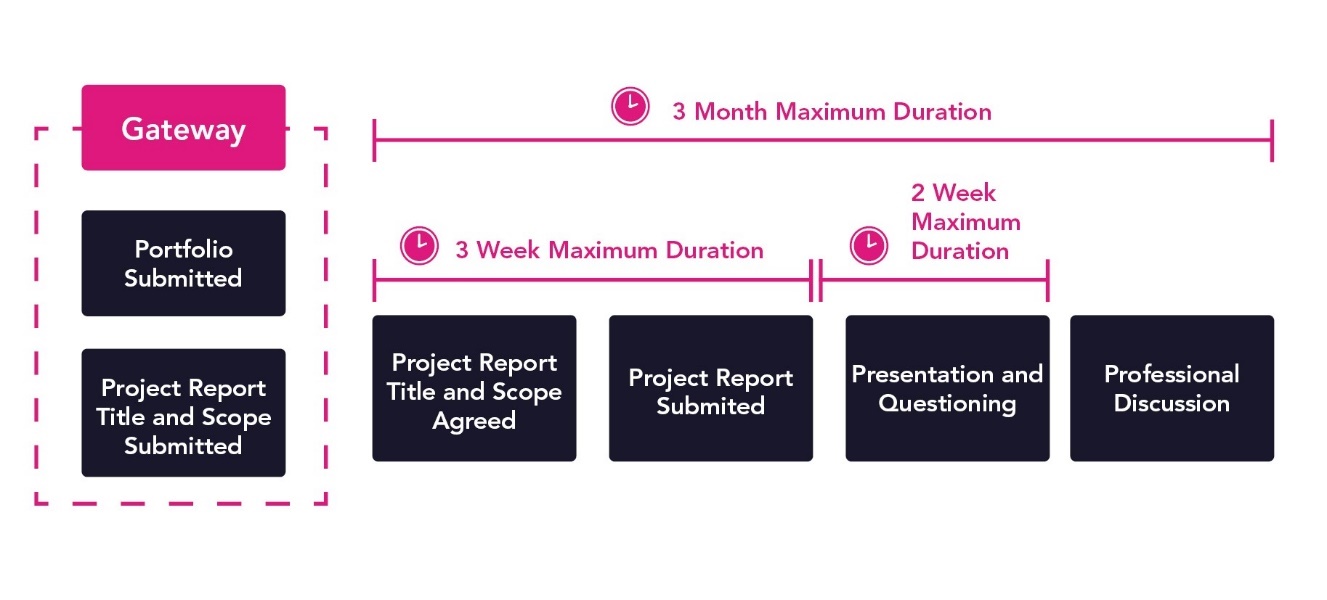
The Research Scientist EPA consists of two assessment components:

1. Project Report, Presentation and Questioning
2. Professional Discussion underpinned by portfolio of evidence

The Gateway requirements include the submission of a Portfolio of evidence and the title and scope for the Project report. DSW will confirm that the title and scope is appropriate, or will make an alternative suggestion, within 1 week of the notification. The Apprentice will have a maximum of 3 weeks to complete the Project report from the date the Project title and scope is agreed.

Note:

1. Missing the Project report deadline will result in a Fail for the Project report
2. Missing the overall EPA deadline will result in a Fail for the EPA and all assessments will need to be retaken



The Standard is made up of 21 KSB statements each with a number of descriptors that Apprentices **must meet** to pass the Apprenticeship. Each of the Knowledge, Skills or Behaviours is assessed by a specific assessment method and has one or more Pass descriptor which must be met.

The document below details which KSB statements are assessed by each assessment component and details the descriptors that must be met for each.



## Ungraded Portfolio of Evidence

The Portfolio should be compiled from the best work gathered over the period of the On-programme stage of the Apprenticeship. It will be used to support the Professional Discussion, but it will not be assessed or graded. The portfolio must contain at least one pieces of evidence mapped clearly to each Knowledge, Skill and behaviour (KSB) relating to this assessment method. Although each piece of evidence may map to more than one KSB, this will typically result in 15 pieces of evidence to cover all KSB’s listed.

The Portfolio will be submitted to DSW at Gateway who will ensure that the Independent Assessor has access to it at least 2 weeks prior to the Professional Discussion taking place.

The Portfolio Referencing table embedded below provides details of each Pass and Distinction descriptor which is assessed through the Professional Discussion. The Apprentice, the ATP and/or the Employer must be confident that the Portfolio evidences each of the required descriptors as detailed in the attached Referencing Table. The Employer must sign off the referencing table to authenticate the portfolio in cell B4 selecting “Portfolio signed off” and adding their signature in cell B5.



Appendix 1 provides guidance on what type of evidence can be included in the Portfolio and a steer on how to ensure that the evidence is sufficient, authentic, relevant and current.

## Professional Discussion

The Professional Discussion is a structured dialogue between the Apprentice and the Assessor, designed to establish the Apprentice’s understanding and application of the Knowledge, Skills and Behaviours that link to the Professional Discussion.

The Portfolio of evidence can be referred to by the Apprentice and the Assessor during the Professional Discussion. It should last for 60 minutes (+6 minutes at the discretion of the Assessor, anything in excess of this will not be included in the assessment of the Professional Discussion). It will be structured as follows:

* The Apprentice will be asked 13 structured questions and will not see the structured questions before the EPA. The Independent Assessor may also ask up to two follow-up questions per core question if required to clarify their understanding but must not lead the Apprentice.

The Discussion will be held in an environment free from distraction, via an online video conferencing platform such as Webex or Zoom, as advised by the Assessor. You may ask to use an alternative platform if necessary. It is strongly recommended that the platform is tested prior to the date of assessment to avoid technical problems and ensure familiarity with the platform. The Apprentice must be given a minimum of 10 working days’ notice of the time and date of the Professional Discussion.

The Apprentice may bring notes into the Discussion for reference.

Following the Professional Discussion, the Independent Assessor will write up their notes and will issue the final grade and feedback to the ATP. This will be done within 5 working days of the assessment date.

**To achieve a Pass in the Professional Discussion, the Apprentice must meet all 13 Pass descriptors which are mapped to this assessment method at Pass level.**

**To achieve a Distinction in the Professional Discussion in addition to the Pass descriptors, the Apprentice must meet 5 of the 13 Distinction descriptors which are mapped to this assessment method at Distinction level.**

## Project Report

The Apprentice must produce a 4000 word Project Report during the EPA period, this will be based on a project they were involved in during the on-programme phase of the Apprenticeship. The Project Report will allow the Apprentice to reflect on a real example of work done in their role and to demonstrate the application of their Knowledge, Skills and Behaviours.

The Employer will provide the title and scope for the Project Report to the apprentice prior to the EPA gateway. The document below should be completed and be submitted to DSW at gateway, DSW will confirm that the title and scope is appropriate, or will make an alternative suggestion, within 1 week of the notification.



The start date for the project report will be the date that DSW agree the project title and scope, the project report must be completed and submitted within 3 weeks of the start date. If the deadline is missed, then the project will be graded as a Fail and a resit will be needed.

Typical project subjects could be:

* Process Improvement
* Efficiency Improvement
* Cost Reduction
* New Products; New Processes

The Project Report should be supplemented by product evidence which authenticates the Apprentice’s account. This may include things such as emails, reports, minutes from meetings or project documentation. Apprentices must comply with Data Protection legislation as well as redacting any commercially sensitive information where appropriate.

## Completing the Project Report

* Work Based Projects with a word count below 4,000 words will be accepted and marked.
* Work Based Projects with a word count above 4,400 words will be accepted and marked based on the first 4,400 words.
* The word count does not include headings used within the body of the text, annexes or references.

The Project report should be supplemented by product evidence which authenticates the Apprentice’s account. This may include things such as emails, reports, minutes from meetings or project documentation. Apprentices must comply with Data Protection legislation as well as redacting any commercially sensitive information where appropriate.

The Referencing Table below must be completed to indicate which sections of the report and supporting evidence meet each of the required descriptors.



Once the Project has been completed and signed off by the employer (by authenticating the Project in cell B4 selecting “Project signed off” and adding their signature in cell B5) it should be sent to DSW for assessment against the standard. The End Point Assessor will assess the report however no feedback can be given prior to the Presentation and Questioning taking place.

* If the Work-based Project is not submitted within 3 weeks of the agreed project start date it will be marked as a Fail.
* Work-based Projects with a word count below 4,000 words will be accepted and marked.
* Work-based Projects with a word count above 4,400 words will be accepted and marked based on the first 4,400 words. Anything in excess of this will not be assessed.
* The word count does not include tables, figures, references and annexes.

When the Work-based Project has been submitted the Apprentice can progress to the Presentation and Q&A and Professional Discussion.

## Presentation and Q&A

Following the submission of the Project Report the Apprentice will have a further 2 weeks to complete and deliver a presentation based on their Project Report.

The Presentation will cover the following:

* a summary of the project report;
* explanation of how and why specific techniques and criteria have been selected;
* improvements moving forward;
* recommendations;
* critical evaluation of the project.

The Presentation must be delivered verbally and will be conducted over video conferencing technology. A copy of the Presentation should be provided to the End Point Assessor ahead of the delivery.

The Presentation will take the following format:

* A 30-minute Presentation on the project report
* A 30-minute Question and Answer session which will consist of 12 competency type questions based on the KSB’s assigned to this assessment method.

The Assessor may extend the timing allowed for both elements by up to 3 minutes each if necessary. Anything outside of the maximum time will not be assessed.

Prior to the Presentation and Questioning, the End Point Assessor will have prepared 12 questions for the questioning element based on the subject matter. However, the questions may be modified to take account of the Presentation evidence. The Assessor may ask up to two follow-up questions for each of the core questions to clarify their understanding but must not lead the Apprentice.

**To achieve a Pass in the Project Report, Presentation and Questioning, the Apprentice must meet all 8 Pass descriptors which are mapped to this assessment method at Pass level.**

**To achieve a Distinction in the Project Report, Presentation and Questioning in addition to the Pass descriptors, the Apprentice must meet 5 of the 8 Distinction descriptors which are mapped to this assessment method at Distinction level.**

# Grading

There are two graded assessment methods:

* Project Report, Presentation and Questioning
* Professional Discussion underpinned by portfolio of evidence

Apprentices must achieve a minimum of a Pass in both assessment methods to achieve an overall Pass and a Distinction in both assessment methods to achieve an overall Distinction.

Each Assessment method is graded either a Distinction, Pass or Fail as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| EPA Component | Fail | Pass | Distinction |
| Project Report, Presentation and Questioning | Pass descriptors not met | The Apprentice must meet all 8 Pass descriptors which are mapped to this assessment method at Pass level. | In addition to the Pass descriptors, the Apprentice must meet 5 of the 8 Distinction descriptors which are mapped to this assessment method at Distinction level. |
| Professional Discussion underpinned by portfolio of evidence | Pass descriptors not met | The Apprentice must meet all 13 Pass descriptors which are mapped to this assessment method at Pass level. | In addition to the Pass descriptors, the Apprentice must meet 5 of the 13 Distinction descriptors which are mapped to this assessment method at Distinction level. |

# Resits

Apprentices that fail the EPA will have the opportunity to resit. A resit should be discussed between the ATP, Employer and Apprentice and DSW should be notified.

# Appendix I – Guidance on Evidence

All evidence must be clearly labelled and dated then referenced in the Portfolio and Project Referencing Tables attached in End Point Assessment Overview section of this document. All documents should be amended appropriately to ensure confidentiality and Data Protection are adhered to. DSW will supply a set of Evidence Templates.

Evidence must be:

* Sufficient
* Authentic
* Relevant
* Current

|  |  |
| --- | --- |
| What is Sufficient? | Enough evidence must be produced to clearly meet all of the relevant descriptors attached to the assessment method. Sufficient does not mean a mass of evidence. It simply means collecting enough quality evidence to demonstrate competence. |
| What is Authentic? | The Apprentice must be able to explain and substantiate the evidence put forward. It is important to ensure that only evidence that relates to their performance is submitted. There is a declaration to be completed at Gateway to confirm that evidence will be authentic. |
| What is Relevant? | Any evidence must relate clearly to the Professional Discussion Descriptors, the job role and the Apprentice’s performance. Avoid the inclusion of reference documents, training materials and other evidence that simply ‘bulks out’ the portfolio. |
| What is Current? | ‘Current’ means evidence relating to knowledge, skills and behaviours that the Apprentice currently demonstrates – these will tend to be the Apprentices best work. Evidence should be gathered and collated in line with the timeframe specified by the Standard. |

The portfolio must be a combination of evidence that is:

* Anecdotal
* Performance
* Product

## Anecdotal evidence

This is the explanations and descriptions written by the Apprentice that tell their story about what happened whilst performing a specific task or activity. It relies entirely on personal testimony so therefore should be backed up with performance and product evidence.

It will involve honesty, critical analysis of performance and a chance to demonstrate integrity in approach and attitude to work. It is designed to allow honest appraisal of performance and look at the impact the whole experience has had.

This can be recorded as a Personal Statement which may help with the structure of the Portfolio; however, this is optional. Each Personal Statement should be supported by blend of evidence.

The following questions and tips will the Apprentice get started:

* What was your starting point at the beginning of the task/activity?
* What specifically did you do to perform the activity?
* Who was involved, what systems did you use, policies and procedures did you follow?
* What challenges did you face and how did you overcome them?
* What was the outcome and output of the activity – what did you achieve?
* What knowledge, skills and behaviours did you demonstrate?
* What did you learn and what might you do differently next time?

## Performance Evidence

Performance evidence can be statements and observations from credible people, such as a Line Manager, that confirm that the story told in the anecdotal evidence is true and reflects the Apprentice’s performance in that situation.

## Observation Record

An observation record should be used when the ATP, Coach or appropriate colleague observes the Apprentice undertaking a task in the workplace as part of their normal duties. During the observation the observer will see evidence of the application of Skills and Knowledge and demonstration of the Behaviours identified in the Assessment Plan.

## Witness Statement

A Witness Statement is evidence given by an appropriate person such as a Line Manger. This is their recollection of various situations they have seen the Apprentice deal with and an overview of the Skills, Knowledge and Behaviours that the Apprentice consistently displays. The Witness Statement must be signed by the person who provides the evidence.

## Product Evidence

This is the additional documentation that supports the anecdotal and performance evidence and ‘proves’ that what is described in the ‘story’ actually took place.

This documentation might include a selection of:

* Customer records/files/notes
* Sales pitches
* Written reports
* Feedback/recognition from clients and colleagues
* Email trails
* Personal Statements
* Small Project documentation
* Performance review information
* Learning record entries/development plan
* Videos, photos, blogs entries – there should be a maximum of 2 hour’s recordings within the Portfolio

## Labelling of evidence

All evidence needs to be labelled with the following information:

* Title of evidence
* Date that the task took place/evidence was generated
* Evidence does not need to be signed as a declaration covering this will be submitted at Gateway. Exceptions to this are witness testimonies and observations which must be signed by the person completing this.

## In Summary

1. Anecdotal evidence shows what should happen
2. Performance evidence shows that what should happen, did happen
3. Product evidence is the proof

# Appendix II – Toolkit Amendments

Version 2 – 07/01/2020

* Project scope template replaced with project proposal template
* Removal of project template



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