

Chief examiner's report

T Level Technical Qualification in Digital Business Services (Level 3) (603/6902/4)

Summer 2023 – Employer set project (Data Technician)



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Assessment Dates: 09–19 May 2023

Paper number: P001871

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 which 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	80
A *	71
Α	62
В	53
С	45
D	37
Е	29

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

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

Standard of student work

This is the third series that students have been able to undertake the employer set project (ESP) for this qualification. The ESP is 1 of 2 core skills assessments that students undertake in the first year of their T-Level qualification, alongside the core exams. The majority of students who undertook the ESP this series will be students in the first year of their qualification. There will also have been some students in their second year of their qualification who have chosen to undertake the ESP again to improve their performance.

The ESP consists of a pre-release task given to students approximately a month prior to the assessment which is then used to provide evidence for 5 tasks. These tasks are set over a 2-week timetable assessment period.

In the first week of assessment, students undertake tasks 1, 2a and 2b, with tasks 3 and 4 being completed in the second week.

The scenario for this assessment was for LuxClink, a business which imports premium soft drinks to the UK. LuxClink currently operate a wholesale business selling to a range of business customers such as restaurants and cafes; however, they are looking to expand their business to sell products directly to consumers via their website. In addition to the project brief, students were also provided with a range of LuxClink internal data and external secondary statistics.

There was performance across the grade range within the assessment for this series. The quality of student work varied, both across and within providers. As with the previous series, it has been noted that in some tasks there has been a continued improvement in the evidence that students are presenting with their ESP. There is also evidence of improved English and digital skills amongst students this series.

At times there were some excellent quality responses to tasks, demonstrating that students have a developed knowledge of digital business and their skills are at a level that supports them to deliver evidence, which would be of the quality expected of an experienced professional in the workplace. These students demonstrated that they had a very good understanding of the requirements of the project that LuxClink were asking them to engage with and this was evident in the contextualised answers provided throughout their ESP evidence and that any recommendations they were making were relevant and within the constraints of the project.

Where students performed to a good or reasonable standard, they demonstrated that they had a range of underpinning knowledge of the digital business sector. These students were able to demonstrate a range of soft skills within their evidence which were on the most part of a good standard and this supported the students to provide reasonable/good quality evidence. These students were able to provide some good, contextualised answers within their evidence, but this was often not as developed as students who were achieving higher mark bands. The differentiator between good performing students and reasonably performing students tended to be how contextualised the evidence they were producing is. Good students were able to consider the change from business to business (B2B) to business to consumer (B2C) and how this new market might impact on LuxClink. Reasonably performing students could provide some contextualised answers but these tended to be more generic to any type of business rather than the specifics of LuxClink's project.

Where students provided limited quality evidence this was due to a range of factors. These students were able to demonstrate a reasonable understanding of the digital business sector but there were some misconceptions or omissions in their work. These students were able to demonstrate a range of soft skills throughout their ESP; however, these were often not fully developed. An example of an area this was demonstrated was their English skills. Many of these students did not utilise the editor tools available within the software they used to check their spelling and grammar for example. Students should be encouraged to utilise all the tools available in their chosen software packages to support the generation of their evidence.

Once again there is evidence seen this series that providers and students are accessing the materials being made available by NCFE to prepare for the employer set project (ESP). Utilising the Chief Examiner Report, Grade Standard Exemplification Materials (GSEMs), ESP how to videos and past ESP materials is having a beneficial impact on student achievement.

Once again, this series the presentations being produced for task 3 were of a professional standard and the students have demonstrated a wide range of digital skills. There are no set skills that need to be demonstrated within task 3 but some of the skills seen included the use of slide transitions, use of charts and graphs, use of images and themes to provide a consistent style and the use of speakers notes or slide handouts.

Another task which performed well this series was task 1, the project management tool. This was the second series where students have been asked to use provided data to create a Gantt chart. This series there were some excellent Gantt chart produced by students. There has been improvement across all grades for the Gantt charts with all students able to produce a recognisable Gantt chart this series. Although some students did miss that there were predecessor tasks and so started all tasks in week 1 rather than across the project timeline.

One area where students still need to improve their performance is making use of the project brief. This series, the use context within students' work tended to be on a par, or less well utilised, than the Autumn 2022 series. The purpose of the ESP is that it takes the form of a task which students could be expected to be asked to undertake by their employer. Students should be ensuring that every element of the work they are completing for each task is directly linked to the project brief, the aims of the business and linked to the specific project the business is asking them to advise on. Students should be encouraged to include context in every part of their evidence.

Task 2b continued to be the most challenging task of the ESP once again this series. Many students were not able to identify that the account number was the primary key within the data set provided which meant that they struggled to produce an accurate entity relationship diagram (ERD). Limited marks were given to students who produced an ERD even where they misidentified the primary key as they had demonstrated a reasonable understanding of how the ERD works; but students need to ensure that they are carefully checking the data set before completing the task.

The analysis of the data was also performed less well this series. The project brief for task 2b action 2 did not specifically ask students to create charts/graphs/dashboards this series so many students opted not to produce these. This made it more difficult for some students to demonstrate their selection and analysis of the data. Some students were able to select appropriate data from the datasets they were provided with and to use tools such as pivot tables and filtering on this. It would be worth providers signposting to students that even where task 2b action 2 does not explicitly mention creating charts/graphs/dashboards that they should include any that they do produce for their presentations within their spreadsheet for action 2 as they will be credited for this. There were a number of students that included charts and graphs within their presentations but did not include these within action 2, which meant they could not be credited within the data analysis.

There were still some instances of missing student evidence this series, although this was significantly lower than in previous series. There were occasional instances where missing evidence was requested from providers, but the student had not saved this. Students should be encouraged to save all evidence for their ESP in two formats. The original format they produce the work in such as .xlsx, .docx,.pptx, .odt, .ods and .odp as well as then saving it in the requested .pdf format. The reason students should be encouraged to save lost some of their evidence, their speakers notes for task 3, or their formatting has significantly changed and this has affected the presentation of their work such as was seen this series for a number of students for task 1, the Gantt chart. By ensuring that they save their work in both formats, this will allow any issues to either be addressed by the student before submission, or if it is requested by the examiner.

The ESP is designed to enable students to use the knowledge and data they have collected or generated in each task to support their decision making for subsequent tasks. Student evidence this series suggests that many students are still using tasks in isolation rather than using the evidence to provide greater depth. Students should be encouraged to refer to evidence in previous within subsequent tasks, either implicitly by reusing/restating information or explicitly by referring to the task by name. There is a small improvement in students utilising the information from previous tasks in their ESP but overall, most students are still completing many tasks in isolation.

On the whole performance this series has shown improvement from the previous series and that students are becoming more confident in their knowledge and skills in digital business; however, there are still areas for further development.

Evidence creation

Providers and students should be aware that there is no set format in which students are required to produce their evidence beyond the allowed file formats. Where examples of tools such as Gantt charts or ERD's are provided in mark schemes, GSEMSs, etc. this is just one example of how evidence could be presented. This is not a definitive statement to say that is how students are expected to produce their evidence. Students are free to produce their evidence using any appropriate software and any suitable format as long as it meets the evidence requirements provided in the provider guide, student guide and project tasks.

There was a range of evidence provided by students within this assessment. This series saw an increase in students only uploading the pdf versions of their work and a decrease in the original formats of their work being uploaded. This is in part as the instructions to students did not request both be uploaded but students should be ensuring that they are saving both within their ESP files when completing their assessment in case they are needed later.

For task 1, students presented their Gantt charts using a range of software such as project, Word and spreadsheet software and then presented this in pdf format.

Students were provided with a template for their email, and this has been submitted as a word document or a pdf.

For task 2(a), students were provided with a template for their email, and this has been submitted as a word document or a pdf.

For task 2(b) action 1, students have presented their cleansed data and their dashboards in spreadsheet software or in a word documents.

For action 2, students used a range of tools to display their data such as charts, pivot tables, graphs, and lists. Students have presented their entity relationship diagrams (ERD) in a range of formats such as in a spreadsheet, a document and pdf.

For action 3, students have presented their email in the form of a document.

For task 3, students created their presentations in PowerPoint or exported their presentation to a pdf.

For task 4, students were provided with a template for their reflection of their project which most used, and this has been submitted as a word document or pdf.

Providers are also ensuring that, within student evidence folders, all relevant documentation such as research logs and student declarations are included. There was a decrease this year in the inclusion of the research logs so for future series students should be reminded to include these in their evidence for upload.

Responses to the external assessment tasks

Task 1: Project Management Tool

This series, students were asked to create a Gantt chart for their project management tool. Students were provided with a table of data including some predecessor tasks and to present this in Gantt chart format.

Students largely presented their Gantt charts in excel format but there were also a number of other formats used such as specialist project management software and, in a table, generated in word. There is no specific approach or software that students need to use when producing their project management tools, as long as it includes all the relevant information and it would be easily recognisable as the project management tool to anyone viewing it.

There was an issue that arose when students exported their Gantt charts to .pdf format as the Gantt chart was then spread across multiple pages, which made it difficult to get an overview of their plan. Students were awarded for the evidence produced but for future series it would be beneficial for students to consider the presentation of their evidence when saving it. It would be encouraged for students to upload their original and .pdf versions of their work where there are presentation differences in their evidence.

Most students presented a well-planned Gantt chart. The timescales and headings were present and well presented.

Where students performed well in this task, their Gantt charts were well structured. They had taken into account the predecessor tasks and had identified these in the chart, either as a column, or using the appropriate chart tools. These students had ensured that the tasks were planned to meet the timescales given by the project brief and some had even included contingencies for the tasks.

Where students had not performed as well, their Gantt charts had some errors in the basic layout such as not including the predecessor tasks or exceeding the total planned project time. Students should ensure that they are fully reading the project requirements and timescales when planning their charts. Some of these students that performed less well started all the project tasks in week 1 as they did not take into account the predecessor tasks. Students need to ensure that they are fully reading the project scenario when completing the tasks.

Some students that performed less well did include contingencies and broke the main tasks down into sub tasks: however, they did not then stick to the overall project timescales, and this resulted in charts that would not meet the requirements of the projects and its timescales.

A very small number of students opted to change the order of the tasks in their Gantt chart. Students should ensure that they are ensuring that any changes they make to the project plan enhance the project plan.

To improve performance, students should ensure that they are confident they know the different project management tools that could be assessed for this task. Students should ensure that they refer back to the project brief throughout the task to ensure that they are fully understanding the specific requirements of the project brief and are not producing a generic project management tool.

Task 1: Email to Line Manager

This series students were asked to create an email to their line manager to discuss the project plans and timescales as well as the impact on the stakeholders and any issues that could arise from the project.

In common with previous series, many students did not complete all elements of the tasks.

Students that performed well on this task were able to explain why the project plan would enable the business to complete the elements of the planned project on time and they were able to link this to well to

the context of the business. These students also were able to identify potential elements of the plan which could result in delays to the project or could raise issues with stakeholders and these students were able to offer how this could be mitigated.

Students that performed less well tended to simply explain why the project was taking this approach and did not then expand on why this order of the tasks was required. Students who performed less well also tended not to have linked their justifications to the context of the business and many of their judgements were generic in nature.

Students who performed less well also tended to not consider the wider impact of the project schedule. They did not consider any risks or issues that could arise from the project or how this could impact on stakeholders.

Where these students had considered risks, they tended to be either generic issues that could arise from any project of this nature or they did not then develop their answer further to explain what the impact would be or how it could be mitigated.

To improve performance students should ensure that they know how to write an email in the professional setting. Students can include screenshots of relevant information in their email as this would be expected in a workplace project. Students should identify all the information that they are required to include in their email and ensure that they are including all relevant information and that they are writing their email in the context of the project they are working on and not in a generic format.

Task 1: English Skills

The English skills seen this series were improved from previous series. The emails presented by students are more consistent with the structure and formality that would be expected from an email. There are still some students who are not utilising paragraphs, grammar and spellchecking in their work, Students should be encouraged to make use of all relevant digital tools in their chosen software packages to support them with this.

Many students seem to struggle with how to address their emails in the absence of a name in the project brief. Where a name is not provided in the project brief, or the task students are free to utilise any name for their line manager that they feel would be appropriate as this would allow them to produce a more professionally formatted email than simply starting their email Dear Line Manager.

Task 2a: Sources of Data

This series students were once again asked to create a document which considered the sources of data that would be needed to support the planning of LuxClink's expansion.

Students that performed well in this task were able to consider a good range of internal and external sources of data which were relevant to the project. These students were able to consider which sources of data would be most appropriate, what the data could tell LuxClink about the business and the move into the B2C market and how this data could be used to support the success of the project.

Students that performed less well were able to provide a range of sources of data, both internal and external, that could be used; however, some of these may not provide useful data for the move into the B2C market. Students tended to consider a range of sources of data rather than being selective of the most appropriate data. This meant these students offered a wide range of sources of data but in less depth than students who had been more selective of the sources of data who were then able to provide more depth and context to their response.

These students were able to describe the different sources of data; however, they were not always then able to say how the data might help to support the project or what specific types of data might be needed. For example, students may have identified sales data as being a source of data but then didn't develop this to consider how this could be used to decide what drinks would be best to sell to the B2C market.

Students should be aware that this task does not require them to address all potential sources of data, instead they should select the sources of data which would be most relevant. This means that each series students may be considering different sources of data.

To improve performance, students should refer back to the project brief and previous tasks to identify what specific types of data will be needed. Students should identify the most important sources of data for the project and start with these and ensure that they are explaining why this data would be essential to the project's overall success. Students should then continue to consider the sources of data they will need in order of importance to the project aims and brief.

Task 2b: Action 1 ERD and Data Cleanse

This series students were once again asked to use the provided data sets to cleanse some customer data and to then create an entity relationship diagram ERD. As with previous series this task continues to prove challenging for most students.

Students that performed well were able to cleanse the data by separating the customer first name and surnames into separate columns, to remove incomplete customer records and to normalise the data. They were able to use the tools available in their chosen spreadsheet software to complete this for all the records in the data sets. Students were then able to use this data to create an ERD. These students were able to identify that the account number was the Primary Key when creating their ERD.

Students that performed less well were able to use the datasets to begin to cleanse the data. Most students were able to normalise the data within the data set. Some students were able to separate the customer first names and surnames and to sort the customer data.

These students however tended not to remove the incomplete customer records. Some students sorted them to the incomplete records to be at the end of the records whilst others left the incomplete records in their original order.

For the ERD some students were able to present a recognisable ERD; however, they had identified the customer's name as being the unique data and used this as the primary key. This then meant that the student was not able to present an accurate ERD.

To improve performance further, students need to ensure that they are confident in the creation and use of the tools they will need for this action. This can be the tools for the data cleanse or when producing the ERD. The more confident students are in using these tools and preparing these diagrams the more their performance should improve.

Task 2b: Action 2 Data Analysis

This series students were again given a number of data sets that they were then asked to use to create a new dataset to provide data for the new project. This series students were not directly asked in the task to create charts/graphs like they have in previous series.

Students that performed well in this task were able to review the datasets they were provided with, including the dataset from action 1, and to select relevant data to create their new dataset. These students were able to use a range of tools such as conditional formatting. tables, queries, charts and graphs to present the data.

They presented their information in a number of different tables or charts/graphs and had combined relevant data together to create data that could be used in planning and delivering the project.

Students that performed less well in this task were able to review the datasets provided with; however, they tended to be less selective with the data or to use less tools when presenting their data. Students were able to demonstrate use of tools, but this was more limited and tended to be limited to tables or sorting data. The ways in which the data was presented tended to be less organised and students tended not to select data that was relevant to the new B2C market, and selected data about the drinks market as a whole.

These students also tended not to include any charts/graphs/dashboards. Students are creating charts/graphs/dashboards as part of their ESP as these are evident in their task 3 presentations, but they aren't including them in their action 2. Students should be reminded that even if the guidance in the task does not explicitly state to include the charts/graphs/dashboards in their action 2 evidence, they should include anything they are doing with the data on their sheet for this task as this could then be considered as part of the evidence for this action.

To improve performance further, students should be confident in how to select data based on the project brief and aims they are given. In developing the skills to select relevant data and to then present this in a range of formats this will enable students to be able to explain what the data is showing and its relevance to the project more effectively in subsequent tasks.

Task 2b Action 3: Email to Line Manager

This series students were once again asked to send their line manager an email summarising the data cleansing and data analysis from actions 1 and 2.

Students that performed well in this task drafted an email which provided an explanation of the steps they had taken in cleansing and analysing the data and why these steps were appropriate to the project. These students were able to discuss why they took the decisions they did in terms of cleansing or analysing the data specific to engaging with a new customer base. Some students also included screenshots of the new data sets within their email to enable their line manager to have a better understanding of the data they were sharing.

Students that performed less well in this task were able to explain the steps taken in actions 1 and 2. These students were able to describe the steps taken to cleanse the data and then why they chose the data for action 2. They also were able to provide some limited explanations of why the data selected was relevant to the business. These students tended to focus on the actions taken rather than how the data can be used to inform the project.

Some students found this action more challenging due to performance in actions 1 and 2. Where the students had only limited evidence in the previous actions this than meant that the feedback to the line manager was limited to an overview of the elements they attempted.

To improve performance further students should ensure that they are confident in the skills they need to undertake actions 1 and 2 as this will then provide students with the evidence, they need to complete this action more effectively.

Task 3: Presentation of research findings

This series students were once again asked to produce a presentation which summarised their findings in relation to the new B2C project. Students were asked to consider data analytics, impact on stakeholders, any risks and solutions to any issues or risks raised.

Students that performed well created a professional presentation which was appropriate for the directors of LuxClink and was linked to the project brief. These students were able to explain what the data they analysed in task 2b meant for the project. They also considered how the project could impact on LuxClink's stakeholders and solutions to any issues that the project faced.

Students that performed less well produced professional looking presentations that were appropriate for the directors. These students tended to consider the data they produced during task 2b, but they tended to outline what the data showed rather than considering what the data meant for the project. These students also considered the stakeholders of LuxClink but this was more in terms of who the stakeholders of the project are, as opposed to how LuxClink could address the stakeholder concerns. Students also considered the issues the project may face, but these were often issues any project may face rather than being specific to the expansion into the B2C market. Solutions which were offered by these students tended to be generic in nature and not always relevant to the specific issues being faced by the business and this means that many of these recommendations were not relevant to the project aims.

There were some students who did not fully address all elements of the presentation. Most students included reference to stakeholders and data analytics but gave little to no consideration to risks, mitigations and confidentiality, integrity and availability (CIA). Students need to ensure that they are reading the task fully and are including all the information required by the task in their presentations as they need to be addressing all elements of the task in order to demonstrate good or excellent performance.

To improve performance further students should ensure that they are fully reading the project brief and are including all the information they are required to include in their presentation. Students should also ensure that they are referring back to the project brief and aims throughout their presentation and how the data they are presenting could help the business achieve their project aims or what risks it faces and how the issue could be addressed to ensure the overall success of the project.

Task 3: Digital Skills

The digital skills seen this series were improved from previous series. Students are utilising a range of the tools available to them in their chosen presentation software to produce increasingly professional quality presentations. Students across all performance levels are using these tools. Popular digital tools utilised included inserting charts/graphs, using backgrounds, using speakers notes and using a theme throughout their presentation.

Most students are now demonstrating reasonable to good digital skills in their presentations. In addition to the use of backgrounds and themes, these students were also able to use annotation tools to link to the charts and graphs inserted into the presentation. These students were able to insert tables of data and a few students also added animations or transitions to their slides and used speakers notes to support their presentations.

Some students are demonstrating excellent use of digital skills. These students are producing professional quality presentations which would be of the quality that they could be used for the intended purpose of presenting information to the directors.

Task 3: English Skills

The English skills seen this series were improved from previous series. More students are utilising the speakers notes and this is resulting in better quality evidence on the slides. Instead of huge chunks of information as seen in previous series, students are now using more appropriate sentence structure and length for the type of written communication being utilised.

There are still some students who are not fully utilising the editor tools available to them in their chosen presentation software; however, on the whole, spelling and grammatical errors have reduced this series in students' presentations.

Task 4: Evaluation

This series students were once again asked to reflect on their ESP project. Students are provided with a template that they can use to complete this activity and most students have opted to present their evidence for the task on this template.

Students who performed well showed good or excellent reflective skills. They were not only able to summarise what actions they took throughout the ESP, but they were also able to consider why they took these actions, how this was relevant to the project aims and to then consider how they could have completed these actions in a more effective way. Students were able to critically self-evaluate why their actions were effective or not and could then offer better alternative approaches they could have considered. These students were able to reflect on their own skills development to identify what they would benefit from further developing and could then identify some relevant continuing professional development to support this.

Students that performed less well demonstrated reasonable to good reflective skills. These students were able to summarise the actions they took throughout their ESP; however, these were often superficial or generic in nature and not always linked to the project aims. These students were able to consider how effective their own performance was, but it was often in relatively basic terms rather than showing real insight into why their current skills did not enable them to perform as well as they could have. These students were able to identify skills they should develop further but were not always able to say why or identify ways in which they could develop these skills to the required level.

To improve performance further, students should ensure that they are considering their specific performance in relation to the project aims and brief. Students need to be considering how effective their work is in helping the project to be a success rather than a generic summary of their skills in the different tasks.

Administering the external assessment

The external assessment is invigilated and must be conducted in line with our <u>Regulations for the Conduct of</u> <u>External Assessment</u>. 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 <u>Qualification</u> <u>Specific Instructions for Delivery (QSID)</u>.