Key facts	
Title:	Advance Assessments Level 4 Improvement Technician End Point Assessment
Ofqual Qualification Number	610/1815/6
Applicable Apprenticeship Standard(s)	ST0193 Improvement Technician
RQF level:	3 (= 'A' Level / BTEC Nationals)
Qualification Objective	To enable learners to engage with a project team and make valuable contributions in the delivery of change across organisational functions and processes through the delivery of improvement projects. Projects are likely to be limited in scope by a budget set at the level of the apprentice's line manager and a duration of less than one year.
Entry requirements:	Individual employers will set their own entry requirements. Please note the Gateway requirements when making this determination.
Programme duration and programme training requirements:	Minimum training duration 12 months, typically 14 months. Minimum of 20% off-the-job training.
Gateway requirements:	Learners must have attained UK RQF Level 2 qualifications in mathematics and English before entry to Gateway.
	The End Point Assessment can only start once the employer is satisfied that the apprentice is consistently working at or above the level set out in the standard and provides a signed declaration* confirming this to Advance Assessments.
	The apprentice must have completed a log that references evidence* for each KSB. The log will typically include 13 to 15 discrete items of evidence. An evidence item may be mapped to more than one attainment criterion.
	The apprentice must also complete a project portfolio to evidence completion of an improvement project(s). Projects must clearly demonstrate delivery of a business improvement benefit; be completed in the employer's workplace; address substantive business problems; and follow each step of a recognised improvement methodology.

	The employer must submit a 'signed statement'* from an apprentice's line manager to confirm authenticity and business benefit of project(s) completed.
EPA duration, following Gateway	Maximum two months. Log and project portfolio must be submitted within one month of passing through gateway.
Link to IfATE Occupational map	Occupational progression map for Improvement technician (instituteforapprenticeships.org)
Grades available	Fail/Pass/Merit/Distinction
Assessment methods	Multiple Choice Examination (**MCE**). Project Report, Presentation and Questioning (**REP_Q&A**). Professional Discussion, underpinned by Log (**PROF_DISC**).
Link to IfATE apprenticeship specification	Improvement technician / Institute for Apprenticeships and Technical Education

*Blank forms to fulfil each of these requirements are included on the Advance Assessments EPA platform, available to registered apprentices and training providers.
Contact support@advanceassessments.co.uk to register your learners, gain access to the apprentice support materials and equip each learner with a personal upload area.

Definitions:

Gateway refers to the requirements that need to be met in order for an employer to put forward an apprentice for EPA. This ensures that all apprentices have completed the mandatory aspects of the occupational standard and any work that underpins specified assessment methods, and that employers believe an apprentice is occupationally competent at the point they enter Gateway.

KSB (Knowledge, Skills and Behaviours) The Knowledge, Skills and Behaviours required to be competent in the duties described in the occupational standard published by IfATE.

IfATE is the Institute for Apprenticeships and Technical Education is an employer led organisation that supports technical education and apprenticeships in the United Kingdom, through qualifications. It is funded by the Department for Education.

IfATE Occupational Map is the diagram that delineates occupations and the expected qualification achievements along occupational routes in the UK. It is available on the IfATE website.

UK RQF is the UK Regulated Qualifications Framework that defines the levels of different qualifications in the UK.

Assessment methods (3)

1. **Multiple Choice Examination (MCE)**
   The multiple-choice examination consists of 40 objective answer questions and is time-limited to 40 minutes. It is available on the Advance Assessments online platform. Each question presents the candidate with four options (a) – (d). There is one correct answer and three distractors in each question. Candidates may only select one answer.

   Each correct answer gives a score of one mark. All other responses, including non-completion, score zero marks. This gives a total possible score of 40.

   Candidates may access their training materials or reference books during the examination, but may not access any online materials.

   Multiple-choice examinations will be invigilated by Advance Assessments appointed invigilators. Invigilators will confirm the identity of the candidate before the examination starts.

2. **Project Report Presentation and Questioning**
   Apprentices are required to deliver a presentation to an Advance Assessments assessor in order to assess the apprentice's competence and excellence in the KSB requirements assigned to this assessment method.
   The presentation audience must include one employer representative. The employer must not amplify or clarify points made by the apprentice.

   The project report presentation will have a duration of 30-40 minutes and will be followed by 25-25 minutes of questioning from the assessor. This gives a maximum duration of 75 minutes.

3. **Professional discussion underpinned by Log**
   Apprentices are required to complete a professional discussion with an assessor in order to assess the apprentice's competence and excellence in the KSB requirements assigned to this assessment method.

   The professional discussion audience must include one employer representative. The employer must not amplify or clarify points made by the apprentice.

   The professional discussion will have a duration of 40-50 minutes.
   Typically, the assessor will ask 13 to 15 open questions in the assessment.

Assessment Criterion (KSB)	Attainment criteria. The learner is able to:			Assessment Method
	PASS	**MERIT**	**DISTINCTION**	
Knowledge statements				
K1. Compliance Graded by examination only	• Identify and interpret fundamental UK Health and Safety legislation for organisations • Identify and interpret UK legislation applicable to organisational quality and customer compliance			MCE
K2. Team formation and leadership Maximum grade attainable: Pass	**REP_Q&A** • Describe team roles and responsibilities in specific work cultures and contexts • Describe how they worked with others in a team during an improvement project **PROF_DISC** • Describe their role in a project team			REP_Q&A AND PROF_DISC
K3. Self-development Maximum grade attainable: Pass	• Identify different sources of information for self-development			PROF_DISC
K4. Project management Maximum grade attainable: Pass	• Describe the use of a project charter, Gantt Charts, reporting documentation, Red Amber Green (RAG) status, communication and			REP_Q&A

	implementation plans in project management			
K5. Change Management Graded by examination only	• Describe the roles of managers and leaders in change environment • Describe recognised influencing, reinforcement and coaching principles			MCE
K6. Principles and Methods Graded by examination only	• Describe six sigma principles as per ISO13053 (International Organisation for Standardisation) • Describe interim containment actions that may be taken in an improvement project • Describe lean principles			MCE
K7. Project Selection and Scope Graded by examination only	• Describe recognised methods to select and scope an improvement project			MCE
K8. Problem definition Graded by examination only	• Describe how exploratory data analysis may be conducted • Identify data collection planning techniques • Describe problem and goal statements in an improvement plan			MCE
K9. Process mapping and analysis Graded by examination only	• Describe Supplier Input Process Output Customer (SIPOC) diagrams • Describe process mapping techniques • Describe methods of value and waste analysis for a process			MCE

	• Determine performance metrics for a process • Identify discrete data in a process context			
K10. Data acquisition for analysis - basic tools Graded by examination only	• Describe data stratification • Recognise fundamental terms in data sampling theory • Describe types of data • Identify causes of variation • Describe tools used for data collection • Define the principles of measurement error			MCE
K11. Basic statistics and measures Graded by examination only	• Describe three measures of central tendency • Define variation and standard deviation • Describe the application of control charts in improvement activities			MCE
K12. Process capability and performance Graded by examination only	• Calculate and determine process capability to enable decision making			MCE
K13. Root cause analysis Graded by examination only	• Use histograms to describe datasets to support improvement projects			MCE
K.14 Experimentation Graded by examination only	• Describe active analysis and passive analysis • Describe one-factor analysis			MCE

	• Describe Deming's Plan Do Check Act cycle • Demonstrate the use of experiment data in decision making			
K15. Identification and prioritisation Graded by examination only	• Describe brainstorming processes • Describe methods for using selection criteria to prioritise actions			MCE
K16. Sustainability and control Graded by examination only	• Describe the use of data to monitor and control processes • Describe the use of data to maintain process sustainability			MCE
Skills statements				
S1. Compliance Maximum grade attainable: Pass	• Work in accordance with organisational management systems and statutory legislation			REP_Q&A
S2. Communication Maximum grade attainable: Pass	• Share improvement progress through appropriate reporting			PROF_DISC
S3. Project management Maximum grade attainable: Pass	• Plan, manage and implement improvement activities • Identify and support the management of risks • Develop the business case for improvement activity and implementation • Describe why a project was chosen			REP_Q&A OR PROF_DISC
S4. Change management	• Engage through communications			REP_Q&A AND PROF_DISC

Maximum grade attainable: Pass	• Reinforce the case for change through appropriate communications • Effectively coach peers			
S5. Principles and Methods Maximum grade attainable: Pass	• Use a structured method and appropriate improvement tools engaging with subject matter experts to deliver business benefits • Describe how they used different improvement tools			REP_Q&A
S6. Project Selection and Scoping Maximum grade attainable: Merit	• Identify and scope improvement projects and establish clear, measurable objectives	• Explain how outputs from the identification of opportunities and scope writing activities have been used to establish clear, measurable objectives in an improvement project		REP_Q&A
S7. Problem Definition Maximum grade attainable: Merit	• Develop a problem/opportunity statement supported by validated data	• Explain how the development of a problem or opportunity statement has been used to inform next steps, plans and actions in an improvement project		REP_Q&A

S8. Voice of the Customer Maximum grade attainable: Merit	• Apply techniques to identify customers, their requirements and translate these into metrics	• Explain how describing the voice of the customer has been used to inform the development of performance metrics	REP_Q&A
S9. Process Mapping and Analysis Maximum grade attainable: Merit	• Apply process mapping tools to visualise processes • Analyse process performance to establish key insights for performance improvement	• Explain how process maps and process performance analysis has contributed to performance improvement	REP_Q&A
S10. Lean Tools Maximum grade attainable: Merit	• Apply techniques such as identification and removal of 8 wastes, 5S (Sort, Set in order, Shine, Standardise, Sustain), standard work, kaizen, visual displays and controls, error proofing, preventative maintenance	• Explain how lean tools have contributed to the development of an improvement plan	REP_Q&A
S11. Data acquisition for analysis Maximum grade attainable: Merit	• Develop a data collection plan and validated measurement plan to understand performance • Collect data relevant an improvement project	• Explain how data acquisition enables the analysis of performance	REP_Q&A
S12. Basic statistics and measures Maximum grade attainable: Merit	• Establish patterns and trends in data over time using tally, pie, run/trend and Pareto charts	• Explain how data from a measurement systems analysis can be used to influence an improvement plan	REP_Q&A

S13. Data Analysis – Statistical Methods Maximum grade attainable: Merit	• Identify common and special cause variation	• Explain how analysis of common and special cause variation can contribute to an improvement plan		REP_Q&A
S14. Process capability and performance Maximum grade attainable: Merit	• Analyse product/process performance using good quality data	• Explain how analysis of process capability can be used to inform process improvement decisions		REP_Q&A
S15. Root cause analysis Maximum grade attainable: Merit	• Use cause and effect diagrams, techniques of 5 whys and graphical analysis to understand and verify root causes	• Explain how root cause analysis can inform the development of improvement plans		REP_Q&A
S16. Identification and prioritisation Maximum grade attainable: Merit	• Identify and prioritise improvement solutions	• Explain how the prioritisation of improvement solutions will lead to the most effective use of resources		REP_Q&A
S17. Benchmarking Maximum grade attainable: Pass	• Recognise the value of sharing best practice			REP_Q&A OR PROF_DISC
S18. Sustainability and control	• Show how a project has delivered a business benefit for their employer	• Explain how structured		REP_Q&A

Maximum grade attainable: Merit	• Create control and reaction plans with detection measures • Identify opportunities to leverage benefit to the business	improvement plans can deliver sustainable improvement across a business		
Behaviour statements				
B1. Drive for results Maximum grade attainable: Distinction	**PROF_DISC** • Demonstrate a clear commitment for identifying opportunities and delivering improvements • Pays attention to detail	**REP_Q&A** • Demonstrate that they have taken the opportunity to share and/or replicate the improvements made in one area/system to another where there are differences in the solutions/controls required to deliver successful outcomes **PROF_DISC** • Demonstrate that they have identified other opportunities for improvement in their area • Demonstrate that they have taken the opportunity to co-	**REP_Q&A** • Demonstrate that they have taken the opportunity to share and/or replicate the improvements made in one area/system to another where there are differences in baseline metrics **PROF_DISC** • Demonstrate that they have identified other opportunities for improvement • Demonstrate that they have taken the opportunity to co-deliver training to upskill colleagues	REP_Q&A AND PROF_DISC

		deliver training to upskill colleagues		
B2. Team-working Maximum grade attainable: Pass	**PROF_DISC** • Demonstrate that they have helped when asked • Demonstrate that they have worked effectively in a diverse team • Considered the impact of own actions on others • Motivate peers			PROF_DISC
B3. Professionalism Maximum grade attainable: Pass	**PROF_DISC** • Act in a moral, legal and socially appropriate manner			PROF_DISC
B4. Continuous Development Maximum grade attainable: Distinction	**PROF_DISC** • Show how they have proactively sought and acted on feedback • Reflect on performance and demonstrate a desire for learning • Critically evaluate their improvement journey and identify recommendations for improvement/change (e.g. "If I were to do this again I would…")	**PROF_DISC** • Demonstrate that they have used their own knowledge and skills to support colleagues in their application of improvement tools	**REP_Q&A** • Demonstrate that they have sought opportunities to apply Lean, Six Sigma, Project and Change Management tools in daily work **PROF_DISC** • Critically evaluate their improvement journey and identify recommendations for improvement/change (e.g. "If I were to do this again I would…")	REP_Q&A AND PROF_DISC

			• Uses own knowledge and skills to support colleagues in their application of improvement tools	
B5. Safe Working Maximum grade attainable: Pass	• Demonstrate how they have ensured the safety of self and others • Challenge safety issues			PROF_DISC

Overall grade calculation

Assessment methods make the following contributions to the overall grade:

Multiple Choice Examination	Project Report, Presentation and Questioning	Professional Discussion, underpinned by log
MCE	**REP_Q&A**	**PROF_DISC**
10%	60%	30%

Every method of assessment must achieve a PASS grade in order to pass the EPA overall.

Each criterion, in each grading category, must reach the required level to achieve an overall PASS / MERIT / DISTINCTION for an assessment method.

Grading for Multiple Choice Examination

A 40-question examination with 1 mark awarded for each question correctly answered.
Examination time-limited to 40 minutes. The examination is online and is auto-marked.
A score of less than 25 is graded as a FAIL.

Examination grading

Multiple Choice Examination (maximum obtainable = 40 marks)		
Pass Grade	Merit Grade	Distinction Grade
25 to 29 marks	30 to 35 marks	36 marks

Document Revision History

Following improvement identifications and review with colleagues, the Assessment Manager is responsible for revisions of this policy/procedure and completion of the table below, before issue of the amended policy/procedure.

Date (most recent first)	Revision(s)	Reason for revision(s)	New Version Number	Approved by (Initial)