



Assessment Plan

Route: Engineering and Manufacturing

Standard: Improvement Practitioner

Apprenticeships and Associated Training Framework

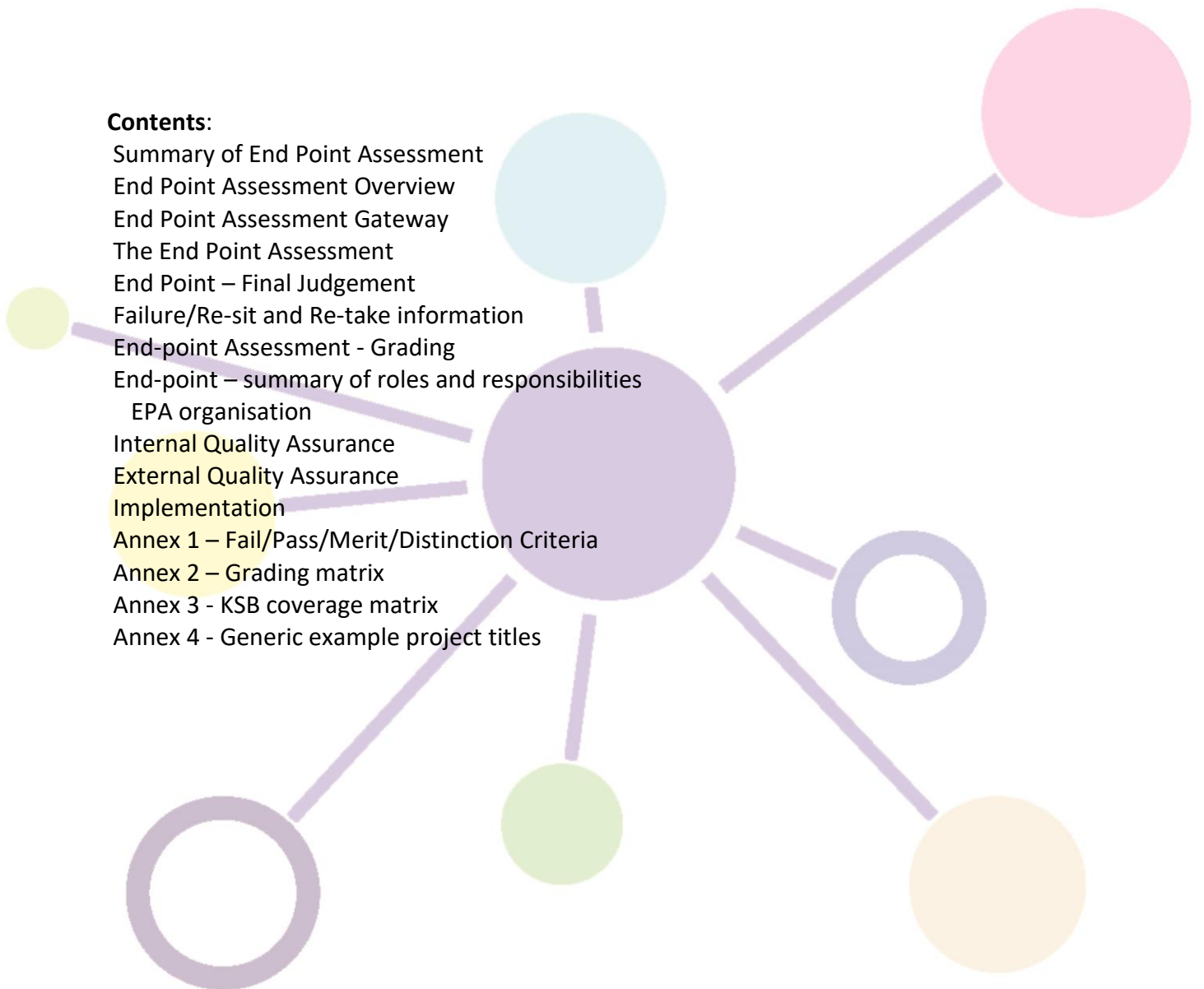
Assessment Plan

Route: Engineering and Manufacturing

Standard: Improvement Practitioner

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END POINT ASSESSMENT PLAN FOR IMPROVEMENT PRACTITIONER LEVEL 4

Summary of End Point Assessment

This document sets out the requirements for end point assessment (EPA) for **the Level 4**

Improvement Practitioner apprenticeship standard. It is written for end point assessment organisations (EPAOs) who need to know how EPA for this apprenticeship must operate. It will also be of interest to improvement expert apprentices, their training providers and employers.

Full time apprentices will typically spend 14 to 18 months on-programme working towards the apprenticeship standard, with a minimum of 20% of this time being off-the-job training.

Apprentices without English and mathematics at level 2 must achieve level 2 prior to taking their EPA.

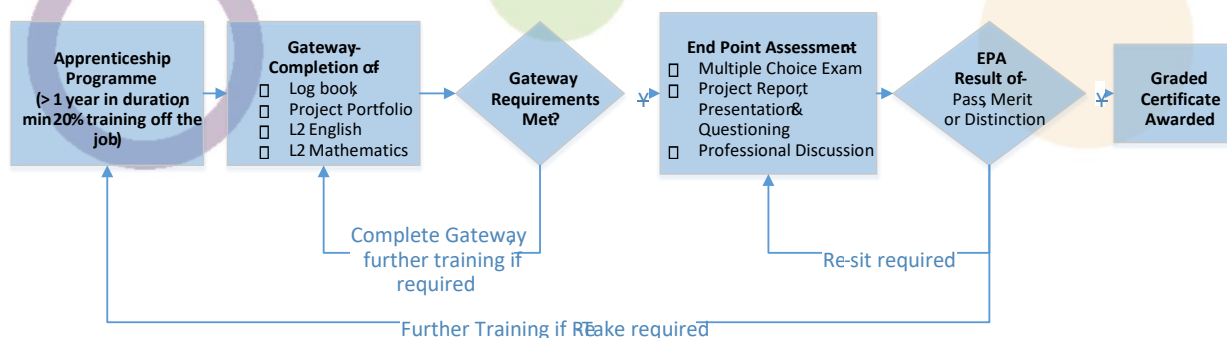
The EPA should only start once the employer is satisfied that gateway requirements for EPA have been met and that the apprentice is consistently working at or above the level set out in the standard.

EPA must be conducted by an EPAO approved to offer services against this standard, as selected by the employer from the Education & Skills Funding Agency's (ESFA) Register of End Point Assessment Organisations (RoEPAO).

The EPA consists of three distinct assessment methods:-

- Multiple choice examination – to assess knowledge elements of the standard
- Project report, presentation & questioning – to holistically assess knowledge, skills and behaviours (KSBs) in the standard
- Professional discussion underpinned by log – to holistically assess KSBs across the standard.

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



Point Assessment Overview

Assessment Method	Area Assessed	Assessed by	Grading	Weighting
Multiple Choice Examination	Knowledge elements	End Point Assessment Organisation	Fail/Pass/Merit/Distinction	10%
Project Report, Presentation & Questioning	Knowledge skill and behaviour elements	End Point Assessment Organisation	Fail/Pass/Merit/Distinction	60%
Professional Discussion, underpinned by Log	Knowledge, skill and behaviour elements	End Point Assessment Organisation	Fail/Pass/Merit/Distinction	30%

Please note that on-programme assessment does not count toward the EPA/apprenticeship grade.

Performance in the 3 assessment methods is combined to determine the EPA and apprenticeship grade of fail, pass, merit or distinction.

End Point Assessment Gateway

EPA can only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the standard. Employers may wish to take advice from their apprentice's training provider(s).

Employers must ensure that the apprentice has met the following requirements prior to EPA taking place, and provide a signed declaration confirming this to the EPAO in order to trigger the EPA:-

1. Completion of a log detailing all training, learning and workshops demonstrating that a minimum of 20% off-the-job training has been completed over the course of the apprenticeship. The log must ensure there is a minimum of one piece of evidence that demonstrates each required KSB of the standard as set out in the coverage matrix in Annex 3.

Evidence must be holistically mapped against the KSBs. For example, the apprentice may write up a meeting held with stakeholders to demonstrate team working and communication, or examples of application of learning to the wider job role.

The log must be 4000 words +/- 10% in length and reference between 13 and 15 pieces of evidence. The log will be used to underpin the EPA professional discussion.

2. Completion of a project portfolio to evidence completion of an improvement project(s). The improvement project(s) will be the subject of a project report to be produced during the EPA period and the subject of the presentation and questioning. The improvement project must:-
 - Clearly demonstrate delivery of business improvement benefit as confirmed in writing by the apprentice's employer
 - Be completed in the apprentice's workplace
 - Address substantive business problem(s)
 - Follow each step of one of a recognised improvement methodology
3. Attained Level 2 English and mathematics.

The End Point Assessment

The EPA consists of three distinct assessment methods:

1. Multiple choice examination to assess the knowledge elements of the standard
2. Project report, presentation & questioning to holistically assess KSBs across the standard –based on the apprentice's improvement project(s) as contained in the project portfolio
3. Professional discussion underpinned by the apprentice's log, to holistically assess KSBs across the standard

Each assessment methods' contribution to the overall grade of the EPA/apprenticeship is set out in the following table:

Multiple Choice Examination	Project Report, Presentation & Questioning	Professional Discussion, underpinned by log
10%	60%	30%

Pass, merit and distinction criteria for each of the above assessment methods are shown in Annex 1.

Each of the three assessment methods of the EPA needs to be passed in order to gain a minimum grade of 'pass' for the EPA and thus the apprenticeship. The grade from each assessment method is combined reflecting its weighting to determine the EPA grade of pass, merit or distinction, as shown in the matrix in Annex 2.

The EPA must be completed within 2 months of completion of the EPA gateway. By the end of month one, the apprentice must have submitted their log and project portfolio to their EPAO and have prepared their project report and presentation. The project report, presentation & questioning and professional discussion underpinned by the log will take place during month two with a minimum notice period of 2 weeks required. It is anticipated that the report presentation and questioning, and

professional discussion underpinned by log will take place on the same day however, this is not a requirement. The multiple choice examination can take place at any point during the EPA period.

A matrix showing the KSBs assessed by each of the assessment methods is shown in Annex 3.

Practical arrangements for the EPA

Location:-

- As the EPA does not need to be at the workplace or contain any practical tests or demonstrations, any venue for the EPA would be acceptable based on the following criteria:-
 - Availability of quiet and private rooms suitable for the multiple choice examination, report presentation & questioning and professional discussion underpinned by log to take place. More detailed requirements for each EPA method are given below. Such a venue may be located within employer's premises, or alternately may be rooms hired specifically for the occasion, i.e. at a local hotel.
 - Every effort should be made to ensure that the location selected is geographically close to the apprentice's employer's location. EPAOs must operate, as a minimum, regional EPA locations. Apprentices must not be disbarred or disadvantaged by lack of local EPA locations.
 - The multiple choice examination if taken on-line, report presentation & questioning and professional discussion underpinned by log may be carried out remotely. EPAOs must ensure appropriate methods to prevent misrepresentation are in place should a remote option be chosen. For example, screen share and 360 degree camera function with an invigilator when taking the multiple choice examination on-line remotely.

Reasonable adjustment:-

- Should an apprentice be declared by the employer as having special needs, e.g. Dyslexia, English not as a first language, then appropriate reasonable adjustment should be made by EPAOs. EPAOs must have in place clear arrangements for making reasonable adjustments for this standard. This should include how an apprentice qualifies for reasonable adjustment and what reasonable adjustment will be made.

Specific detail regarding the multiple choice examination:-

- Location. Availability of a quiet and private room for the examination and with chairs and a standard or larger sized desk available for each apprentice (i.e. desk no smaller than 600*800mm). Note that if multiple apprentices are undertaking the multiple choice examination at the same time, there should be a minimum gap between each apprentice's desks of 0.5 metres.
- Content and time limit. The multiple choice examination will contain 40 knowledge-based questions and be time limited to 40 minutes. It may be an on-line or paper-based test. Each question will present the apprentice with four options to be selected, (a) - (d), from which the candidate must select one option. The candidate may refer to training material/reference books but may not access computer search engines or similar. This is in line with existing practice for assessment in the subject. The multiple choice examination is not a memory test and the ability to refer to material

reflects real working environment where improvement practitioners would look things up to inform the right answer. Given the time restraints apprentices will not be able to refer to notes for every answer.

- Administration/Invigilation. An EPAO appointed administrator/invigilator must be present (physical or virtual) in the examination room throughout the duration of the examination. The administrator/invigilator must read from a script to provide apprentice instruction at the commencement of the examination. The administrator/invigilator must also confirm the apprentice's identity through examination of a suitable identity document to be provided by the apprentice (i.e. photo driving license, passport). A maximum of 12 apprentices per administrator/invigilator are allowed, excepting any cases of remote administration/invigilation of on-line tests where a maximum of 4 apprentices per invigilator are permitted.
- Marking. EPAOs will mark the examination. Each correct answer to be assigned one mark, any incorrect or missing answers to be assigned 0 marks. Where an apprentice selects more than one option to any single question, 0 marks are to be awarded. Electronic marking is permissible.
- Scoring. An EPAO marker will record the number of correctly answered questions.
- Questions available. EPAOs must create and maintain a minimum bank of 150 questions, representing the range of knowledge from the standard. 40 questions will be drawn at random for every test, whilst ensuring full coverage of the required knowledge is achieved. Alternate question sets must be used in re-sits and re-takes. A minimum 25% of the question bank questions must be refreshed annually.
- Grading criteria. Grading criteria for this element of the EPA are shown in Annex 1.

Specific detail regarding the project report, presentation & questioning: -

The project report is to be submitted to the EPAO by the apprentice within one month following the EPA gateway. The project report will then be read by the independent assessor prior to the presentation and questioning. This report will also be the subject of the presentation. Questioning on the report will follow the presentation.

- Project Report requirement. The report must detail the improvement project(s) carried out by the apprentice. The improvement project(s) must clearly show a business benefit to the apprentice's employer. Example project titles/scope are shown at Annex 4. The evidence contained in the report will comprise of a series of pieces of work, or sections on the report, related to each one of the steps of one of the recognised problem solving methodologies. This evidence will be generated over the period of the project activities.
- Report format. The report should:
 - o Be a concise, visual summary
 - o Follow the principles of "A3 Thinking"
 - o Convey key points in a way that enables messages to be grasped "within 3 seconds"
 - o Be typically one to three sides of A3
 - o Include any support documents in an annex which must be submitted with the report and which must be distinct from documents included in the project portfolio

The report MUST follow each step of one of the recognised problem solving methodologies, e.g. 'Define, Measure, Analyse, Improve, Control' (DMAIC), '8 Disciples (8D)', 'Practical Problem Solving' (PPS), and holistically demonstrate how each of the KSB's listed in Annex 3 have been achieved.

The project report must be authorised by means of a 'signed statement' from the apprentice's line manager to confirm authenticity and business benefit.

- Grading criteria. Grading criteria for this assessment method is shown in Annex 1.
- Report Presentation and Questioning location. Availability of a quiet and private room for the report presentation and questioning of appropriate size. IT equipment/display space should be available as required by the needs of each apprentice (see following).
- Report Presentation content/scope. The presentation made must be on the project(s) which is the subject of the apprentice's project report, and as such detail the improvement project(s) carried out by the apprentice. It is up to the apprentice how this information is presented, for example through PowerPoint, through a large copy of the project 'A3' report, images or charts. The apprentice must inform the EPAO of their selected method of presenting to allow the EPAO to organise any IT equipment required. It is up to the apprentice to bring all materials to the presentation. The scope of the presentation is limited to the improvement project(s) carried out by the apprentice and should be presented following linearly the steps of the applicable improvement methodology applied to the project(s).

The apprentice should clearly explain the reasons for project selection, how each improvement tool was used, business benefit of the project including a key performance indicator measure (for example, hours saved, money saved) and how the apprentice worked with a team of people during this project.

- Report Presentation format. The presentation may be in any format (employers have differing 'house styles' and preferred presentation methods) and there are no word or content restrictions. However, the presentation MUST follow each step of one of the recognised problem solving methodologies (e.g. DMAIC, 8D, PPS). Also, the presentation must be authorised by means of a signature from the apprentice's line manager to confirm authenticity and business benefit.
- Project portfolio. The apprentice must bring their project portfolio of evidence to the presentation & questioning and be prepared to show extracts from these to the independent assessor if required during the questioning.
- Questioning specification. The purpose of the report, presentation and questioning is to holistically assess the KSBs required by the standard as set by the coverage matrix in Annex 3. It is expected that the evidence for many of these KSBs will naturally occur in the report and as the apprentice makes their presentation, but it is accepted that there will be some 'gaps'. For each of the required KSBs which are not naturally evidenced through the report and presentation, the independent assessor should ask follow up questions to elicit evidence that the KSBs have been attained, or otherwise. Accordingly, it is not possible to make a discrete list of questions and the skill of the independent assessor is required to identify those 'gap' KSB items and make appropriate skilled questioning. In addition, the independent assessor should ask questions to enable accurate

assessment against the pass/merit/distinction criteria where further information is required to address any 'gaps'.

Open questions must be used, for example:-

Explain in detail.....

Describe.....

Give an example.....

Demonstrate.....

Take us through your calculation of.....

Where do you find.....

How did you.....

What was the objective.....

- Timing. Presentation by apprentice:- 30-40 minutes
Questioning by independent assessor:- 25-35 minutes
Hence the report, presentation and questioning method has a maximum time limit of 75 minutes.
- Audience. The audience for the presentation & questioning must include one employer representative (usually supervisor of the apprentice or above). Their role is to confirm validity of the information provided in the question and answer section, provide guidance to the assessor in terms of employer policy and practice where requested and to create a realistic presentation environment. The employer must not amplify or clarify points made by the apprentice. Note that the EPAO judgement lies solely with the independent assessor who alone 'marks' the report, presentation and questioning. Quality assurance staff (internal or external) may also be in attendance.
- Grading criteria. Grading criteria for this element of the EPA are shown in Annex 1.

Specific detail regarding the professional discussion, underpinned by log: -

The log is to be submitted to the EPAO by the apprentice within one month following the EPA gateway. The log will be reviewed by the independent assessor prior to the professional discussion.

- Grading criteria. Grading criteria for this assessment method is shown in Annex 1.
- Professional discussion location. Availability of a quiet and private room for the professional discussion.
- Log. The apprentice must bring a copy of their log to the professional discussion and be prepared to show extracts from these to the independent assessor if required.
- Professional discussion specification. The purpose of the professional discussion is to holistically assess the KSBs required by the standard as set by the coverage matrix in Annex 3. The independent assessor will typically ask 13 to 15 open questions and can ask follow up questions for clarification to elicit evidence that the KSBs have been attained, or otherwise and to enable accurate assessment against the pass/merit/distinction criteria.

Professional discussion questions. It is not possible to specifically state the questions to be asked at the professional discussion, as these will depend on the results of the review of the log previously carried out by the IA to identify where KSB's required have sufficient evidence or are not sufficiently evidenced. The apprentice will be asked, with reference to their log to explain how KSB's required were practically achieved.

Open questions must be used, for example:-

Explain in detail.....

Give an example.....

Take us through your calculation of.....

How did you.....

Describe.....

Demonstrate.....

Where do you find.....

What was the objective.....

- Timing. Professional discussion 50 - 60 minutes
- Audience. The audience for the professional discussion must include one employer representative (usually supervisor of the apprentice or above). Their role is to confirm validity of the information provided in the professional discussion and provide guidance to the assessor in terms of employer policy and practice where requested. The employer must not amplify or clarify points made by the apprentice. Note that the EPA judgement lies solely with the independent assessor who alone 'marks' the professional discussion. Quality assurance staff (internal or external) may also be in attendance.
- Grading criteria. Grading criteria for this element of the EPA are shown in Annex 1.

End Point Assessment – Final Judgement

The decision on the apprentice's performance in the EPA will be determined solely by an EPAO's independent assessor, subject to moderation (see internal quality assurance section below). It is anticipated that the same independent assessor will mark the project report, presentation &

questioning and professional discussion underpinned by log, although this is not a requirement to allow EPAOs flexibility. The independent assessor that conducts the report, presentation and professional discussion assessment will combine the results from each assessment method to determine the EPA/apprenticeship grade as described later in this document.

The apprentice should be notified of the EPA outcome in writing within 4 weeks of the completion of the EPA, including detail of areas for further development and improvement where they have failed.

Failure/Re-sit and Re-take information

Apprentices that fail the EPA will have the opportunity to re-sit/re-take. Re-sits/re-takes are not to be offered to apprentices wishing to move from pass to merit/distinction or merit to distinction. A re-sit does not require further learning, whereas a re-take does. The conditions relating to re-sits/re-takes are outlined below.

Apprentices who fail any one EPA method will be offered the opportunity to take a re-sit/re-take for that one method. The re-sit/re-take must be taken within one month of notification of the result of the original EPA, otherwise the entire EPA must be retaken. The re-sit/re-take will be graded pass/merit/distinction and combined with the grades for the other 2 assessment methods to determine the EPA grade. If an apprentice fails the re-sit/re-take they will be required to re-take the EPA in full after a period of further learning.

Apprentices who fail more than one of the EPA methods or who have re-take the EPA in full due to conditions described above will be required to re-take the entire EPA after a period of further learning and the maximum grade awarded will be 'pass', unless the EPAO establishes that the reason for the original fail was for reasons beyond the apprentice's control.

In all cases the apprentice's employer will need to agree that a re-sit or re-take is an appropriate course of action.

End-point Assessment - Grading

Each assessment method will be individually graded – fail, pass, merit, distinction. A fail in one or more of the assessment methods will result in a fail in the EPA.

Points will be awarded for each grade as follows:

Grade	Fail	Pass	Merit	Distinction
Points awarded	0	1	2	3

The points achieved for each method will be multiplied in line with the weighting of the assessment method in terms of its contribution to the EPA/apprenticeship grade, as follows.

	Multiple Choice Examination	Project Report, Presentation & Questioning	Professional Discussion, underpinned by log
Weighting	10%	60%	30%
Pass	10	60	30
Merit	20	120	60
Distinction	30	180	90

Accordingly, the minimum score attainable with 'pass' in all three methods = 100

The maximum score attainable with 'distinction' in all three methods = 300

Boundaries for overall pass, merit or distinction are set as follows, with 'merit' being set at 50-79% of the range and distinction being set at 80% or greater of the range.

	Pass	Merit	Distinction
Lower Boundary	100	200	260
Upper Boundary	199	259	300

Each potential combination of grades for each individual method may then be tabulated to show the overall grade to be awarded as shown in annex 2.

End-point Assessment - Summary of Roles and Responsibilities

Employer	<ul style="list-style-type: none"> Selects EPAO (may be advised by training provider). Confirms all EPA gateway requirements have been met, signs off to this effect and triggers EPA to the EPAO. Confirms arrangements with EPAO for the EPA (who, when, where). Ensures apprentice is aware of the EPA, is prepared and ready, and ensures attendance. Selects appropriate employee (supervisor or above) to attend the presentation & questioning and professional discussion to ensure accuracy and veracity of the apprentice's presentation and statements.
Training Provider	<ul style="list-style-type: none"> May assist employer to select EPAO for EPA.

	<ul style="list-style-type: none"> • May assist employer to confirm that all EPA gateway requirements are completed prior to EPA (e.g. through demonstrating to the employer results of any on-programme testing). • May assist employer by making arrangements with an EPAO for the practical aspects of the EPA (who, when, where). • Prepares apprentice for EPA during the on-programme phase.
EPAO	<ul style="list-style-type: none"> • Develop and provide all required material and resources required for the EPA (i.e. Multiple choice examination question bank, multiple choice examination drawn from the question bank, multiple choice examination Instruction script, presentation & questioning guide, assessment recording documentation). • On receipt of 'trigger' from employer and/or training provider, contact the employer and arrange dates, times and locations for the required EPA. • Ensure all required material is present at the EPA venue. • Provide appropriate and qualified staff to enable completion of all aspects of the EPA. • Confirm result of EPA to apprentice and employer. • Arrange for certification. • Maintain robust internal quality assurance procedures and moderation. • Support as requested the activities of the nominated external quality assurance body.

End Point Assessment Organisations

Employers must choose an EPAO approved to deliver the EPA for this apprenticeship from the Education & Skills Funding Agency's Register of End Point Assessment Organisations (RoEPAO).

EPAOs must appoint independent assessors (IA) to mark the project report and conduct the presentation and interview. The EPAO must approve and appoint individual assessors who meet the following requirements:

- Be independent of the apprentice, their employer and training provider(s)
- Be qualified at level 5 or above in an improvement discipline (Lean, Six Sigma, etc.) and have 2years' recent (i.e. last 5 years) experience working in improvement, or be approved by the

EPAO as meeting this requirement through demonstrable knowledge and experience and currently working in the improvement sector

- Have attended all of the training for the delivery elements of this standard, or attended an induction with a recognised provider which details the delivery elements prior to carrying out any EPA activities in order to be familiar with the learner journey and KSB of the standard
- Further, prior to carrying out their EPA assessment of an apprentice, any 'new' IA must:-
 - o Have observed 1 assessment carried out by a current IA
 - o Have co-assessed 2 assessments with a current IA

IAs must attend a minimum of TWO standardisation meetings per year in order to be able to continue to assess against this standard.

EPAOs must appoint invigilators/markers to invigilate and mark the multiple choice examination. There are no specific qualification/experience requirements for these individuals however, they must be trained in invigilation/marketing practices. Invigilators/markers must be independent of the apprentice, employer and training provider.

Internal Quality Assurance

Internal quality assurance refers to the requirements that EPAOs must have in place to ensure consistent (reliable) and accurate (valid) assessment decisions. EPAOs for this standard must undertake the following:-

- Appoint invigilators, markers and independent assessors that meet the requirements as detailed above in this plan
- Produce assessment tools and supporting materials for the EPA that follow best assessment practice
- Provide training for independent assessors in terms of good assessment practice, operating the assessment tools and grading
- Provide training for invigilators/markers in invigilation/marketing practice
- Have quality assurance systems and procedures that support fair, reliable and consistent assessment across organisation and over time
- Operate regular standardisation events that enable assessors to attend a minimum of 2 events per year
- Operate moderation of assessment activity and decisions, through examination of documentation and observation of activity, with a minimum of 10% of each independent assessors' assessments moderated every 6 months. Individuals completing moderation must to trained in quality assurance.

External Quality Assurance

External quality assurance arrangements will ensure that EPAOs delivering EPA for this apprenticeship standard operate consistently and in line with this plan.

External quality assurance for this apprenticeship standard will be undertaken by a professional body - the Chartered Quality Institute (CQI). The CQI is a not-for-profit organisation whose Royal Charter (para 4) states that *'The income and property of the Institute shall be applied solely towards the promotion of the objects as set forth in this Our Charter as amended or added to in the manner hereinafter provided and shall not be paid or transferred directly or indirectly by way of dividend, bonus or otherwise howsoever by way of profit to its members, or to any member of the Board provided that nothing herein contained shall prevent the payment in good faith by the Institute.'*

Implementation

Affordability: It is anticipated that the EPA will not represent more than 20% of the apprenticeship funding band, based on analysis of quotes received. It is the responsibility of the employer to negotiate a 'best price' through negotiation, including potential reductions where multiple candidates require EPA. Flexibility in the scheduling of assessments and the ability to use technology should enable EPAOs to minimise costs and deliver the EPA in the volumes required. The use of a work-based project to underpin the EPA that delivers business benefit should provide value to the employer.

Volumes: It is anticipated that there will be initially 300 starts per year on this apprenticeship but it is expected that this number will grow substantially within the first three years of delivery, with a minimum number of 500 starts by this point.

It is anticipated that organisations will be ready for delivery of the EPA by June 2018.

Annex 1. Pass, Merit and Distinction criteria and Matrix for overall grading

Project Report, presentation and questioning		
Pass Criteria	Merit Criteria	Distinction Criteria
<p>Apprentices must demonstrate all the following criteria</p> <p>1. Prepare, submit and present a project report to agreed timescales that details one improvement project. The project must:</p> <ul style="list-style-type: none"> - Show business benefit to the apprentice's employer (S22) - Follow the steps of a recognised Problem Solving methodology (e.g. PPS, DMAIC, 8D) with a clear flow from one step to another and supported by the application/interpretation of appropriate Lean, Six Sigma, Project and Change Management tools (S1, S4, S5, S6, S7, S8, S9, S10, S11, S19, S22) - Demonstrate data-backed decision making to support definition, measurement, analysis and improvement (S12, S13, S14, S15, S16, S17, S18, S20) <p>2. Present the project using a concise, visual format and include:</p> <ul style="list-style-type: none"> - Explanation of how they chose and scoped the project (S7) - How they used each tool (S6) - How they led a crossfunctional team during the project (K2, K4) <p>3. How they coached colleagues in the application of improvement tools (S3)</p>	<p>In addition to satisfying all criteria for a Pass:</p> <p>1. Clearly explains how the outputs of each tool are used to inform the next step (S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S22)</p> <p>2. Identifies and takes the opportunity to share and/or replicate the improvements made to one other area / system where there are differences in the <u>solutions/controls</u> required to deliver successful outcomes (B1)</p>	<p>In addition to satisfying all criteria for a Pass and Merit:</p> <p>1. Identifies and takes the opportunity to share and/or replicate the improvements made to one other area / system where there are differences in <u>baseline metrics</u> (B1)</p> <p>2. Seeks opportunities to apply Lean, Six Sigma, Project and Change Management tools in daily work (B4)</p>

Project Report, presentation and questioning – Fail Criteria

The apprentice will be deemed as a 'fail' for the project report element if the criteria for 'Pass' grade are not met, specifically the apprentice will fail should they meet any one or more of the criteria below:-

- Not submit their project report to the EPAO within one month following the gateway
- Not provide a statement signed by their employer authenticating the project report and presentation and confirming business benefits associated with the improvement project
- Not demonstrate their role in setting-up and leading others in an improvement team (i.e. worked alone without communication and consultation throughout the project)
- Fail to address a substantive business problem/opportunity in the workplace
- Are unable to demonstrate that sustainable business benefits have been delivered into the business as a result of any project(s) carried out
- Not demonstrate that they have applied a recognised methodology (e.g. PPS, DMAIC, 8D)
- Not correctly applied and/or interpreted Lean, Six Sigma, Project and Change Management tools
- Fail to demonstrate data-backed decision making to support definition, measurement, analysis and improvement or equivalent phases of the recognised methodology being applied.
- Not present the project using a concise, visual format
- Not demonstrate holistically through the project report, presentation and questioning, their knowledge and skills as set out in Annex 3 and as detailed in the L4 standard

Professional Discussion underpinned by Log		
Pass Criteria	Merit Criteria	Distinction Criteria
<ol style="list-style-type: none"> Provide evidence of their behaviours as detailed in the L4 standard (B1, B2, B3, B4, B5) Clearly explain: <ul style="list-style-type: none"> Methods used for making decisions in the project team (K2) How they engaged and influenced others (S2) Their coaching skills as set out in the L4 standard (S3) Their approach to Project Management (S4) Their approach to Change Management (S5) Their approach, results and learning relating to developing skills in Experimentation and Optimisation as set out in the L4 standard (S18) Their use of benchmarking to inform target setting and improvement options (S21) Critically evaluates their improvement journey and identifies recommendations for improvement/change (e.g. "If I were to do this again I would...") (B4) 	<p>In addition to satisfying all criteria for a Pass:</p> <ol style="list-style-type: none"> Identifies opportunities for cross-functional improvement (B1) Supports delivery of business-wide improvement projects led by Improvement Experts (B4) 	<p>In addition to satisfying all criteria for a Pass and Merit:</p> <ol style="list-style-type: none"> Takes the opportunity to prepare and/or deliver training to upskill colleagues (B1) Seeks opportunities to involve others in building a Continuous Improvement culture (B4)
Professional Discussion underpinned by Log Fail Criteria		
<p>The apprentice will be deemed as a 'fail' for the professional discussion element if the criteria for 'Pass' grade are not met, specifically the apprentice will fail should they meet any one or more of the criteria below:-</p> <ul style="list-style-type: none"> Not submit their CPD log to the EPAO within one month following the gateway Not demonstrate holistically, their knowledge skills and behaviours as set out in Annex 3 and as detailed in the L4 standard Not explained how they involved others in decision making and how they influenced others Not clearly planned the management of the project and the management of change 		
Multiple Choice Examination (maximum obtainable = 40 marks)		
Pass Criteria	Merit Criteria	Distinction Criteria
25 to 29 marks	30 to 35 marks	36 marks or greater
Fail Criteria – Less than 25 marks.		

Annex 2. Grading matrix

Tabulated individual grades and overall award:-

Results for each assessment method			Corresponding score for each assessment method			Overall Score	Overall Grade to be awarded
Multiple Choice Examination	Project Report, Presentation & Questioning	Professional Discussion, underpinned by log	Multiple Choice Examination	Project Report, Presentation & Questioning	Professional Discussion, underpinned by log		
FAIL	ANY	ANY	0	ANY	ANY	N/A	Fail
ANY	FAIL	ANY	ANY	0	ANY	N/A	Fail
ANY	ANY	FAIL	ANY	ANY	0	N/A	Fail
PASS	PASS	PASS	10	60	30	100	PASS
PASS	PASS	MERIT	10	60	60	130	PASS
PASS	PASS	DISTINCTION	10	60	90	160	PASS
PASS	MERIT	PASS	10	120	30	160	PASS
PASS	MERIT	MERIT	10	120	60	190	PASS
PASS	MERIT	DISTINCTION	10	120	90	220	MERIT
PASS	DISTINCTION	PASS	10	180	30	220	MERIT
PASS	DISTINCTION	MERIT	10	180	60	250	MERIT
PASS	DISTINCTION	DISTINCTION	10	180	90	280	DISTINCTION
MERIT	PASS	PASS	20	60	30	110	PASS
MERIT	PASS	MERIT	20	60	60	140	PASS
MERIT	PASS	DISTINCTION	20	60	90	170	PASS
MERIT	MERIT	PASS	20	120	30	170	PASS
MERIT	MERIT	MERIT	20	120	60	200	MERIT
MERIT	MERIT	DISTINCTION	20	120	90	230	MERIT
MERIT	DISTINCTION	PASS	20	180	30	230	MERIT
MERIT	DISTINCTION	MERIT	20	180	60	260	DISTINCTION
MERIT	DISTINCTION	DISTINCTION	20	180	90	290	DISTINCTION

DISTINCTION	PASS	PASS	30	60	30	120	PASS
DISTINCTION	PASS	MERIT	30	60	60	150	PASS
DISTINCTION	PASS	DISTINCTION	30	60	90	180	PASS
DISTINCTION	MERIT	PASS	30	120	30	180	PASS
DISTINCTION	MERIT	MERIT	30	120	60	210	MERIT
DISTINCTION	MERIT	DISTINCTION	30	120	90	240	MERIT
DISTINCTION	DISTINCTION	PASS	30	180	30	240	MERIT
DISTINCTION	DISTINCTION	MERIT	30	180	60	270	DISTINCTION

DISTINCTION	DISTINCTION	DISTINCTION	30	180	90	300	DISTINCTION
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Annex 3. Knowledge, Skills and Behaviours to be assessed by each assessment method:-

Assessment method	Key
Multi Choice Examination	E
Project Report, Presentation & Questioning	R
Professional Discussion, underpinned by log	P

Knowledge statement	End Point Assessment Method
1. Compliance	E
2. Team formation and Leadership	R,P
3. Project management	E
4. Presentation and Reporting	R
5. Change Management	E
6. Principles and Methods	E
7. Project Selection and Scope	E
8. Problem definition	E
9. Process mapping and Analysis	E
10. Data Analysis	E
11. Measurement systems	E
12. Basic Statistics and measures	E
13. Data analysis – statistical methods	E

14. Process capability and Performance	E
15. Root cause analysis	E
16. Experimentation	E
17. Identification and prioritisation	E
Skills statements	Assessment method
1. Compliance	R
2. Communication	P
3. Coaching	R
4. Project management	R, P
5. Change management	R,P
6. Principles and Methods	R
7. Problem Selection and Scoping	R
8. Problem Definition	R
9. Voice of the Customer	R
10. Process Mapping and Analysis	R
11. Lean Tools	R
12. Measurement Systems	R
13. Data Acquisition for Analysis	R
14. Basic Statistics and Measures	R
15. Data Analysis – Statistical Methods	R
16. Process capability and performance	R
17. Root Cause Analysis	R
18. Experimentation and Optimisation	R,P
19. Identification & Prioritisation	R
20. Data Analysis – SPC	R
21. Benchmarking	P
22. Sustainability & Control	R

Behaviour statements	Assessment method
1. Drive for results	P
2. Team-working	P
3. Professionalism	P
4. Continuous Development	P
5. Safe Working	P

Cross map of EPA methods:-

Knowledge	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	K11	K12	K13	K14	K15	K16	K17
(E) Multiple Choice Examination																	
(R) Project Report, Presentation & Questioning																	
(P) Professional Discussion, underpinned by log																	

Skill	1	2	3	4	5	6	7	8	9	10	11
(E) Multiple Choice Examination											
(R) Project Report, Presentation & Questioning											
(P) Professional Discussion, underpinned by log											
	S1	S1	S1	S1	S1	S1	S1	S1	S2	S2	S2
(E) Multiple Choice Examination											
(R) Project Report, Presentation & Questioning											
(P) Professional Discussion, underpinned by log											

Behaviour	1 R	2 R	3 R	4 R	5 R
(E) Multiple Choice Examination					
(R) Project Report, Presentation & Questioning					
(P) Professional Discussion, underpinned by log					

Annex 4. Generic example project titles – for illustration only

Project Area	Key Metric
Accounts	Invoice processing time - days
Finance/Control	Cash flow - monthly overdraft limit/cost
HR/Training	Availability of required skill set - %
Logistics	Quality of product received from Tier 1
Purchasing	Spend on materials, services and utilities supplier - PPM -
Quality	Removal of value major non-conformances
Sales	Enquiry to order processing time - days
Resource/Equipment	Scrap material reduction - £
Product/Service Quality Productivity	Supplier Quality Performance - %
Design	Product Approval leadtime for export markets weeks