HM Government

T-LEVELS

Chief Examiner Report

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

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

NCFE

Introduction

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

Assessment dates: **3 November 2025 to 14 November 2025**

Paper number: **P003021**

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

The standard of work students produced is consistent with previous assessment windows. Tasks 1 and 3, which demanded higher-order skills and the application of knowledge, proved more challenging for students, with Task 1 test plan documentation earning 39% and the Task 3 proposal earning 56% of available marks.

Many students demonstrated confidence in their interviews, achieving an average of 63% of available marks. Higher-achieving students demonstrated the ability to deviate from pre-planned questions to explore technical details in greater depth, thereby developing a comprehensive understanding of network infrastructure issues.

Students are continuing to improve their written communication skills, with good analytical thinking evidenced across project proposals and technical documentation. In Task 3, students demonstrated their ability to apply logical problem solving to network design challenges. However, costing justifications and detailed technical specifications were less well developed and remain areas for improvement.

Mathematics skills (AO4) showed strong performance, with students achieving 76% of available marks, demonstrating good numeracy when calculating network capacity and infrastructure costs. English skills continue to be consistently strong, with many students achieving three to four marks.

Evidence creation

Most students submitted well-structured evidence in appropriate formats. The interview audio recordings for Task 2 were, in most cases, of good quality with participants' voices easy to hear and understand. Unfortunately, some providers did not account for background noise, making some recordings more difficult to assess. In some instances, other conversations could be heard in the background. It is paramount that providers minimise distractions and refrain from making disparaging remarks to students once the interview has concluded.

In some instances, the microphone was placed very close to the interviewee, making it easy to hear their responses. Unfortunately this affected how easy it was to hear the students' questions.

Some students would have benefitted from more attention to completeness in their documentation. Test plans occasionally lacked structure, whilst project proposals sometimes omitted network topology diagrams or comprehensive justifications and costings.

There is no need for students to upload their task briefs or Word versions; correctly named PDFs will suffice, and any additional documentation is a waste of time and effort.

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, even though no penalty is imposed.

Responses to the external assessment tasks

Task 1: troubleshooting document

In this task, students investigated network connectivity issues at Brunswick Gaming's Scotland office, where laptops were receiving APIPA addresses and experiencing intermittent network access. The cohort averaged 2.95 out of 6 marks, approximately 49% of the available marks.

Many students correctly identified the root cause: DHCP scope exhaustion with only five addresses configured for 10 laptops requiring dynamic IP allocation. Higher-achieving students demonstrated a systematic troubleshooting methodology, linking the APIPA address (169.254.6.2) to a failed DHCP allocation and referencing Control Document C to confirm an insufficient scope configuration.

Stronger responses proposed comprehensive solutions, including expanding the DHCP scope to accommodate all laptops, verifying DHCP service status on the main server, and implementing proper verification procedures using ipconfig commands. These students demonstrated understanding that desktops with static IP addresses remained unaffected, correctly identifying this as evidence supporting the DHCP exhaustion diagnosis.

Some students struggled to connect the symptoms to the underlying cause, focusing on cable connectivity or switch configuration issues rather than addressing the DHCP limitation. Weaker responses failed to systematically reference the control documents or to propose complete resolution procedures, including verification testing.

This task proved challenging for students who lacked structured fault-finding frameworks. Greater distinction is needed in applying systematic diagnostic approaches that examine all available evidence before proposing solutions.

Task 1: test plan document

The task required students to create a comprehensive test plan documenting the systematic verification of proposed network solutions. The cohort averaged 6.21 out of 16 marks, representing approximately 39% of the available marks, indicating that this component proved particularly challenging.

Higher-achieving students produced professional test plans with a complete structure, including user details, test dates, computer specifications, proposed tests with detailed expected outcomes, space for recording actual results, and user acceptance sign-off sections. These responses demonstrated appropriate testing, including ipconfig verification, ping connectivity tests, and validation of network resource access.

Most students struggled with completeness and professional presentation. Common weaknesses included missing essential fields, insufficient detail in expected outcomes, inappropriate or irrelevant tests, and a lack of systematic organisation. Some students proposed tests without clearly articulating what constituted successful outcomes, whilst others omitted critical components such as DNS verification or gateway connectivity checks.

Some students would have benefitted from understanding that test plans must document the entire verification process systematically. Stronger responses demonstrated that expected outcomes should specify exact IP address ranges, subnet masks, gateway addresses, and the characteristics of successful ping responses. Care should be taken to ensure students develop skills in creating professional technical documentation with appropriate structure and completeness.

Centres are advised to provide exemplar test plans and practice opportunities for students to develop systematic documentation skills. Students should understand that professional test plans serve as both planning tools and verification records.

Task 2: interview

This task required students to conduct a recorded interview investigating network infrastructure requirements for Brunswick Gaming's expansion and Azure migration plans. The cohort achieved an average of 3.79 out of 6 marks, representing approximately 63% of the available marks, with the strongest performance in the troubleshooting and interview components.

Many students demonstrated confidence and good communication skills during their interviews. Higher-achieving students asked relevant questions about current network capacity, bandwidth requirements, growth projections, security considerations, and cloud migration timelines. These students appropriately deviated from prepared scripts to explore technical details based on responses, demonstrating active listening and adaptive questioning.

Most students identified key infrastructure issues, including insufficient network capacity for 35 users, a need for proper cable management and structured cabling systems, wireless access requirements, and considerations for cloud service connectivity. Stronger responses explored network segmentation needs, backup and disaster recovery requirements, and scalability planning for anticipated growth.

This proved challenging for students who adhered too rigidly to prepared questions without responding to the information provided. Some students missed opportunities to gather critical technical specifications such as current bandwidth usage, specific application requirements, or detailed timeline constraints.

Task 2: emails

Students were required to write two emails: a technical email to their line manager and a non-technical email to the operations manager. The cohort achieved an average of 3.58 out of 6 marks, with this representing approximately 60% of the available marks.

Many students successfully demonstrated the ability to adjust their communication style for different audiences. Higher-achieving students produced technical emails with appropriate terminology, including VLAN configuration, bandwidth calculations, structured cabling specifications, and network topology considerations. Their non-technical emails effectively explained business benefits such as improved reliability, better performance, and support for growth without overwhelming technical detail.

Most students recognised key points from their interviews, including requirements for infrastructure upgrades, capacity planning needs, and migration considerations. Stronger responses synthesised interview findings into coherent recommendations with a clear rationale for proposed solutions.

Some students struggled to maintain a clear distinction between technical and non-technical communication. Common weaknesses included excessive jargon in emails to operations managers or insufficient technical depth in communications to line managers. Greater analytical thinking is required when synthesising interview findings into comprehensive infrastructure assessments.

This task discriminated very effectively between students, with those achieving higher marks demonstrating stronger communication skills and technical understanding than those who struggled with audience-appropriate language.

Task 3: proposal

This task required students to develop a comprehensive network infrastructure project proposal addressing structured cabling, network capacity, wireless connectivity, security, and Azure cloud integration. The cohort achieved an average of 13.24 out of 24 marks, or approximately 55% of the available marks.

Many students demonstrated a good understanding of enterprise networking requirements. Higher-achieving students proposed appropriate infrastructure, including Cat6a or Cat7 structured cabling systems, managed switches with sufficient port density, enterprise wireless access points, and proper network segmentation using VLANs. These responses included detailed network topology diagrams showing the logical and physical layouts, along with correct IP addressing schemes.

Most students recognised the need to upgrade network capacity to support 35 users and future growth. Stronger responses calculated bandwidth requirements based on user numbers and application needs, proposed appropriate internet connectivity speeds, and addressed redundancy considerations. These students compared on-premises versus cloud-based infrastructure options, discussing the implications of Azure migrations for network design.

Wireless network design proved challenging for some students. Whilst many proposed access points, fewer students addressed coverage planning, channel allocation, security protocols (WPA3), or guest network segregation. Some students would have benefitted from more thorough consideration of enterprise wireless requirements versus domestic solutions.

Costing justifications varied considerably in quality. Higher-achieving students researched actual prices from appropriate vendors, calculated total costs including installation and ongoing maintenance, and presented a whole-life cost analysis over 5 to 8 years with clear cost-benefit justification. Weaker responses provided incomplete costings, used inappropriate vendors, or failed to justify investment through business value demonstration.

Network security considerations were addressed inconsistently. Stronger responses included firewall implementation, network segmentation for security, access control measures, and secure remote access solutions. Some students overlooked critical security elements or failed to integrate security throughout their network design.

This task effectively discriminated between students who could synthesise complex technical requirements into comprehensive professional proposals versus those who addressed only partial requirements or lacked technical depth.

Task 3: mathematics skills

This task required students to demonstrate numeracy skills by performing calculations on infrastructure and service costs. The cohort achieved an average of 1.53 out of 2 marks, representing approximately 76% of the available marks and the strongest performance across all assessment components.

Approximately three-quarters of students achieved high marks through accurate calculations, appropriate units, and the correct application of mathematical operations. Many students successfully calculated cost totals, with some including VAT.

Most students demonstrated competent numeracy when the mathematical context was clearly defined. Higher-achieving students clearly showed their working out, used appropriate units consistently, and verified their calculations for accuracy.

Some students made simple arithmetic errors or omitted units, losing marks even though they demonstrated sound mathematical reasoning. Students should continue to develop habits of showing all working, double-checking calculations, and clearly labelling numerical results with appropriate units.

Task 4: testing method – audience testing

Students were required to create a satisfaction survey to measure user responses to the implemented network improvements. The cohort averaged approximately 3.08 out of 6 marks on this task, achieving approximately 51% of the available marks.

Students demonstrated a clear understanding of basic survey design principles. These included questions assessing ease of use, network performance, confidence, and access to resources. Higher-achieving students included appropriate question types, mixing Likert scales, yes/no responses, and open-ended qualitative feedback opportunities. Weaker responses did not.

Surveys are meant to include systematic coverage of all aspects: user satisfaction, system performance, resource accessibility, remote connectivity, training adequacy and understanding the user. Stronger responses achieved this.

Task 4: post-project review

This task required students to provide a project summary, including infrastructure challenges identified, solutions implemented, and a critical self-evaluation. The cohort achieved an average of 3.08 out of 6 marks, or approximately 51% of the available marks.

Many students provided reasonable project overviews identifying key challenges such as insufficient network capacity, lack of structured cabling, wireless connectivity requirements, and cloud migration considerations. Most students summarised their proposed infrastructure upgrades, including cabling systems, switches, wireless access points, and network architecture improvements.

Self-evaluation depth varied considerably. Higher-achieving students demonstrated thorough reflective analysis using established frameworks, such as Gibbs' reflective cycle, and critically evaluated both strengths and weaknesses in their approach. These responses identified specific areas for improvement, articulated lessons learned about network design processes, and demonstrated genuine insight into their professional development.

Some students provided superficial reflection without critical analysis of decision making or project outcomes. Weaker responses lacked structure, failed to evaluate how well solutions addressed original requirements, or provided generic statements without specific examples from their work.

This task proved to be the most effective discriminator in the entire assessment, with excellent separation between students who could synthesise learning and evaluate performance critically versus those who struggled with reflective practice. Students should develop skills in structured professional reflection to enhance the quality of their evaluative writing.

Task 2, 3 and 4: English skills

English skills were assessed holistically across written work in Tasks 2, 3, and 4. The cohort achieved an average of 2.79 out of 4 marks, with approximately 70% of available marks, indicating consistently strong literacy performance.
Most students demonstrated good spelling, punctuation, and grammar accuracy throughout their submissions. The majority achieved Band 3 or Band 4 marks, demonstrating mostly accurate or fully accurate technical communication, with an appropriate professional tone and coherent organisation. Higher-achieving students maintained professional standards across all written outputs, including emails, technical proposals, and reflective summaries. These students adjusted language appropriately for different audiences whilst maintaining clarity and accuracy throughout.

Document information

NCFE is authorised by the Department for Education to develop and deliver this T Level Technical Qualification.