

# **L3 Lead Examiner Report 1906**

Summer 2019

**L3 Qualification in Computing  
Unit 3: Planning and Management of  
Computing Projects**

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## Grade Boundaries

### What is a grade boundary?

A grade boundary is where we set the level of achievement required to obtain a certain grade for the externally assessed unit. We set grade boundaries for each grade, at Distinction, Merit and Pass.

### Setting grade boundaries

When we set grade boundaries, we look at the performance of every learner who took the external assessment. When we can see the full picture of performance, our experts are then able to decide where best to place the grade boundaries – this means that they decide what the lowest possible mark is for a particular grade.

When our experts set the grade boundaries, they make sure that learners receive grades which reflect their ability. Awarding grade boundaries is conducted to ensure learners achieve the grade they deserve to achieve, irrespective of variation in the external assessment.

### Variations in external assessments

Each external assessment we set asks different questions and may assess different parts of the unit content outlined in the specification. It would be unfair to learners if we set the same grade boundaries for each assessment, because then it would not take accessibility into account.

Grade boundaries for this, and all other papers, are on the website via this link:

<http://qualifications.pearson.com/en/support/support-topics/results-certification/grade-boundaries.html>

## Unit 3: Planning and Management of Computing Projects

Grade	Unclassified	N grade	Level 3		
			Pass	Merit	Distinction
Boundary Mark	0	11	23	37	51

## Introduction

This was the fourth examination season for Level 3 BTEC Computing Unit 3 Planning and Management of Computing Projects.

This unit assessed through two parts, part A was the development of the PID and Gantt chart, which was 3 hours, and part B was the checkpoint and email, which was 2 hours.

This unit is a mandatory unit for all learners studying the extended certificate, foundation diploma, all diplomas and the extended diploma.

The examination for this unit will always contain four sections and each section will be link to a scenario that and used throughout the whole of that section. The scenario clearly stated at the beginning of each section.

Each section is broken down into activities, which will then test learners on different areas of the specification, and learners should expect to apply their knowledge to the scenario.

Learners given a scenario with additional information to support. They instructed to look at individual parts / sections of this during the examination in order to answer questions. The information brief may give learners:

1. Information about problems that they need to solve.
2. Interpret the scenario and apply solution using Project Management techniques and theory

All Activities of the examination paper provide differentiation at all attainment levels and the brief designed to escalate in difficulty so that a larger percentage of higher-grade marks depends on the skills, knowledge and understanding

- LE Report to be considered with paper and mark scheme
- Contextual introduction

## Introduction to the Overall Performance of the Unit

The overall performance of learners was good though compared to the previous seasons for this unit it was slightly worst. It was evident that learners prepared for the rigour of this exam. Again the performance on the Activity 2, Gantt chart was excellent with many learners picking up marks for most sections. The number of blank responses was also significantly less. Responses for Activity 1, the Project Initiation Document, were quite weak. The main problem was the interpretation of the scenario. Activities 3 and 4 were of good standard and demonstrated the learner's ability to apply theory to practical scenario. However, some parts of Activity 3, especially the project quality management was another area that learners struggled with. Learners failed to include processes and activities that determine the quality of the policies, work processes. For activity 4, there were many examples of inaccurate interpretation of the scenario. The objectives were either rewritten or unrelated to the scenario there this had impact on project evaluation.

There is still evidence that many learners are still not covering the full specification in depth. For Activity 2, part b the costing, performance was particularly poor; most learners were not able to use logic chains of reasoning to apply Project Management techniques such as those that are related to functional points. Many learners were still using hours to calculate cost rather than converting the functional points to number of hours needed.

## Individual Questions

The following section considers each question on the paper, providing examples of learner responses and a brief commentary of why the responses gained the marks they did. This section should be considered with the live external assessment and corresponding mark scheme.

## Activity 1

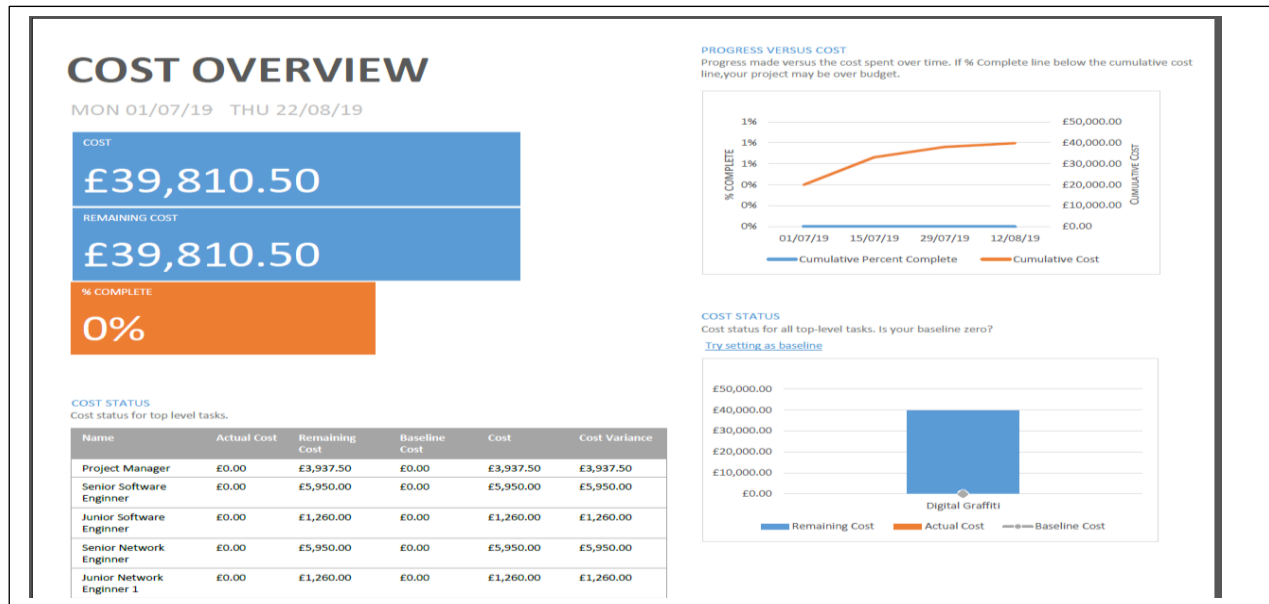
### Example response

Assumptions			
Assumption	Validated by	Status	Comments
All staff members will be available during the project		Project Manager	If any staff are unavailable during the project contractors will have to be hired to fill in for them during their absence
No technical issues during the project		Project Manager	Any issues will be fixed by either replacing the broken hardware or having the device repaired, or software fixed for the user
Networking equipment will arrive on time		Project Manager	Planning to order the networking equipment 1 month before the project start to make sure that it will all arrive on time and not set the project back
Online backup is decided on by the client		Project Manager	If the client decides to not go with the online backup the physical backup system will have to be ordered, but will put the customer over the budget
Tasks will be completed by their set finish date		Project Manager	If the the Analysis & Design runs overtime more staff will be assigned to the task and the project manager can authorise overtime if needed to have the tasks completed
Project will finish on time 19/08/19		Project Manager	If a task or the project is going to over run the deadlines then more staff can be assigned to the tasks and overtime may be required to keep the

Risk Management Strategy				
Risk	Probability	Impact	Severity	Contingency Plan
Staff members are unavailable during the project	Low	Low	Medium	Contractors can be hired to fill in the missing member of staff until they are available again there are also other staff members that can work in these areas
Network Equipment is delivered late	low	Medium	Medium	The networking equipment is going to be ordered a month before the project so if delivered late it will have little to no impact
Technical Issues	low	High	High	If there are any technical issues they will be solved by either being repaired or replaced so the project can continue
Delayed components (e.g. sales terminals)	low	Medium	low	Components will be delivered a month before the project starts, this will insure that it will be

## Activity 2

### Example response



The main point of this section is primarily the benefits of meeting quality requirements. This should include less rework, higher productivity, lower costs, therefore increased stakeholder satisfaction and increased productivity. The learner has shown some reasonable understanding, having included hardware resources and cost, the time needed for each employee with cost, but they have not shown any evidence of how they attained the number of days required. However, it has come over budget; the learner has shown how they have calculated the costs from the functional points or how they have found the most efficient use of resources.



## Activity 3

### Example response

#### **Quality Management**

(List the activities undertaken this period)

The development of the project started on the 01/07/19, the PID was created on 10/05/19. The development started when the client requested for a new infrastructure, relational database and a online customer ordering system. Once these had been decided upon the project continued to move forward with meetings with the clients, introducing the project team and discussing what would take place during the months leading upto the project, and also what would occur during.

The first stage of the project was to being the analysis, this was to gain a broader picture of what was going to be undertaken. This gathered information on the system they already had, infromation for the new stores, design and database needs for the customer storage system and general infromation needed to start the next stages. After the project had been analysed by the project manager and project team, the next stage was to being the desing stage. This allowed for the project team and I to start to plan out the system, desining up interfaces and the customer order system, this stage allowed for the project to be planned so that the tasks could be set out for each memeber to carry out, this time was also for the Senior Software Enginner and Senior Network Enginner to plan out a test plan to be used during the testing stage.

After the the design stage there was a large meeting with the client, CEO, Project Manager and Project Team. This was for verifying the desings and plans with the diffrent stakeholders to allow the team to start the development stage of the project. During this the project team and project manager began the instalation of the network infrastructure, this was delayed due to the week building of the new stores not being completed, this however did not impact the software enginners who began working on the Online Customer Order System, Relational Database and customised interfaces. The development stage also saw the instalation of the sales terminals with the configured server finishing just after they where installed.

Quality management looks at the processes and activities that determining the policies, objectives and responsibilities so the project is successful. The learner has clearly done this focusing on standards as well as the project and sustaining it. They have demonstrated planning, performance and control quality key features that make up Quality management.

### Lessons Learned

During the project I have gained valuable lessons that I have learned from and can incorporate in a future project, my lessons learned range from planning better for illnesses to including extra time for testing and fault fixing. A lesson I have learned is to be more prepared for a senior staff member being ill, this is due to the Senior Network Engineer taking four days off due to an illness, I decided to have one of the Junior Network Engineers who was not on a project to continue his work, however due to the complex nature of the tasks that they had to carry out it means that the junior developer struggled to fulfill, having the Senior Network Engineer still being able to communicate meant that the junior developer was able to contact the Senior Network Engineer if there were any issues.

While managing the project I have also learned lessons with planning for events such as faulty equipment such as the sales terminals. As I had not planned for this to occur I was able to learn how to deal with this situation, as the sales terminals were going to take 10 days to be replaced and returned it meant that I had to work with the times that I had and keep pushing the project, this did mean that the testing took longer than needed due to this issue. During this time I took the opportunity to communicate with the client, CEO and the Senior Engineers, during this meeting we discussed about the equipment being faulty and how long it would take, during this minutes were taken to make sure that we were able to fulfill what the client wanted and make sure that the client was kept in the loop with the project.

I have also learned lessons regarding the project as a whole, this as properties such as team managing and making sure that I was able to communicate with the team strongly, this was needed when I was assisting the Junior Network Engineer when the Senior Network Engineer was absent, making sure that he was able to fulfill this role while he was away. These skills have allowed me to manage and control situations that arose during the project. With the project another issue such as the building of the new stores being delayed caused an issue as the infrastructure could not be installed until this was completed, this means that the network engineers would have been behind. However after discussing this and using my team leader skills we planned to configure the server before it was installed, this would allow us to cut down the installation time and keep the project on track, I learned from this lesson to communicate with the team to devise a plan to make sure that the project continues to operate and allow for the end product to be delivered to the client on the project deadline.

There is a consideration of the relevant additional information that shows a full awareness of the scenario and information given in the brief. Entered accurately with all sections fully completed; requirements have both been met by the learner work. In this section, we are looking for accurate and relevant information, which has been thought about before, been entered into each section. **Mark band 3(6-8)**

## Activity 4

### Example response

Email	
<b>From</b>	Joseph Arro (Project Manager)
<b>To</b>	Rachael Burns (CEO of Hype Computing), Mr Jones (Owner of Digital Graffiti)
<b>Subject</b>	Project Closure for, Digital Graffiti infrastucture and online system with a relational database
<p><b>Deliverables Success:</b>            The deliverables for the project are:</p> <ul style="list-style-type: none"> <li>● <i>Increase customer service</i></li> <li>● <i>Increase the number of customers</i></li> <li>● <i>Ensure orders are recorded accurately</i></li> <li>● <i>Allow out of stock items to be replaced within 24 hours</i></li> <li>● <i>Increase the total orders by at least 10%</i></li> <li>● <i>Lead to an increase in profit of £50,00 per year</i></li> <li>● <i>Budget of £40,000</i></li> <li>● <i>Delivery date 19/08/19</i></li> </ul> <p><b>Process Success:</b>            The process success are:</p> <ul style="list-style-type: none"> <li>● <i>The delivery off the network infrastructure was successful, so was the Relational Database, Backup System and online order system that where all success to the project</i></li> </ul> <p><b>Performance Success:</b></p> <ul style="list-style-type: none"> <li>● <i>The team performed well due to the adapting enviroment, responding to issues when they came up with faulty equipment</i></li> <li>● <i>Project manager was able to communicate and perform well with the team to keep the performance of the project on track for the end project</i></li> </ul>	



**Deliverables Success:**

After the project was completed the company saw an improvement, the stocks at each store was replaced within 24 hours, the increase in the total orders has increased by 9% close to the set deliverable, the company is already seeing a increase in profit which is so far on track going to be £50,000, the accuracy in the orders be taken has increased and the number of customers has increased in their stores with a better customer service improvement. The project was also under budget coming in at £39,810.50 as the end total, the project was also delivered a few days over the deadline date due to the issues that arrived during the project, these range from the faulty terminals due to the Senior Network Engineer being absent

**Process Success:**

The delivery of the network infrastructure, relational database, backup system, online order system where all successful for the project, allowing for these to be delivered to the client once the project finished at a high standard of quality, this was important for the client to have so that they can start to meet their deliverables.

**Performance Success:**

The performance of the team was shown through being constantly devoted to making sure that the project was completed to the deadline date, they were also focused on making sure that they completed their tasks to the set deadline date. The performance of the team was vital and important for the project, and with the team working efficiently and effectively the project as a whole was delivered at a high standard.

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**Evaluation:**

The end of the project has allowed for an ending to what was given, and has also allowed for the client to gain a system that is going to allow them to increase sales and make a larger profit, giving them a competitive edge. As the project manager the project has resulted in many lessons learned that I can use and allow for me to apply them to future projects that I may undertake.

Before the project started there was a meeting set a month before the project was to start, during this meeting the client, CEO, Project Manager and Project Team discussed the project and what would be carried out. This allowed for the client to meet the project team and see who would be working on what, this benefits the client to know who will be installing the networking equipment. During this we had minutes taken to be used later if the client was to bring up any new suggestions that they wanted while we went over the plans to the project.

One issue that occurred before the installation could even occur was that the stores were delayed by one week to be completed, this meant that the installation of the infrastructure equipment was delayed. However this did not stop the software engineers from developing the customised interfaces the relational database.

Issues that have arisen range from faulty equipment to the stores being unfinished, with each of them I have been able to respond in a manner that has allowed for the project to continue and also for the communication between the project team and I. During the development of the project the Senior Network Engineer was unavailable for 4 days in the third week, this meant that the project that they were working on would fall behind. With this I decided that I would assign one of the Junior Network Engineers to continue his work while he was away, I assigned one of the junior developers and the project manager to allow for this task to have extra supervision to keep the Junior Developer comfortable with what they were doing.

I chose to have Mason Thomas work on the senior network engineers part, during this he was very responsive when I assigned him being enthusiastic, this allowed for confidence when he was working on it. There were a few issues during while Mason was working on it, however the Senior Network Engineer was contactable through phone and email, this meant that he was able to contact the Senior Network Engineer when he had any issues. I also spent more time with him and having daily sit downs with him to make sure that he was still able to work on the task. This also allowed him to develop his skills and work on a much harder task, though it took him longer to do one section it showed that he was willing to learn and progress.

The final stage is the email or review of the project success. In this section we are looking for three main areas:

- Success criteria - "there is an accurate summary of how quality criteria were met showing an awareness of the scenario throughout".
- The second part is review of the project, and linking this to the project lifecycle.
- The third part is summary of lesson learnt. For the success criteria we are expecting the candidate to look back at part A of the exam and see if they have met their objectives, and if so how and if not why not, in this case the learner has met this criterion by discussing the success criteria individually and providing examples of how each criterion was met. **Mark Band 3(3)**

The information given in the scenario has been utilised effectively to provide details of deliverables success, such as the project coming in close to budget. Process success such as the new system delivered by the team to match the designs, and performance success such as the project team working together with the aim of developing a new system of high quality. **Mark band 4 (8-9)**

## Summary

Based on performance in this examination series, centres/learners are offered the following advice to help continue this improvement:

- Focus on using and applying techniques so that the functional points are correctly converted to the correct cost of the employee rather than assuming number of hours needed to work, also making sure that all cost are included such as any hardware.
- For the Objectives, try adding comments giving good reasons for each objective, it would be useful to try using less generic objectives and more which are appropriate to the given scenario.
- Understand the different components that make up quality management which will help with other areas in the task such as lessons learnt.

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Welsh Assembly Government



Rewarding Learning

