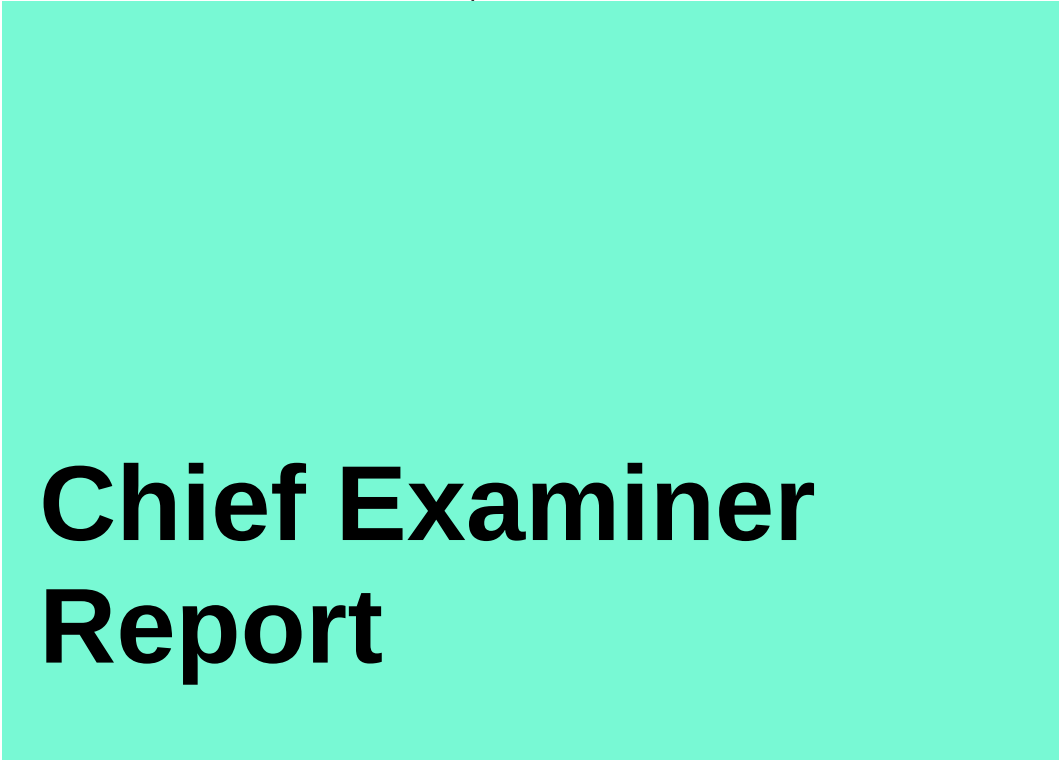




Chief Examiner Report

**T Level Technical Qualification
in Digital Support Services
QN: 603/6901/2**

**Summer 2025 – employer set project
(ESP) Network Cabling and Digital
Infrastructure**

Introduction

Summer 2025 – employer set project (ESP) Network Cabling and Digital Infrastructure (NC&DI)

Assessment dates: **12 May 2025 to 23 May 2025**

Paper number: **P002705**

This report contains information in relation to the externally assessed component provided by the chief examiner, with an emphasis on the standard of student work within this assessment.

The report is written for providers, with the aim of highlighting how students have performed generally, as well as any areas where further development or guidance may be required to support preparation for future opportunities.

Key points:

- grade boundaries
- standard of student work
- evidence creation
- responses to the external assessment tasks
- administering the external assessment

It is important to note that students should not sit this external assessment until they have received the relevant teaching of the qualification in relation to this component.

Grade boundaries

Raw mark grade boundaries for the series are:

	Overall
Max	76
A*	67
A	58
B	49
C	41
D	33
E	25

Grade boundaries are the lowest mark with which a grade is achieved.

For further detail on how raw marks are converted to uniform mark scale (UMS), and the aggregation of the core component, please refer to the Qualification Specification.

Administering the external assessment

The external assessment is invigilated and must be conducted in line with our [Regulations for the Conduct of External Assessment](#) document. Students may require additional pre-release material to complete the tasks. These must be provided to students in line with our regulations.

Students must be given the resources to carry out the tasks and these are highlighted within the [Qualification Specific Instructions for Delivery](#) (QSID) document.

Standard of student work

Students have continued to produce work to a standard comparable to previous assessment windows. Task 1 and Task 3 are often the more challenging tasks for students, as they demand higher-order thinking skills and an application of knowledge. However, there has been some improvement in how students approach Task 1, with a good step-by-step guide and testing plan being developed, which will be discussed in detail later.

In Task 2, many students capitalised on the email task and provided two contrasting emails that were well-written and achieved top band marks.

Unfortunately, there has been an increase in the number of submissions containing Artificial Intelligence (AI)-generated content, and this was more prevalent in Task 3. Although using AI effectively as a research tool is valid, students are prohibited from copying and pasting AI-generated content into their work and treating it as their own; this constitutes a form of academic malpractice. It was also observed that students using AI legitimately tended to generalise their points and not add their own opinions or discuss how they impact the issues presented within the scenario. This reduced the level of understanding evidenced by the student and thus their overall mark for the task.

Students have continued to improve their mathematical skills (AO4), with many students using spreadsheets to calculate subtotals and totals, thereby gaining two marks.

English skills have also improved among many students, who are now consistently gaining three to four marks.

Evidence creation

It was pleasing to see that the majority of the evidence submitted was in an appropriate format, for example, MP3 for audio and PDF for documentation. This maximised compatibility with the RM portal. However, there was an increase in the occurrences of some audio files, such as WAV, that were supplied in an unsuitable format, resulting in delays when assessing evidence. There was also a significant number of students uploading Word files, in addition to or instead of their PDF files. Only the PDF versions are required, with the correct naming notation used.

As mentioned in previous assessment windows, there were some issues with background noise in interview recordings, such as external conversations, vacuum cleaning and phone calls. Every effort should be made to minimise their impact. There were instances in which the tutor's voice was loud and clear, but the student's voice was barely audible.

Some students are still including hyperlinks in their documents. Due to the scanning process of student evidence, these links become non-functional. Therefore, adding links should be discouraged, although no penalty is given for doing so.

Responses to the external assessment tasks

Task 1: step-by-step guide

In this task, students are asked to identify and address a network configuration issue related to DHCP (Dynamic Host Configuration Protocol) on the Preston network. Students are required to review the three control documents to identify this problem. In this scenario, the primary issue is that both Server01 and the Preston Router have the DHCP service enabled simultaneously. This results in IP address conflicts and intermittent connectivity issues reported by staff. The majority of students recommended disabling DHCP on one of these devices (usually the router). Unfortunately, many students failed to explain the reason for doing so, for example to resolve the IP address conflict, as there is only one DHCP service, thus ensuring that each machine can obtain a unique IP address.

Some higher-level responses justified the recommendation by considering the context in which each DHCP service is most appropriate. For example, router-based DHCP service is typically better suited for small home or small office networks and offers limited customisation / control. A server-based DHCP configuration is more suitable for larger networks, offering greater control, scalability and integration with other network services, such as Domain Name System (DNS) and Active Directory (AD).

The scenario encourages students to evaluate the size of the DHCP scope. The router provides a scope of only 64 addresses, while the server allows for 100 addresses. This suggests that the current demand may be close to or exceeding this threshold. Although specific staff numbers are not given, higher-level responses proposed that a DHCP scope of 100 addresses is a minimum requirement and recommended a modest increase to accommodate future growth or continued monitoring to determine if the scope needs to be expanded over time.

In conclusion, many students identified the two DHCP services running simultaneously and recognised the need to disable one of them or adjust their scope ranges to prevent overlap. Justifications for doing this were generally weak and are an area for improvement.

Task 1: test plan document

Some students still struggled to understand the importance of creating a test plan and performing tests to verify that the faults reported by staff had been resolved. For instance, they did not recognise the significance of accessing remote files and folders or using commands like Ping and Tracert to connect to Server-PT, Server01 and the affected PCs such as PC-PT PC0 and PC-PT PC1. Instead, they offered additional steps that could be taken to resolve the issue.

Task 2: interview

In this task, most students continued to perform well, often scoring three to four marks or higher. They showed strong communication skills by asking clear, well-structured questions to gather information effectively.

Unfortunately, a minority of students still scored a band 1 mark because they stuck too rigidly to their pre-planned questions, making it difficult for them to engage in follow-up discussions or practice active listening.

Providers' approaches varied widely during the task. Some gave unsolicited answers or read directly from the materials provided. The most successful interviews happened when providers paraphrased the information, which made the interaction feel more natural. Instead of simply saying, 'I don't know' or 'I don't have that information', these providers used the material given in the Provider Guide to provide informed answers or make logical inferences.

When evaluating student performance, the examiner will consider several factors, including whether the student is leading the interview effectively, whether they are asking relevant and open-ended questions, and whether the student is adapting their questions based on previous answers. These criteria, along with others, help determine the final band score.

There were more occurrences of poor-quality sound recordings than in previous assessment windows. Providers should also be mindful of background noise during interviews, such as outside conversations, power tools or phone calls, to ensure a clear and uninterrupted recording. Every effort should be made to reduce these distractions for a smoother experience. In some instances, the student's voice was very low, almost inaudible, while the staff member's voice was loud and clear. Providers should test the setup before any interview takes place to ensure the microphone's location allows all parties to be recorded effectively.

Task 2: emails

There has been a marked improvement in the approach many students have taken to complete this task. The technical email written to update the line manager contained more technical terminology and detail than in previous assessment windows. Many students also demonstrated strong analytical thinking and problem-solving skills in this email. The second email was written to the company's facilities manager (non-technical), and many were able to contextualise the initial technical email into a non-technical format successfully.

Although some students lost marks because their non-technical email contained some technical jargon without any explanation.

Task 3: project proposal

In this task, students are presented with a scenario containing a range of networking problems. Two offices, one based in Newquay and the other based in Preston. Both offices have reported performance and connectivity issues. Students should identify that in the Newquay office, the single server is running multiple roles, including DHCP, DNS, AD, web hosting, file storage, CRM applications and virtual private network (VPN) access. This all-in-one configuration is the root cause of the performance bottlenecks. Students should also recognise that the VPN has only ten concurrent connections, which is inadequate for the 10 remote IT support staff and limits future expansion. Not many students addressed the issue of staff bringing in and connecting their own personal devices without restriction. This could be a source of malware or a vector for cyberattacks.

The Preston office is newer but has a minimal setup, including a server that hosts DHCP, DNS and VPN services, which limits integration with the Newquay office. Some good responses identified the lack of centralised user and mobile device management.

Most students recognised the lack of redundancy in both offices as a single server failure would incapacitate the entire network, and there was a need to improve the connection for remote users.

Students' evidence should comprehensively address various aspects, including current problems, proposed solutions, network hardware, software, services and data protection. During assessment, it was observed that many proposals lacked sufficient detail and justification, with few students achieving a score above band 3. While some students proposed potentially effective solutions, they often failed to adequately justify their choices or explain how the specified components would integrate.

When recommending a specific supplier, students should clearly explain their selection and, where possible, use the same supplier for multiple hardware and software components. This approach provides a single point of contact in the event of failure, aligning with industry standards.

Several students underestimated the level of detail required to achieve higher marks, submitting only one or two pages, which was insufficient for addressing the task's scope. Some students duplicated resources, such as recommending multiple costly servers in addition to a comprehensive cloud solution.

While hybrid networks are valid, it is essential to describe the purpose of each component carefully. To score higher, network diagrams should include all relevant elements – such as VPNs, servers, cloud resources and PCs – and be clearly labelled. Strong responses detailed cloud services, addressed security concerns and provided thorough descriptions of all necessary hardware and software, consistently linking these to the scenario's requirements throughout their evidence.

A common problem was the inclusion of hyperlinks in evidence that examiners could not access. Students should be discouraged from using hyperlinks and ensure that all necessary information is directly included within their submissions.

There was an increase in the number of students using AI tools to help them with this task. The use of AI in itself is not problematic, and when used effectively and with a high degree of transparency, it can yield good results. The problem arises when students take credit for AI-generated work, simply copying and pasting AI content into their reports without citing its source. Providers should ensure that students avoid misusing AI by ensuring they are well-versed in the contents of the 'Use of AI in Assessments' guidance provided by NCFE.

Task 3: mathematics skills

In this activity, students are expected to showcase their numeracy skills as part of their proposals.

Most students submitted a table that detailed the costs of cloud services, hardware and software. These tables listed quantities, indicated whether expenses were recurring or one-off, included subtotals and provided a final total. Employing basic arithmetic operations – such as addition, subtraction, multiplication or division – was often enough to secure full marks.

Few students extended their analysis by estimating costs for alternative approaches, such as comparing on-site solutions with cloud services. This approach is strongly encouraged, as it reflects a more thorough understanding of cost evaluation and strategic decision-making.

Task 4: testing method – audience testing (sample satisfaction survey)

Some students are still overlooking key elements outlined in the indicative content in their survey.

Electronic surveys are considered good practice and are expected to be used more frequently.

Strong responses featured well-structured and relevant questions, employing a variety of question types to collect qualitative and quantitative data. These questions were phrased in clear and concise language. Where rating scales were used, students clearly defined what each point on the scale represented.

Effective survey questions should address critical areas such as customer satisfaction, network performance and the user's understanding of the service or product. This ensures a comprehensive evaluation of the user experience and system effectiveness.

Task 4: post-project review

In this task, students must summarise the key issues identified in Task 3 and present their proposed solutions.

However, some students are still including details from Task 1, Task 2 and Task 4, which were unnecessary and wasted time that could have been spent refining their Task 3 summary.

Additionally, some students found evaluating their performance in this task challenging. They often relied on descriptive language rather than adopting an evaluative approach. On a positive note, more students were able to connect their proposed solutions to the initial problem and assess how effectively these solutions met the requirements. This demonstrates an improved ability to analyse and justify their decisions critically.

Task 2, Task 3 and Task 4: English skills

There has been an improvement in proofreading as more students are gaining three to four marks for their spelling, grammar, and punctuation in Task 2, Task 3 and Task 4.

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