

NPL Management Limited

Address: National Physical Laboratory, Hampton Road, Teddington, Middlesex, TW11 0LW

Unique reference number (URN): 2539256

Inspection report: 15 April 2026

Exceptional	
Strong standard	
Expected standard	
Needs attention	
Urgent improvement	

Safeguarding standards met

The safeguarding standards are met. This means that leaders and/or those responsible for governance and oversight fulfil their specific responsibilities and have established an open culture in which safeguarding is everyone's responsibility and concerns are actively identified, acted upon and managed. As a result, learners are made safer and feel safe.

How we evaluate safeguarding

When we inspect providers for safeguarding, they can have the following outcomes:

- **Met:** The provider has an open and positive culture of safeguarding.
- **Not met:** The provider has not created an open and positive culture of safeguarding. Not all legal requirements are met.

1. Inclusion, and leadership and governance

Expected standard



Needs attention



Expected standard

Inclusion

Expected standard 

Leaders and managers have a clear vision that all apprentices should feel that they belong and have a right to succeed. They put suitable processes in place to identify any additional needs as soon as apprentices begin their programme. For example, they make effective use of 'getting to know you' interviews and initial assessment to find out about potential barriers. Tutors use this information well to inform their teaching so that it meets the needs of all apprentices.

Tutors have had suitable training in how best to adapt their teaching to reduce barriers to learning. Apprentices with special educational needs and/or disabilities (SEND) and other barriers to learning typically benefit from clear instruction and personalised teaching and guidance. Tutors provide additional individual support to ensure that apprentices do not fall behind. Apprentices with SEND and other barriers generally thrive at NPL and in the workplace. They value the support that they receive from tutors and their employers as they quickly develop essential knowledge and technical skills.

Apprentices with barriers to learning typically make progress at the same fast rate as their peers and achieve as well. However, senior leaders do not proactively use progress and achievement evidence to make strategic decisions about inclusive practices.

Needs attention

Leadership and governance

Needs attention 

Since the previous inspection, there have been significant changes to the structure of the senior leadership and governance teams. Governors and senior leaders broadly understand which aspects of the provision are strengths and which need development. For example, they plan to strengthen the governing board with educational expertise. However, their plans lack precision and are at an early stage. They have not led to improvements at a swift enough pace.

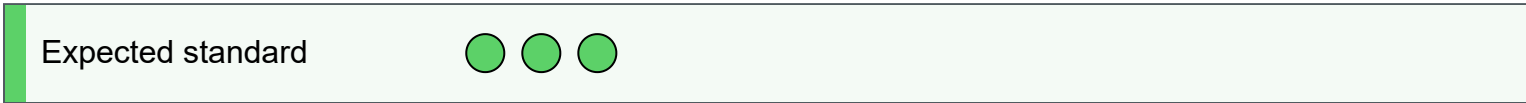
Senior leaders and governors have a high degree of expertise in metrology. They collaborate well with stakeholders to inform their strategic approach to train technicians, who are in high demand across a range of organisations. Leaders and governors invest well in

resources that enable tutors to teach in world-class training facilities, which greatly enhances apprentices' experience.

Tutors have access to professional body resources that keep them abreast of rapid changes in the world of metrology. They have had suitable training that helps them to develop their teaching practice. However, leaders do not monitor the quality of teaching well enough. This means that they do not target training accurately to support the needs of individual tutors.

Leaders and managers generally consider tutor workload well when they make plans. For example, they arrange tutors' caseloads geographically to minimise travel time to review meetings. However, in recent months when there have been disruptions to staffing, senior leaders and governors have been too slow to add teaching capacity. This has resulted in undue pressure on managers and tutors.

2. Apprenticeships



Expected standard

Achievement Expected standard

Most apprentices achieve their apprenticeship and a high proportion gain distinctions in their final assessments. Apprentices, including those with barriers to learning, make substantial progress from their starting points. They quickly develop new knowledge, technical skills and professional behaviours essential for their next steps. Apprentices gain promotion and more responsibility at work. A few move on to higher-level study.

Apprentices recall confidently and accurately their new technical knowledge. They apply their skills competently when completing practical tasks in workshops and at work. For example, apprentices measure and calibrate data with precision, which informs key reports, such as environmental impact assessments.

Apprentices develop their English, mathematical and digital skills well. For example, they confidently use correct technical vocabulary when discussing and presenting their work. Apprentices typically produce high-quality written and practical work. In a few cases, however, the quality of their written work is not at the expected standard.

Curriculum and teaching Expected standard

Leaders have designed a specialised curriculum in metrology that reflects employers' requirements well. They work closely with employers and other stakeholders to develop and implement a highly relevant curriculum.

Managers and tutors structure the curriculum logically. Tutors start by teaching foundation knowledge and skills in measurement, including mathematical concepts and uncertainty of measurement. The curriculum increases in technical complexity, building on the foundation knowledge, with coverage of dimensional metrology and other specialist subject areas. Apprentices acquire the basic skills and knowledge that they need before they attempt complex applications at work or in the training laboratories.

Tutors and laboratory trainers have extensive subject and industry expertise. They use appropriate teaching strategies to ensure that all apprentices, including those with barriers to learning, understand specialist theoretical and applied practical content. For example, tutors use demonstrations, discussion and presentations to encourage apprentices to evaluate the characteristics of different sensors. Apprentices experiment with a range of analogue and digital instruments to complete specific measurement tasks. They build a secure knowledge of different sensor technologies.

Tutors use assessment, such as tests, questioning and workplace observations effectively to check understanding and correct misconceptions. If apprentices misunderstand or fall behind, tutors provide helpful one-to-one support. While tutors' verbal and written feedback on work is typically helpful, comments on portfolio work occasionally lack detail. In a few cases, apprentices do not have a clear enough understanding of how to improve their work.

Participation and development

Expected standard 

Managers and tutors plan useful additional events and opportunities across the curriculum. For example, they arrange for guest speakers to give lectures on specialist and emerging topics in metrology, such as sustainability and artificial intelligence. Tutors encourage apprentices to enter competitions and build professional connections. Apprentices develop their wider knowledge and skills well.

Tutors incorporate meaningful discussions about topics beyond the subject into their lessons. Apprentices engage in healthy debates about a range of topics, such as the rule of law when exploring the importance of following health and safety regulations in the workplace.

Apprentices attend their training well and participate enthusiastically. They demonstrate professional behaviours that metrology employers value, such as attention to detail and problem-solving. Employers value apprentices for being committed, punctual and hardworking team players in their organisations.

Tutors prepare apprentices well for their next steps. Through interactions with their peers and visits to different departments during training sessions, apprentices develop a suitable understanding of different metrology sectors and job roles. Most apprentices have an appropriate awareness of career opportunities. However, leaders do not embed careers advice, information and guidance throughout the curriculum well enough. Apprentices have a limited understanding of career opportunities beyond their training and work settings.

What it's like to be a learner and/or an apprentice at this provider

Apprentices enjoy attending their blocks of training, where they come together to learn with their tutors and other apprentices in the training laboratories. Together with their kind and supportive staff, they build a community where they feel valued, included and encouraged to grow professionally and personally. Apprentices frequently share good practice with their peers from different organisations. They quickly develop their confidence, communication and problem-solving skills. While they say that balancing studies and work is demanding, apprentices are resilient and feel supported to succeed.

Apprentices are proud to learn at NPL because they contribute to meaningful, high-quality scientific work. They benefit from training in laboratories where they have access to world-class resources and innovative technologies. Apprentices are taught by industry professionals who are international experts in metrology. They find that their training closely links to real workplace practice. They acquire specialist knowledge and technical skills that they successfully implement at work.

Apprentices demonstrate a positive attitude to their studies and work. They are highly motivated, work hard and are punctual. A high proportion achieve their qualifications, many gaining distinction grades. A small number compete in and win subject-specific competitions. Staff provide opportunities for apprentices to meet NPL scientists from different departments and former apprentices. These events enhance apprentices' understanding of career pathways, workplace expectations and emerging topics, such as artificial intelligence and the future job market.

Apprentices with identified special educational needs and/or disabilities or other barriers generally thrive at NPL and in their workplaces. They appreciate the help that they receive from tutors and their employers and enjoy the same high-quality experiences as their peers.

Next steps

- Leaders and governors should strengthen the senior leadership team and governing board with expertise in educational monitoring and improvement work.
 - Leaders and governors should ensure that tutors benefit from professional development that is based on an accurate evaluation of the quality of their teaching and their individual development needs.
 - Leaders and governors should minimise any negative impact on managers' and staff's workload when there are changes to the provision.
 - Leaders should ensure that they have a strategic approach to inclusion, making use of evidence to inform their actions.
 - Leaders should strengthen the careers education and guidance programme so that it is provided to all apprentices throughout their apprenticeship.
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About this inspection

Following our renewed inspection framework, all inspections are now led by His Majesty's Inspectors (HMIs) or by Ofsted Inspectors (OIs) who have previously served as HMIs.

Inspectors spoke with governors, leaders, managers, tutors, laboratory trainers/technicians, apprentices and employers during the inspection.

The inspectors confirmed the following information about the provider:

NPL Management Limited is a public sector research establishment owned by the Department for Science, Innovation and Technology. It is the UK's national metrology institute (NMI). Its role is to develop and maintain the national primary measurement standards. NPL works with other NMIs to maintain the international system of measurement. It offers one apprenticeship standard, level 3 metrology technician.

During the inspection, there were 29 apprentices on the level 3 metrology technician apprenticeship. Eight apprentices were employed by NPL and the rest were employed in a range of organisations located around England. Teaching takes place face to face at NPL's laboratories in Teddington, in the London Borough of Richmond.

CEO: Peter Thompson

Lead inspector:

Claudia Harrison, His Majesty's Inspector

Team inspector:

Saher Nijabat, His Majesty's Inspector

Facts and figures used on inspection

The data was used by the inspector(s) during the inspection. More recent data may have been published since the inspection took place.

 This data is from 15 April 2026

Number of learners

Total learners

29

Apprenticeships

Percentage of learning aims successfully achieved

Apprenticeships overall achievement rate

Year	This provider	National average	Compared with national average
2024/25	100	65	Above
2023/24	S	60	S
2022/23	86	55	Above

'This provider' and 'national average' figures are taken from the publicly available DfE achievement rates. Where the DfE have suppressed the figures, usually due to small cohorts, this has been mirrored in the Report Card and will be shown by an 'S'.

Apprenticeships pass rate

Year	This provider	National average
2024/25	100	98
2023/24	S	98
2022/23	100	97

'This provider' and 'national average' figures are taken from the publicly available DfE achievement rates. Where the DfE have suppressed the figures, usually due to small cohorts, this has been mirrored in the Report Card and will be shown by an 'S'.

Our grades explained

Exceptional 

Practice is exceptional: of the highest standard nationally. Other providers can learn from it.

Strong standard 

The provider reaches a strong standard. Leaders are working above the standard expected of them.

Expected standard

The provider is fulfilling the expected standard of education and/or care. This means they are following the standard set out in statutory and non-statutory legislation and the professional standards expected of them.

Needs attention

The expected standards are not met but leaders are likely able to make the necessary improvements.

Urgent improvement

The provider needs to make urgent improvements to provide the expected standard of education and/or care.

The Office for Standards in Education, Children's Services and Skills (Ofsted) inspects services providing education and skills for children and learners of all ages, and inspects and regulates services that care for children and young people.

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