

Cambridge TECHNICALS LEVEL 3

BUSINESS

Cambridge
TECHNICALS
2016

Unit 16 – Principles of project management
DELIVERY GUIDE

Version 1

CONTENTS

Introduction	3
Related Activities	4
Key Terms	5
Misconceptions	7
Suggested Activities:	
Learning Outcome (LO1)	8
Learning Outcome (LO2)	14
Learning Outcome (LO3)	19
Learning Outcome (LO4)	25

INTRODUCTION

This Delivery Guide has been developed to provide practitioners with a variety of creative and practical ideas to support the delivery of this qualification. The Guide is a collection of lesson ideas with associated activities, which you may find helpful as you plan your lessons.

OCR has collaborated with current practitioners to ensure that the ideas put forward in this Delivery Guide are practical, realistic and dynamic. The Guide is structured by learning outcome so you can see how each activity helps you cover the requirements of this unit.

We appreciate that practitioners are knowledgeable in relation to what works for them and their learners. Therefore, the resources we have produced should not restrict or impact on practitioners' creativity to deliver excellent learning opportunities.

Whether you are an experienced practitioner or new to the sector, we hope you find something in this guide which will help you to deliver excellent learning opportunities.

If you have any feedback on this Delivery Guide or suggestions for other resources you would like OCR to develop, please email resources.feedback@ocr.org.uk.

OPPORTUNITIES FOR ENGLISH AND MATHS SKILLS DEVELOPMENT AND WORK EXPERIENCE

We believe that being able to make good progress in English and maths is essential to learners in both of these contexts and on a range of learning programmes. To help you enable your learners to progress in these subjects, we have signposted opportunities for English and maths skills practice within this resource. We have also identified any potential work experience opportunities within the activities. These suggestions are for guidance only. They are not designed to replace your own subject knowledge and expertise in deciding what is most appropriate for your learners.



English



Maths



Work

Please note

The timings for the suggested activities in this Delivery Guide **DO NOT** relate to the Guided Learning Hours (GLHs) for each unit.

Assessment guidance can be found within the Unit document available from www.ocr.org.uk.

The latest version of this Delivery Guide can be downloaded from the OCR website.

UNIT AIM

Businesses undertake projects of all kinds that vary in terms of purpose and scope. Some examples of business projects are running an event, launching a marketing campaign, carrying out market research and setting up book keeping for local clubs or charities. A project comprises a set of tasks and activities to be carried out in order to reach an intended purpose. Being able to prepare and manage a project is an important skill needed by many different people working in business.

In this unit you will learn about the stages of project management, and the type of skills a project manager should have. You will also learn why you need to monitor the progress of projects as it is vital to their successful completion and implementation.

You will plan a project, and prepare a project plan. You will learn about the different planning tools available for project planning. Whilst preparing the project plan, you need to be aware of internal and external factors which might have an impact on the planning process, as well as the successful completion and implementation of a project.

This unit will help you to develop the skills required to plan projects and be aware of possible obstacles that can impact on the outcome of a project.

Unit 16 Principles of project management

LO1	Understand the stages of project management
LO2	Understand the skills project managers need to have
LO3	Understand how and why projects are monitored and factors that influence a project
LO4	Be able to prepare project plans

To find out more about this qualification please go to: <http://www.ocr.org.uk/qualifications/cambridge-technical-business-level-3-certificate-extended-certificate-foundation-diploma-diploma-05834-05837-2016-suite>

Cambridge
TECHNICALS
2016

2016 Suite

- New suite for first teaching September 2016
- Externally assessed content
- Eligible for Key Stage 5 performance points from 2018
- Designed to meet the DfE technical guidance

RELATED ACTIVITIES

The Suggested Activities in this Delivery Guide listed below have also been related to other Cambridge Technicals in Business units/Learning Outcomes (LOs). This could help with delivery planning and enable learners to cover multiple parts of units.

This unit (Unit 16)	Title of suggested activity	Other units/LOs	
LO1	Key terms	Unit 16 Principles of project management	LO4 Be able to prepare project plans
	SMART objectives	Unit 6 Marketing strategy	LO1 Understand the purpose of marketing strategies
		Unit 20 Business events	LO2 Be able to support the running of a business event
	Project planning	Unit 15 Change management	LO3 Be able to plan for change, manage change and overcome barriers
LO4	Project vision	Unit 16 Principles of project management	LO1 Understand the stages of project management
	Budget costing	Unit 2 Working in business	LO3 Be able to use business documents
	CPA (critical path analysis)	Unit 3 Business decisions	LO3 Understand how human resource information informs business decisions LO5 Be able to use resource, project and change management information to inform business decisions

KEY TERMS

Explanations of the key terms used within this unit, in the context of this unit

Key term	Explanation
Budget variance analysis	A budget is an estimate of costs for a project. At the end of the project the actual costs may have been more or less than the budget. Looking at the differences and finding out reasons why there were differences is called budget variance analysis.
Client	The person who commissions a project; for example, the person who has decided to have a house built for them.
Consultant	A person who is brought into a project to offer their advice. For example, an electrician may be able to help on a new house build. In a business context, an example could be an advisor who is asked for advice on how to run a start-up company.
Contingency	A chance event which could happen in the future but cannot be predicted for certain. For example rain and snow will slow down the building of a new house; it is winter but it may not rain or snow during the winter. In business we may also refer to a contingency as a plan for the unexpected.
Contractor	A person or business who is asked to work on a project; for example, a building contractor may be asked to build a house for a client.
Critical path analysis	A visual method which explains the steps in a sequence of events that need to happen in a project. For example, in a house build the roof cannot go on until the walls have been built, so the roof would be displayed on the diagram after the action to put the walls up. The diagram when completed should display the critical activities that must be carried out on time for the project to be a success. This is known as the critical path through the diagram.
Decision log	A document, usually a spreadsheet, which keeps track of decisions made while the project is in progress. For example when a house is being built the project manager and site manager may decide to change the height of the interior doors. This decision will need to be 'logged' and noted down so it can be referred back to at a later date.
Delegate	To give a task to a subordinate worker or a colleague. For example, an assistant in a shop may be delegated (given the task) to tidy the window display by the shop manager.
Feasibility	An assessment of whether a project is capable or likely to be completed. For example, the feasibility of building a house in three months may depend on factors such as the weather and the availability of contractors.
Flow diagram	A diagram that displays the sequence of tasks of a project in a visual format. This may be used on small projects that last a day or two.
Gantt chart	A visual chart of a series of activities that need to be completed in sequence. It looks similar to a bar chart. Milestones which are completed project steps can be shown with the use of symbols. This will help a business allocate resources, plan for the project and help avoid confusion on a complex project.
Objectives	The aims of a business; for example what it hopes to achieve this year.
PERT	PERT stands for programme evaluation and review technique. This is a decision-making tool which shows a sequence of tasks in a project as a diagram. This will help a business to identify the shortest possible time that the project can be completed in.
Project	A series of related tasks that come together to achieve an aim; for example, to build a house.
Project management	The combination of skills, knowledge and resources to manage a project to completion; for example, ensuring all the necessary steps are followed so that a new product is launched onto the market on the target date.
Project manager	A person with responsibility for ensuring that a project is completed correctly and on time, and that it has the right resources to be completed.
Project stakeholder	Anyone who has an interest in a project and its completion; for example, stakeholders in a business include that business's suppliers, customers, employees and shareholders, as well as government agencies and industry regulators.
Slippage	Slippage means moving away from the deadline of a project. For example there may be some slippage due to poor weather holding up the project. Slippage is also the variation between the planned finish date and the actual date.

Explanations of the key terms used within this unit, in the context of this unit

Key term	Explanation
SMART objectives	Objectives need to be SMART if they are to be useful to a business. They need to be Specific, Measured, Attainable, Relevant and Time-bound. For example, a business may wish to move into new premises. A SMART objective would be to move into the new premises by 31 March 2018.
Supplier	A person or business that can get resources for the project; for example, a supplier of concrete or bricks for a building project.

MISCONCEPTIONS

Some common misconceptions and guidance on how they could be overcome

What is the misconception?	How can this be overcome?	Resources which could help
Who the project stakeholders might be and what level of involvement they may have with a project	Tutors could introduce learners to the concept of stakeholder involvement in a project. A stakeholder could be defined as anyone who has an interest in the project, and their level of involvement will determine how much of the project they know about. Tutors could explain that knowing who the key stakeholders are and keeping them happy can ensure a successful outcome for the project.	Stakeholder Analysis Mind Tools https://www.mindtools.com/pages/article/newPPM_07.htm A great page of resources including a video on stakeholder analysis and a power/interest grid for stakeholder prioritisation, showing how stakeholders can be added to the grid and their level of involvement plotted.
What corporate social responsibility means	Tutors could explain to learners that the term 'corporate social responsibility' is frequently abbreviated to CSR. They may also wish to explain to learners that CSR is accepted to be the responsibility that businesses have to society, in terms of labour rights, environmental conditions, human rights and preventing poverty.	What is Corporate Social Responsibility? Business Wales https://www.youtube.com/watch?v=Milv5u59qPs A short video on CSR that explains the term and introduces the learner to the idea of economic, ethical, legal and discretionary ways of doing business.

SUGGESTED ACTIVITIES

LO No:	1		
LO Title:	Understand the stages of project management		
Title of suggested activity	Suggested activities	Suggested timings	Also related to
Key terms	<p>When introducing the Learning Outcome 1 for Unit 16 tutors could cover the meaning of key terms. Tutors could help learners to understand the key terms by displaying each one on a separate sheet on the wall or desk. Learners could then be encouraged to research the definitions and examples for each term and then write these under each term. In the spirit of Wikipedia (and other editable sites) other learners could move round the definitions and edit them as they feel appropriate. This could provoke some lively debate about the terms and their meanings. Tutors could ensure that each term should have a definition and at least one example.</p> <p>Key terms:</p> <ul style="list-style-type: none"> • Project • Project manager • Project management • Project stakeholders. <p>Tutors could then add their own definitions and examples to the sheets and discuss with the learners, what (if anything) was omitted or what extra information was found. Tutors could also use this as an opportunity to discuss the reliability, validity and bias of some websites, and suggest that for best results several sources could be used.</p>	30 minutes	Unit 16 LO4





Title of suggested activity	Suggested activities	Suggested timings	Also related to
SMART objectives	<p>Tutors could share the meaning of SMART objectives with the learners; objectives need to be SMART if they are to be useful to a business. They need to be Specific, Measurable, Attainable, Relevant and Time-bound. For example a business may wish to move into new premises. A SMART objective for this might be: To move operations to the new factory site in Nottingham, with the aim of starting production from 1 December 2017.</p> <p>Learners could then produce a table with two sets of SMART objectives: one for themselves and one for a small start-up business such as a café. A SMART objective for the business might be to generate £10,000 revenue within 2 years. Their SMART objectives might include being able to pass their Cambridge Technical with a distinction in two years' time.</p> <p>Tutors could share the following three examples with the learners in order to give them some context and help them to discuss what the group thinks may have been the SMART objective in each example.</p> <p>Brushed off by the Dragons, the comb worth £65 million Daily Mail http://www.dailymail.co.uk/news/article-3157004/Victoria-Beckham-Cara-Delevigne-fans-revolutionary-comb-Dragons-Den-brushed-entrepreneur-worth-65million.html A <i>Daily Mail</i> article about the Tangle Teezer brush and how it was rejected by <i>Dragons' Den</i> but has still been a success. This would work even better if the tutor could take in a Tangle Teezer brush and ask learners to estimate its value and then the SMART objectives that the owner may have had for it.</p> <p>Kate's favourite children's clothes designer reveals Princess Diana inspired her to turn Prince George into a retro royal pin-up Daily Mail http://www.dailymail.co.uk/femail/article-3174677/Kate-s-favourite-children-s-clothes-designer-reveals-Princess-Diana-inspired-turn-Prince-George-retro-royal-pin-up.html Clothes designer Rachel Riley has transformed the children's clothing market with royal retro inspired designs.</p> <p>Could this finally be the end of hiding valuables under a towel? Entrepreneur invents holiday beach locker that screws into the sand Daily Mail http://www.dailymail.co.uk/travel/article-2639541/Could-finally-end-hiding-valuables-towel-Entrepreneur-invents-ULTIMATE-beach-gadget.html An article from the <i>Daily Mail</i> about a beach storage system.</p>	1.5 hours	Unit 6 LO1 Unit 20 LO2



Title of suggested activity	Suggested activities	Suggested timings	Also related to
Feasibility study	<p>Tutors may need to start this activity by explaining the term feasibility: this means if the project is capable, or likely to be completed. The tutor may explain this by giving the example of a construction business wanting to build some houses. The tutor could direct learners to think about a house build that may be happening near them. When the project is in the planning stage a feasibility study will be carried out to see if the house build is possible. Is the land OK to be built on? If it is a flood plain then the project may not be feasible.</p> <p>Tutors could introduce to learners the idea of a feasibility study as the next logical step after a set of SMART objectives has been drawn up. This will help the business to decide if it can go ahead with the project, if in fact it will be feasible.</p> <p>The infrastructure industries are the ones that most commonly use a feasibility study; road, railways, electrics and water companies being amongst those that use them the most.</p> <p>The group could be directed to think about a housing estate build – what infrastructure would need to be in place for that to be feasible. Learners should be able to brainstorm a list of utilities and perhaps add in roads, railway and bus services so workers can get to work.</p> <p>Learners could then be directed to think about why a feasibility study may be carried out – as an important marketing tool to attract investors to the project and “to carry out an appropriate level of testing and analysis to establish if a project could be developed through into the detailed engineering and construction stage.” In other words moving a project forwards will mean more money needs to put into the project and so a feasibility study is important before any more money is spent.</p> <p>Both of these points can be found in the resource below:</p> <p>A guide to feasibility planning for junior mining companies Norton Rose Fulbright http://www.nortonrosefulbright.com/files/mining-guide-feasibility-104177.pdf</p> <p>A document which sets out in quite simple terms the purpose of feasibility studies for small mining companies. It may be useful to show learners this as a different industry example from house building and to show how widely feasibility studies are used as a planning tool.</p> <p>At the end of the session tutors may wish to consolidate learning by targeting some directed questions at learners about their understanding of the term feasibility.</p>	1 hour	



Title of suggested activity	Suggested activities	Suggested timings	Also related to
Project planning	<p>For project planning, tutors could help learners to understand the planning process by giving them the case study about Dell who moved to Poland from Limerick in Ireland.</p> <p>Tutors could start by sharing this video with the group:</p> <p>Dell relocating flagship factory from Ireland to Poland Part 1 Prenno12 https://www.youtube.com/watch?v=qLTHIFaUdHU</p> <p>A video about Dell moving to Poland from Ireland. There is a part 2 if tutors wish to continue this introduction: https://www.youtube.com/watch?v=sW6NgDPXskc</p> <p>Tutors could then share out these articles, which they may find useful to provide in a printed version, for learners to refer to:</p> <p>Dell to axe 1,900 jobs as it moves production from Ireland to Poland The Telegraph http://www.telegraph.co.uk/finance/economics/4174637/Dell-to-axe-1900-jobs-as-it-moves-production-from-Ireland-to-Poland.html</p> <p>Dell makes the announcement that it is to move production from Ireland to Poland.</p> <p>Dell sheds 1,900 jobs in Ireland for Polish move - with suppliers predicted to axe further 1,500 in 'ripple effect' Daily Mail http://www.dailymail.co.uk/news/article-1110407/Dell-sheds-1-900-jobs-Ireland-Polish--suppliers-predicted-axe-1-500-ripple-effect.html</p> <p>Article about the loss of jobs in the Dell Limerick plant.</p> <p>Dell given €55m to aid transfer to Poland Irish Examiner http://www.irishexaminer.com/ireland/dell-given-55m-to-aid-transfer-to-poland-101683.html</p> <p>Article on the decision by the EU Commission to give \$55m to Dell to help with the move to Poland.</p> <p>Tutors could now divide learners into four teams where possible. Each team could discuss the articles with a particular focus and the group could build up a picture of the project planning process carried out by Dell for the move.</p>	1.5 hours	Unit 15 LO3

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Project planning (continued)	<p>Team 1 could look at the resource plan e.g. human resource requirements, tools and equipment. How did Dell go about the human resource process of making workers redundant in Limerick and hiring in Poland?</p> <p>Team 2 could look at the financial plan e.g. sources of finance, corporate budget, external funding etc. What financial incentives was Dell offered to move to Poland?</p> <p>Team 3 could look at the quality plan e.g. set quality targets and quality control methods. How could Dell ensure quality once the move had been made?</p> <p>Team 4 could look at the risk plan e.g. identify the risks, severity of risk, and contingency plans. How risky was this as a plan for Dell, to move production to another part of the EU? How could the company plan for this risk? What contingency plans might have been put in place?</p> <p> Each team should be able to compose a short speech about their plan which at the end they could share with the rest of the group. Tutors could consolidate by asking learners to reflect on which of these plans has the most impact on a project.</p>		
Project direction	<p>Learners may not know about project direction and the tutor could help them to understand this by engaging the help of an outside speaker. An ideal candidate for this would be a governor, trustee or parent teacher association (PTA) member who would be willing to come in and discuss some of the projects going on around school. For example if the school is investing in a new CCTV system there will be a governor or trustee involved who will be overseeing the project. They could give a talk to the learners on how they manage communications and how they report back to various committees on the progress of the project.</p> <p> Learners could be encouraged to prepare a few questions in advance to make sure they get the right information from the guest speaker.</p>	30 minutes	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
<p>Project closure</p>	<p>Learners may not understand the term project closure and tutors could help them to overcome this by sharing this toolkit with the group:</p> <p>Closing a project University of Birmingham https://intranet.birmingham.ac.uk/it/projects/documents/public/Toolkit-Closing-v1-May-2013.pdf A toolkit to help close a project including the process and lessons learned.</p> <p>To extend learners' understanding tutors could also explain that at the end of a project there may be many questions which need to be answered to ensure that the project is ready to be closed, and that nothing has been forgotten.</p> <p>Tutors may wish to share with learners this excellent website page which has a huge list of possible questions to ask at the end of a project prior to closure:</p> <p>Post-Implementation Reviews: Making Sure That What You Delivered Actually Works Mind Tools https://www.mindtools.com/pages/article/newPPM_74.htm A comprehensive list of questions to ask to see if goals have been achieved prior to the closure of a project.</p> <p>To finish this topic tutors may like to share some stories of unfinished projects which have been closed too soon, and how important that process is to the customer:</p> <p>Unfinished business - living 'on a building site' BBC http://www.bbc.co.uk/news/uk-northern-ireland-18039899 Six years after moving into a new housing estate there are still huge problems with the roads not being finished.</p>	1 hour	






SUGGESTED ACTIVITIES


LO No:	2				
LO Title:	Understand the skills project managers need to have				
Title of suggested activity	Suggested activities	Suggested timings	Also related to		
Communication	<p>Learners may not understand what a communication channel is and tutors could help the learners to overcome this by explaining that it is the method by which a message is relayed from a sender to a receiver(s).</p> <p>Tutors could demonstrate this by asking for a volunteer and giving them a message. Learners could be encouraged to identify who is the sender and who is the receiver.</p> <p>Learners could then share where they have had to communicate messages as the sender at work/ on work experience, for example passing on a phone message. They should also be able to identify where they have been the receiver of information; did they attend a meeting or a briefing of some kind?</p> <p>Tutors could now explain that there are a number of different communication channels through which a sender and a receiver can communicate at work.</p> <p>Learners could start by brainstorming a group list of communication channels: email, voicemail, text, letter, meeting, social media, website, handout, newsletter, video, blog, news release, body language, presentation, report, notice board, webcast, site visit, megaphone etc.</p> <p>Now the learners could draw two boxes. In one they could put methods that allow feedback from the message receiver. In the other box they could put methods that do not allow feedback. Learners should be able to discuss each one and how the feedback is important when selecting the method.</p> <table border="1" data-bbox="517 1121 1438 1294"> <tr> <td> Methods that allow feedback from the receiver: Phone Face-to-face Blog (comments section) </td> <td> Methods that do not allow for feedback from the receiver: News release Voicemail Handouts </td> </tr> </table>	Methods that allow feedback from the receiver: Phone Face-to-face Blog (comments section)	Methods that do not allow for feedback from the receiver: News release Voicemail Handouts	1 hour	
Methods that allow feedback from the receiver: Phone Face-to-face Blog (comments section)	Methods that do not allow for feedback from the receiver: News release Voicemail Handouts				

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Communication (continued)	<p>Learners could then identify in a business which methods would be most appropriate for the following situations:</p> <ul style="list-style-type: none"> • A supervisor communicating to a subordinate employee that they will have to be fired due to being constantly late for work • A manager letting the team know that they have had a good year for sales and that there will be a staff social event to celebrate • A director letting the shareholders know that there has been a good year for sales and a dividend will be paid • An employee letting their supervisor know that they will not be in for work as they are ill. <p>To complete this topic tutors may want to run some role-play scenarios for these types of communication methods or to ask learners to think of some scenarios of their own that the rest of the groups should be able to identify.</p>		
Team building	<p>Tutors could begin this topic by explaining that there will be conflict in this session. They will be working as a team. There will be times when team members need motivating. There will also be other times when team members need to be actively listening and responding to others. To see how all of this works the groups will now set off for the moon.</p> <p>The tutors could use this excellent moon landing game; the website contains all the instructions and the only resources that are needed are pencils and paper:</p> <p>Moon landing – a team building game Insight http://insight.typepad.co.uk/insight/2009/02/moon-landing-a-team-building-game.html A decision-making game. You have survived a crash on the moon and can only take certain items with you. As an individual you rank in what order you would take those items and their importance. Then you get together in teams to discuss the same list and work out a team list. This is where there is conflict and listening skills are tested to the limit.</p> <p>After the activity tutors could discuss with the group:</p> <ul style="list-style-type: none"> • Who needed motivating? Was it hard? How did they motivate them? • Was there conflict? How was it resolved? • Did they listen and respond to each other? • Did learners get better results on their own or as a team? The result should be as a team and they could then reflect on their own listening skills employed during the exercise. 	1.5 hours	




Title of suggested activity	Suggested activities	Suggested timings	Also related to
<p>Conflict management</p>	<p>To start this topic tutors could discuss the nature of conflict and any experiences that the learners have had of it in their workplace or work experience. How did they handle the situation? How did it make them feel about their job? How did it change relationships in the workplace? Tutors could also perhaps draw on their own experience of the workplace; any circumstances where they have managed tension between team members or colleagues.</p> <p>Tutors may like to discuss methods of conflict resolution and then direct learners to the excellent work of the Acas (Advisory, Conciliation and Arbitration Service) organisation. This first short video helps to explain what the service does:</p> <p>Acas: UK Workplace experts Acas https://www.youtube.com/watch?v=1fOsYkxr-Ul Acas helps employers and employees by providing information, advice, training, conciliation and other services that prevent or resolve workplace problems. There's no charge for most of what it offers.</p> <p>Tutors may then like to show this mediation video:</p> <p>Mediation in action: role-playing workplace dispute resolution Acas Acas https://www.youtube.com/watch?v=LO3OMVWN8lk In this video from Acas, three actors demonstrate how mediation can help to resolve differences and disputes between employees in the workplace. The video explains the mediation process being used after two members of staff cannot get along which is affecting a project.</p> <p> Tutors could ask learners to take the viewpoints of Paul and Kirsty and also to evaluate how the mediator helped the two come to a resolution. Hopefully learners will be led to conclude that most of the issues were down to a lack of communication between the two workers.</p>	1 hour	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Time management	<p>Tutors could help learners to understand the time management skills that project managers need by sharing this website with the group:</p> <p>Project Time Management Project Management Skills http://www.project-management-skills.com/project-time-management.html This webpage gives some insight into time management for project managers and introduces learners to a simple network diagram.</p> <p>Learners could be encouraged to think of a routine at work or home where they could use a network diagram to help manage their time. At the end of the session learners could show their diagrams in a gallery format on a wall and open them up for discussion. To conclude tutors could encourage learners to think about how these time management skills will help project managers to schedule the duration of tasks, decide what is feasible and realistic in timescales, and finally help them to measure progress.</p> 	30 minutes	
Problem solving	<p>Tutors could help learners to understand this essential project management skill by showing learners the following website and suggesting that they develop their own diagram to illustrate the steps in the problem solving cycle:</p> <p>Problem Solving Techniques & Strategies Project Management Skills http://www.project-management-skills.com/problem-solving-techniques.html This page gives the aspiring project manager 5 simple steps to solving most problems.</p> <p>Tutors could then suggest that learners use the Internet to research other problem solving cycles and see if they can add any extra steps or detail to their diagram.</p> <p>To conclude tutors could encourage learners to think about how problem solving skills will help a good project manager to define the problem, evaluate options, choose an option, to implement and finally to evaluate to see if the problem has been solved.</p> 	30 minutes	


Title of suggested activity	Suggested activities	Suggested timings	Also related to
Critical thinking	<p>To help learners to better understand what critical thinking skills a project manager might need, tutors may like to share this resource with them:</p> <p>Key Resources for Project Managers – Critical Thinking CARE http://pgdl.care.org/Key%20Resources%20for%20Project%20Managers/English%20Resource%20Guide/3_Critical_Thinking.pdf</p> <p>This document describes the basics of critical thinking, gives tools for problem solving and also some resources to help deliver this topic.</p> <p>Tutors could use the guide as a springboard for discussion; there are some excellent activities in here including the ‘5 whys’ and ‘fishbone’ diagrams. Learners could be encouraged to think about how these would be useful to a project manager by applying the diagrams to their own work or work experiences.</p> <p>Pages 25 onwards of the resource include some good questions which tutors could use to consolidate the activity and deepen learning.</p> <p> To conclude tutors could encourage learners to identify that project managers should be able to weigh up advantages and disadvantages and structure arguments logically in order to make good decisions during the project.</p>	1 hour	


SUGGESTED ACTIVITIES

LO No:	3		
LO Title:	Understand how and why projects are monitored and factors that influence a project		
Title of suggested activity	Suggested activities	Suggested timings	Also related to
Budget variance analysis	<p>Tutors may want to begin this topic by explaining that a budget is a set amount of money for part of a project. They may also wish to explain that variance is the difference between the budget amount set and the actual amount spent.</p> <p>To help learners understand how and why projects are monitored tutors could share the following online document with learners. It explains the process of budget variance analysis and will give learners an opportunity to learn by filling in a table for an imaginary project. Tutors could supply learners with some figures to put in and make some simple calculations.</p> <p>Budgeting and Variance Analysis for Community and Voluntary Organisations The Institute of Certified Public Accountants in Ireland http://www.cpaireland.ie/docs/default-source/business-resource/budgeting-and-variance-analysis-for-community-and-voluntary-organisations.pdf?sfvrsn=2</p> <p>Simple two-page online document which describes the budget variance analysis process and gives a blank table for learners to fill in some figures from which to conclude.</p> <p> Learners could then be encouraged to conclude on their budgets and discuss how useful this would be as a tool to monitor a project.</p>	1 hour	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Reasons for monitoring	<p>Tutors could help learners to understand how and why projects are monitored by sharing the list below with the group. Tutors may need to explain that the term slippage means moving away from a deadline and to delegate means to assign tasks to a subordinate. Learners could be encouraged to discuss these reasons and rank them in order of importance:</p> <ul style="list-style-type: none"> • report progress against the plan • ensure the project remains viable • identify potential slippage • identify any issues and problems • identify possible solutions • escalate to managers • delegate to colleagues. <p>Tutors could then share this video with learners and ask them which of the above list did the video narrator think was the most important reason for monitoring a project, and do they agree:</p> <p>Project Management in under 8 minutes Chris Croft https://www.youtube.com/watch?v=qkuUBcmmBpk Quick and basic guide to project management which explains some of the reasons for monitoring a project.</p> <p>To consolidate tutors may like to share this article with learners about the impact on the share price of Balfour Beatty of poor project management and project slippage:</p> <p>Balfour Beatty: bad project management to put £75m dent in profits The Telegraph Http://www.telegraph.co.uk/finance/newsbysector/industry/11127403/Balfour-Beatty-shares-plunge-on-profits-warning.html</p> <p>Article which describes how the share price of Balfour Beatty took a dive after a series of badly managed projects.</p>	30 minutes	




Title of suggested activity	Suggested activities	Suggested timings	Also related to
Internal influences	<p>Tutors could start this topic by explaining that in the early stages of planning the internal factors that influence the project could be identified and given priorities from the most influential to the least. These factors may need monitoring in case they throw the project off schedule.</p> <p>Tutors could then discuss a list of possible internal influences on projects:</p> <ul style="list-style-type: none"> • Organisational aims and objectives e.g. how aligned is the project, how clear are the objectives • Resources e.g. constraints on budgets, human resources • Procedures and policies e.g. CSR. <p>Learners could be encouraged to make this list into a mind map and decide how important each of the factors might be in the following project examples:</p> <p>Crossrail managers accused of 'culture of spying and fear' The Guardian http://www.theguardian.com/uk-news/2014/apr/26/crossrail-workers-culture-spying-fear Article about the crisis in the £15bn Crossrail project, the rail link being built between Reading and London. Learners could be able to conclude that there were some employment and CSR issues to blame for the crisis in the project.</p> <p>Launching a new retail website: what to do (and what not to do) The Guardian http://www.theguardian.com/media-network/media-network-blog/2014/jul/22/launching-new-website-tips-retail Poor internal communications and testing can hamper the launch of a retailer's new website.</p>  <p>NHS told to abandon delayed IT project The Guardian http://www.theguardian.com/society/2011/sep/22/nhs-it-project-abandoned £12.7bn computer scheme to create patient record system is to be scrapped after years of delays.</p>	30 minutes	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
External influences	<p>Tutors may wish to link this to the previous activity (Internal influences) and encourage learners to add the following categories to their mind map so that it has an internal influences side and an external influences side:</p> <div style="text-align: center;">  </div> <p>External factors that influence a project and which need monitoring:</p> <ul style="list-style-type: none"> • Suppliers/contractors e.g. availability, specialisms • Finance e.g. sources of funding, inflation, exchange rates • Laws and regulations e.g. planning permission, employment law, health and safety at work law. <p>Learners could be encouraged to use the Internet to search for suitable examples which they could bring to the group of where an external factor has influenced a particular project, for example the influence of finance on the 2012 Olympics.</p>	30 minutes	



Title of suggested activity	Suggested activities	Suggested timings	Also related to
<p>Poor leadership</p>	<p>To help learners understand how some other factors can present a risk to the success of the project, for example: poor leadership, failing to communicate, and overlooking stakeholders who could be involved, tutors may wish to share the following BBC case study and video with the group:</p> <p>£40m supercomputer scheme misses jobs targets BBC http://www.bbc.co.uk/news/uk-wales-35774920 A Welsh supercomputer project has only delivered half the jobs that were promised in the five-year project.</p> <p>Learners could read the article and watch the video and then discuss how poor leadership may have been to blame for the partial failure of the project. Learners could also identify the aims of the project and where the problems arose from.</p> <p>Tutors may wish to extend this by sharing this further article with learners and encourage them to share their opinions of the aims, problems and outcomes. (Tutors may need to explain that everyone in the UK that watches TV is bound by law to pay a licence fee to the BBC.)</p> <p>BBC's Digital Media Initiative failed because of more than poor oversight The Guardian http://www.theguardian.com/media/media-blog/2014/feb/03/bbc-digital-media-initiative-failed-mark-thompson The BBC's ill-fated Digital Media Initiative (DMI) is a story of poor leadership, which has cost licence payers nearly £100m.</p> <p>TV Licensing http://www.tvlicensing.co.uk/ The official TV Licensing website could help tutors explain where the funding for the BBC's DMI project came from in the article above.</p>	1 hour	



Title of suggested activity	Suggested activities	Suggested timings	Also related to
Failing to manage change	<p>To help learners understand the importance of managing change tutors could share the case study of Google, which has had problems because of the changing goals that the author of the article below calls 'wandering vision'. Learners could be encouraged to read the article and make a summary of the key points. In the key points they could be able to evaluate the importance to a successful project of managing change, using Google projects as examples.</p> <p>Google logic: why Google does the things it does the way it does The Guardian http://www.theguardian.com/technology/2013/jul/09/google-android-reader-why An article which explores why Google closes successful products such as Reader while backing others such as the self-driving car.</p> <p>Close-Up Look At Google's Self-Driving Car CBS https://www.youtube.com/watch?v=qE5VzuYFPU Video explaining Google's self-driving car project.</p> 	1 hour	

SUGGESTED ACTIVITIES

LO No:	4		
LO Title:	Be able to prepare project plans		
Title of suggested activity	Suggested activities	Suggested timings	Also related to
Project vision	<p>Tutors could start this topic by helping learners to understand what the term ‘project vision’ means in this context; for example the description of the project, the target audience and setting aims and SMART objectives.</p> <p>Tutors could then divide the main group into two smaller groups; each group could be given a theory: either 6 steps or 10 steps to making a project plan. Both groups could be encouraged to argue the case for their method and to produce a flow diagram of the steps on flip chart paper which they can use to explain their method to the rest of the group.</p> <p>For the 10 steps group, tutors may wish to share these resources with learners:</p> <p>10 Steps To Creating A Project Plan PM times http://www.projecttimes.com/articles/10-steps-to-creating-a-project-plan.html A 10-step well-developed project plan is outlined on this website.</p> <p>10 Critical Steps to Create a Project Plan Watermark Learning https://www.watermarklearning.com/downloads/10_Steps_to_Creating_a_Project_Plan.pdf A document that outlines in basic terms the 10 steps necessary to produce a project plan, which demonstrates project vision.</p> <p>For the 6 steps group tutors may wish to share the following two resources with learners:</p> <p>Six tips on how to create a clear project plan Computer Weekly http://www.computerweekly.com/photostory/2240205579/Six-tips-on-how-to-create-a-clear-project-plan/1/Step-1-How-to-explain-your-project-plan-clearly-to-stakeholders A website article on the six steps to create a clear project plan.</p> <p>Project Management Basics: 6 Steps to a Foolproof Project Plan Wrike https://www.wrike.com/blog/foolproof-project-plan/ A blog post on the six steps to create a project plan.</p>	1.5 hours	Unit 16 LO1

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Resource requirements	<p>Learners may not know about project resource requirements and the tutor could help them to understand this by engaging the help of an outside speaker. An ideal candidate for this would be a governor, trustee or PTA member who would be willing to come in and discuss some of the projects going on around school. For example if the school is investing in a new recycling system there will be a governor or trustee involved who will be overseeing the project. They could give a talk to the learners on the plans that may have been prepared for resource requirements such as physical resources and human resources.</p> <p>Learners could be encouraged to prepare a few questions in advance to make sure they get the right information from the guest speaker.</p>	30 minutes	
Project schedules	<p>Tutors could start this topic by using this very visual and simple presentation to introduce the idea of project scheduling:</p> <p>Lessons in Project Management - 5 - Project Planning and Scheduling Prof Frank Habbermann http://www.slideshare.net/fhabermann/lectres-in-project-management-lecture-5-project-planning-and-scheduling 76 slides to explain project scheduling and milestones. Tutors may wish to edit out some of the more complex irrelevant slides and make this into a shorter introductory presentation.</p> <p>Tutors may then like to follow that slide show with the following example:</p> <p>Microsoft Project 2016 Tutorial: How to Set Milestones in Project 2016 Simon Sez IT https://www.youtube.com/watch?v=D31q1-ShYkY A simple video that explains what project milestones are and uses of milestones. It also explains and uses examples to illustrate what a dependency is.</p> <p>For a more practical take on project scheduling tutors may wish to encourage learners to research online templates, and there may be templates on the software of the learning centre. For example using the File>new command in both PowerPoint and Word will reveal a host of milestone templates.</p> <p>Learners could consolidate by sharing their best examples and ranking them in terms of usefulness, and then perhaps voting on which tool they would use.</p>	30 minutes	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Budget costing	<p>To help tutors explain what budget costing is they may wish to share this video with learners and then ask them to explain what they now think it might mean:</p> <p>Microsoft Project 2013 Tutorial - Budget Costs and Budgeting Simon Sez IT https://www.youtube.com/watch?v=KzQMnDollzM Tutorial which explains in very simple terms what budget costing is and how progress can be tracked in a software program. The example used is for a website design for a food company.</p>	30 minutes	Unit 2 LO3
Contingency plans	<p>Tutors could start this topic by discussing with learners what they think a contingency plan might be. Tutors could ask learners what they will do if they do not pass their qualification. Do they have a plan B? Could learners think of a time when they needed to have a plan B?</p> <p>Tutors could encourage learners to do a quick search for articles of news on the Internet – they might find swine flu, Ebola, acts of terrorism contingency plans, whatever is current etc. Tutors could then explain that contingency plans for smaller business projects may simply be having viable alternatives to suppliers and key staff in case the worst may happen. To help deepen the understanding of the learners tutors could share this Mind Tools article with the group and then discuss what they now think contingency planning might be.</p> <p>Contingency Planning: Developing a Good 'Plan B' Mind Tools https://www.mindtools.com/pages/article/newLDR_51.htm Explains that contingency planning is usually about major disasters, but in business project management it can simply be that a supplier goes bust and plans need to be in place in case there are significant changes which may prevent the successful completion of the project.</p> <p>Tutors may then want to consolidate by showing how important this can be to even large companies. Learners could be encouraged to identify what problem the contingency covered in both these examples:</p> <p>£13m water project hits problems BBC http://news.bbc.co.uk/1/hi/wales/mid/7905780.stm A £13m project to improve the water system in north Powys hit problems after a company hired to do the work pulled out of the contract.</p>	1 hour	

Title of suggested activity	Suggested activities	Suggested timings	Also related to
Contingency plans (continued)	<p>Stadium project costs rise by £4m BBC http://news.bbc.co.uk/1/hi/scotland/glasgow_and_west/7283241.stm Contingency was used in a stadium building project after the Scottish Rugby Union pulled out as a planning partner.</p> <p>Tutors could then help learners to conclude that contingency planning may take many forms, but should be included as a vital part of the project plan.</p>		
CPA (critical path analysis)	<p>Tutors could start this topic by explaining what a critical path analysis (CPA) tool is and how it works. Tutors could do this by sharing this simple video with the group:</p> <p>Microsoft Project 2013 Training - Critical Paths Simon Sez IT https://www.youtube.com/watch?v=F1r7h15ngJw Describes what a critical path of a project is.</p> <p>Tutors may feel they need to give further information and examples and could use this video as a visual example to help learners understand the term.</p> <p>Learn PMP Critical Path In 17 Minutes Flat! Dave Litten https://www.youtube.com/watch?v=LsbnHNAkfVQ Uses the example of a birthday party to draw a critical path; also shows a CPA diagram compared to a Gantt chart.</p> <p>Tutors could use this resource.</p> <p>Critical Path Analysis – Cooking Bolognese The OR Society http://www.learnaboutor.co.uk/teachers_materials/ORAiS/teachers_ORAiS_CPA.htm This resource includes a PowerPoint to explain the key points, then a worksheet and notes to allow learners to prepare a CPA diagram of their own.</p>	1 hour	Unit 3 LO3, LO5



We'd like to know your view on the resources we produce. By clicking on the 'Like' or 'Dislike' button you can help us to ensure that our resources work for you. When the email template pops up please add additional comments if you wish and then just click 'Send'. Thank you.

If you do not currently offer this OCR qualification but would like to do so, please complete the Expression of Interest Form which can be found here: www.ocr.org.uk/expression-of-interest

OCR Resources: *the small print*

OCR's resources are provided to support the teaching of OCR specifications, but in no way constitute an endorsed teaching method that is required by the Board and the decision to use them lies with the individual teacher. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

© OCR 2016 – This resource may be freely copied and distributed, as long as the OCR logo and this message remain intact and OCR is acknowledged as the originator of this work.

OCR acknowledges the use of the following content:

Cover image: vgajic/istockphoto.com

Square down and Square up: alexwhite/Shutterstock.com

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications:
resources.feedback@ocr.org.uk

We will inform centres about any changes to the specification. We will also publish changes on our website. The latest version of our specification will always be the one on our website (www.ocr.org.uk) and this may differ from printed versions.

Copyright © OCR 2016. All rights reserved.

Copyright

OCR retains the copyright on all its publications, including the specifications. However, registered centres for OCR are permitted to copy material from this specification booklet for their own internal use.

ocr.org.uk/business

OCR customer contact centre

Vocational qualifications

Telephone 02476 851509

Facsimile 02476 851633

Email vocational.qualifications@ocr.org.uk

OCR is part of Cambridge Assessment, a department of the University of Cambridge. For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2016 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England.

Registered office 1 Hills Road, Cambridge CB1 2EU. Registered company number 3484466. OCR is an exempt charity.

