

# Tutor support

## Edexcel Diplomas

To support the Edexcel Level 1, Level 2 and Level 3  
Principal Learning in Information Technology to be  
taught from September 2008

Issue 3

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# Introduction

This publication supports delivery of the Edexcel Level 1, Level 2 and Level 3 Principal Learning in Information Technology. It must be read in conjunction with relevant sections of the published specification.

All Edexcel Level 1, Level 2 and Level 3 Principal Learning units contain sections relating to guidance for delivering and assessing each unit.

Each unit identifies the guided learning hours (GLH) required for delivery and assessment. Centres should allocate this amount of time within the timetable for its delivery and assessment. Edexcel has identified within each internally assessed unit the GLH that will probably be required to meet the assessment requirements of the unit. This may, for example, include time spent in experiential learning, practising skills, research activities and undertaking summative assessment activities. (See sections relating to *Internal assessment* and *Programme design and delivery* in the generic introductory part of the *Specification* document.)

The tutor support materials in this publication are designed to supplement the guidance given in the units. For each unit there will be an exemplar assignment that covers the whole unit and relevant centre guidance for the adaptation of exemplar assignments and for co-teaching opportunities where they may exist.

These tutor support materials are not prescriptive however Edexcel recommends that centres use these, either in their current form or adapted within the scope of the guidelines given.

Tutors may feel that the unit can be delivered and assessed more effectively in a different way. This may be because of the way the qualification is organised within their centre or after taking into consideration their learners and their learning styles and prior learning.

For centres wishing to devise their own assignments for internally assessed units *Annexe A: Internal Assessment of Principal Learning Units: Controls for Task Setting, Task Taking and Task Marking* contains the procedures centres must follow to ensure that these are developed and managed correctly.

# Structure and aims of Principal Learning in Information Technology

## The Edexcel Diplomas in Information Technology: Principal Learning

The Edexcel Diplomas in Information Technology aim to:

- reflect the blend of business, technical and interpersonal skills needed in modern IT and telecoms professional roles
- develop valued transferable skills in English and communications, Maths, project management and Personal, Learning and Thinking Skills
- inspire learners through an exploration of the real-world integration of technology in business, supported by innovative approaches to content, delivery and assessment
- encourage more learners into technology-related careers with exciting content that is equally attractive to all learners
- help learners to prepare for adaptable careers and lives in the ever-changing landscape of the technology-enabled world
- boost learners' employability, whether after higher education or directly from the Diploma, through the use of up-to-date, employer-relevant content.

# The structure of the Principal learning in Information Technology

## Edexcel Level 1 Principal Learning in Information Technology

All units are compulsory.

Unit number	Title	GLH	Assessment
1	Unit 1: Technology in Organisations	30	External
2	Unit 2: The Impact of Technology	30	Internal
3	Unit 3: Working with People	60	Internal
4	Unit 4: Network Systems	30	Internal
5	Unit 5: Database Systems	30	Internal
6	Unit 6: Multimedia	60	Internal

## Edexcel Level 2 Principal Learning in Information Technology

All units are compulsory.

Unit number	Title	GLH	Assessment
1	Unit 1: The Potential of Technology	60	External
2	Unit 2: Exploring Organisations	60	Internal
3	Unit 3: Effective Communication	60	Internal
4	Unit 4: Skills for Innovation	60	Internal
5	Unit 5: Technology Systems	60	Internal
6	Unit 6: Multimedia	60	Internal
7	Unit 7: Managing Projects	60	Internal

## Edexcel Level 3 Principal Learning in Information Technology

All units are compulsory.

Unit number	Title	GLH	Assessment
1	Unit 1: The Potential of Technology	60	Internal
2	Unit 2: Understanding Organisations	90	External
3	Unit 3: Professional Development	90	Internal
4	Unit 4: Creating Technology Solutions	90	Internal
5	Unit 5: Managing Technology Systems	60	Internal
6	Unit 6: Multimedia and Digital Projects	60	Internal
7	Unit 7: Making Projects Successful	90	External

## Further information

For further information please call Customer Services on 0844 576 0028 (calls may be recorded for training purposes) or visit our website at [www.edexcel.com](http://www.edexcel.com).

### Useful publications

Further copies of this document and related publications can be obtained from:

Edexcel Publications  
Adamsway  
Mansfield  
Nottinghamshire NG18 4FN

Telephone: 01623 467 467  
Fax: 01623 450 481  
Email: [publications@linney.com](mailto:publications@linney.com)

Related information and publications include:

- *Accreditation of Prior Learning* available on our website: [www.edexcel.com](http://www.edexcel.com)
- *Guidance for Centres Offering Edexcel/BTEC NQF Accredited Programmes* (Edexcel, distributed to centres annually)
- *Operating Rules for Component and Diploma Awarding Bodies* (QCA, 2007)
- *The Diploma Structure and Standards, Version 2* (QCA, 2007)
- *Regulatory Arrangements for the Qualification and Credit Framework* (Ofqual, August 2008)
- *What is a Diploma?* (DFES and QCA, 2007)
- the ASL catalogue on the National Database of Accredited Qualifications (NDAQ) website: [www.ndaq.org.uk](http://www.ndaq.org.uk)
- the current Edexcel publications catalogue and update catalogue
- the latest news on the Diploma from QCA available on their website: [www.qca.org.uk/diploma](http://www.qca.org.uk/diploma)
- the latest news on Edexcel Diplomas available on our website: [www.edexcel.com/quals/diploma](http://www.edexcel.com/quals/diploma)

NB: Most of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

# Professional development and training

Edexcel supports UK and international customers with training related to our qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building key skills into your programme
- building in effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website ([www.edexcel.com/training](http://www.edexcel.com/training)). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

Our customer service numbers are:

The Diploma	0844 576 0028
BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
DIDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

The training we provide:

- is active – ideas are developed and applied
- is designed to be supportive and thought provoking
- builds on best practice.

# Level 1



Paper Reference(s)

IT102/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 1**

**Unit 2: The Impact of Technology**

**Sample Assignment Brief**

Subject: IT		Level 1 Unit 2
Unit Title: The Impact of Technology		Assessment Time: 10 hours
LO.1	Know how and why organisations use technology.	
LO.2	Know about the impact of technology on individuals and society.	
PLTS	IE1, IE2, IE3.	

## Scenario

You have been asked to contribute to an exhibition illustrating the impact of technology on organisations, individuals and society.

### What you need to do

- Ask your teacher to help you to choose **two** suitable organisations to study.
- Produce a **fact file** of each organisation including:
  - its name
  - what it does
  - what technology it uses
  - how this technology helps it achieve its objectives.
- Produce an illustrated **display** showing how you and people you know use technology for:
  - living
  - learning
  - working
  - socialising.

You must make comments on how the technologies used affects the people who use them.

- Produce an **information board** highlighting one positive and one negative impact of technology on society.
  - positive: how web-based virtual communities are bringing people closer together
  - negative: how some individuals and communities benefit more from technology than others.

### What you need to submit

- Your two fact files.
- Your display.
- Your information board.

## **Notes for teachers**

### **Fact files**

You should help learners to choose two suitable organisations to study. There is no expectation or requirement that each learner in the group should study a different organisation.

As well as describing the technology used by each organisation, learners must also indicate what it is used for, eg administration, marketing, mobile working etc and how it benefits the organisation.

The fact files can be presented in any appropriate fashion.

### **Display**

You should help learners choose suitable examples of how technology is affecting the way in which individuals live, learn, work and socialise. They must then make comments on how the technologies affect the people that use them.

The display can be digital or print-based.

### **Information board**

Learners should use examples to illustrate a positive and a negative impact of technology on society.

The information board can digital or print-based.

Paper Reference(s)

IT103/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 1**

**Unit 3: Working with People**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 1 Unit 3</b>
<b>Unit Title: Working with People</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Know how and why different types of communication media are used for different business purposes.	
<b>LO.2</b>	Be able to use clear appropriate English and demonstrate numeracy skills in a range of simple business related communications.	
<b>LO.3</b>	Know how behaviour, personal styles and actions affect communication and achievement of objectives.	
<b>LO.4</b>	Be able to work in a team to meet agreed objectives, demonstrating active listening skills and effective, confident speaking skills.	
<b>LO.5</b>	Be able to reflect on the workings of teams and the different roles individuals play within teams, demonstrating self awareness.	
<b>PLTS</b>	TW1, TW2, TW3, TW4, TW5, TW6, RL5.	

## Scenario

### Gone missing!

November 2007: 25 million people's child benefit details, held on two discs

December 2007: 7,685 Northern Ireland drivers' details

December 2007: 3 million learner drivers' details lost in US

January 2008: 600,000 people's details lost on Navy officer's stolen laptop

June 2008: Six laptops holding 20,000 patients' details stolen from hospital

July 2008: MoD reveals 658 laptops stolen in four years

August 2008: A memory stick containing the names, dates of birth and expected release dates of 84,000 prisoners records

Organisations of every kind hold vast quantities of personal data about individuals and are responsible for keeping it safe and secure.

Unfortunately, far too many people are failing to follow their organisation's security policies and procedures. This needs to change! Everyone needs to be aware of the importance of protecting private data and how to go about doing so.

### This is your challenge

You must work in a team of 3 or 4 to raise awareness of the issues and promote good practice.

## **What you need to do**

### **YOUR TEAM**

#### **Form a team**

- Form a team of three or four. Check that your teacher is happy with your choice of team members.
- Work together to make sure you understand what has to be done.

#### **Produce a team plan**

- Before you start working on any of the tasks, produce a team plan. Show clearly who will do what. The plan should include a list of tasks that the team will be completing with estimated start date and times for each of the tasks.
- Agree your plan with your teacher.

#### **Use the plan to track progress**

- Use your plan to check your progress. Change the dates and times to show where the team did the tasks on a different day or if they took longer or shorter time than the team first thought.
- Add comments about:
  - what you have done
  - what went well
  - how you dealt with any problems.
- When you finish each main task record the end date for each one on the plan.

#### **Keep a record**

- Keep a personal diary or blog to record all that happens to you during the project. Update it every time you work on the project.
- Keep a record of team discussions and key decisions made.

## **YOUR TASK**

### **Find out about the issue**

- Each team member must investigate an aspect of data security, eg recent breaches of security, legal requirements, policies and procedures.
- Gather both textual and numerical information.

The team will use this information in their publications.

### **Investigate types of communication media**

- Each team member must investigate uses of digital, print and spoken communication media in business and present their findings to the team.

The team will use this information to help them decide how they will communicate their message.

### **Work as a team to communicate the message**

- Make a list of the publications the team will produce. It must include enough items to allow each team member to produce three publications.

In addition, one publication must be a joint effort, requiring contributions from all team members, eg a presentation, a scrolling display or an information point.

You must provide comments (in your diary) on your choice of publications (including the 'team task').

- Decide on the audience and purpose for each publication and agree on a set of requirements.
- Decide who will produce each publication. Share the workload so that each of you gets a chance to use different types of communication media.
- Make sure that each member of the team has the opportunity to show present both textual and numerical information.
- Decide who will do what for the joint publication and make this clear (in your diary) so anyone looking at the work can see the contribution of each team member.
- Produce all the items. Make sure that they work together as a set to get your message across.
- Ask members of the target audience to give you useful feedback. Make changes if necessary.

## LOOKING BACK

At the end of the project spend some time reviewing the project.

### Choice of publications

Comment on your team's choice of publications.

- How well do they get the message across?
- How well do they work as a set?
- Are any other publications needed?

### Team performance

Comment on what went well, what went badly.

- Did all of the team work well together?
- Did anyone say or do anything that made it easier or more difficult for the team to be successful?
- Did anything happen that had an effect on the team – behaviour or actions of any team member(s)?

### Own performance

How good a team player do you think you are?

- List two things that you did that helped your team achieve its objectives.
- List two things you could have done better.
- List two things you have learned about yourself when working in the team.

### What you need to submit

- A copy of the final version of the team plan.
- Your diary.
- Your record of team discussions and key decisions made.
- Notes of your investigation into uses of communication media in business.
- Details of the publications your team will produce.
- The publications you produced.
- A copy of the joint publication, showing which bits you did.
- Your final review.

## Notes for teachers

There are two aspects to this assignment. One is the team work, which attracts the bulk of the marks. The other is the business-related communications (publications) that learners have to produce.

The assignment brief for Level 2, Unit 3 has the same scenario and similar activities, so as to facilitate joint delivery of the Foundation and Higher if appropriate.

## Team work

You should help learners organise themselves into teams of three or four.

The team should produce a joint team plan, but individual team members must keep their own diary with notes on progress and about key discussions and decisions made.

If needs be, you should help teams to produce a workable plan. Do not let them proceed until they have one.

Much of the work is carried out by individual team members, but the team should be encouraged to hold meetings from time to time to monitor progress, update the plan and give each other feedback.

There is a requirement for them to work together to produce one publication. This should provide you with a good opportunity to observe team work in action (marking grid B).

## The message

The message the teams have to communicate is one that's particularly relevant for IT. Breaches of security have been coming thick and fast over the last few months. What the teams have to do is raise awareness of the problem and tell people what they need to do to keep data secure.

A different topic, that you think is more relevant to your learners, can be substituted if required.

Teams can be given help to find information about the topic.

## Communicating the message

The assignment uses the term 'publication' in its broadest sense to mean any form of business-related communication.

Each team member must produce three individual publications and contribute to one joint publication. They must ensure they make a note somewhere (eg, in the diary) to explain why they chose their individual publications and the one for the team task).

Teams can be given guidance on their choice of publications.

It is essential that each team member has the opportunity to present both textual and numerical information.

Before beginning work on their publications, the team should complete a publications table, similar to this one.

publication	audience	purpose	requirements	to be created by
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Paper Reference(s)

IT104/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 1**

**Unit 4: Network Systems**

**Sample Assignment Brief**

Subject: IT		Level 1 Unit 4
Unit Title: Network Systems		Assessment Time: 10 hours
LO.1	Know how a PC is connected to a network.	
LO.2	Be able to connect a PC to an existing network and resolve simple problems.	
PLTS	IE1, CT5, SM6.	

## Scenario

'Learn to Earn' (L2E) owns a large number of training centres in the UK. Each centre has a number of classrooms. Each classroom is equipped with an electronic whiteboard, an overhead projector and video conferencing facilities.

A wide range of courses take place at L2E's centres. Most of them are delivered by visiting trainers. Nowadays, most trainers prefer to use their own laptop rather than one supplied by the centre.

You have recently started work as a trainee network technician at one of L2E's training centres and have been asked to connect a visiting trainer's laptop to the network.

Before the course starts, the trainer needs to print off a set of handouts to give to delegates. You must make sure that her laptop can access the network printer.

## What you need to do

- Produce a diagram identifying the components needed to connect a laptop to an existing network with a description of their purpose.
- Produce a document that lists the key components and provides a description of their purpose.

The key components are as follows:

- Work station
  - Network interface (network card, USB wireless adapter)
  - Connection infrastructure (switch, cabling, wireless base station)
  - Network resources (printer, network drive)
- 
- Connect the laptop to the network.
  - Make sure it has access to the network printer.
  - Carry out testing to make sure that the laptop is functioning correctly on the network and can use the network printer.
  - Deal with some simple problems.

## What you need to submit

- Your diagram identifying the components needed to connect a laptop to an existing network.

Your teacher will observe you connecting the laptop to the network and making sure that everything works properly. They will complete a learner observation record.

## **Notes for teachers**

### **Introduction**

You must observe the learner connecting a laptop to an existing network and accessing a network printer. You must use Marking Grid B to assess how well they carried out this task. The degree of support the learner required is a key differentiator, although there are others.

Make sure they have provided a description of the full list of key components.

### **Problem solving**

You will need to create some simple problems for the learner to identify and resolve.

Paper Reference(s)

IT105/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 1**

**Unit 5: Database Systems**

**Sample Assignment Brief**

Subject: IT		Level 1 Unit 5
Unit Title: Database Systems		Assessment Time: 10 hours
LO.1	Be able to create a simple database system.	
LO.2	Be able to use database tools to retrieve and present information.	
PLTS	CT1, SM2.	

## Scenario

Brunswick College has a number of sports clubs: football, cricket, badminton, squash etc.

Elaine Thomas is responsible for the badminton club. She wants you to update the membership database and produce some reports.

The database holds the following information about members: Member number, First name, Surname, Address, Postcode, Telephone number, Date of birth, Gender, Date joined, Team ranking, Fee paid.

The team ranking relates to whether the member plays for the A, B or C teams. Not all members play for a team.

Members must pay a fee at the start of each year. The 'fee paid' field contains Y or N.

## What you need to do

Use database software to open the database file BADCLUB.

Print the table on one sheet of A4 in datasheet view. Label it 'Badminton Members'.

Three new members have joined the badminton club since the start of the term and two have left.

Add the new members details given below (Member number will be inserted automatically).

Name	Contact details	Date of birth	Date joined	Gender	Team ranking	Fee paid
John Banks	13 Lawrance Lea Newton SG16 7PR 01345 567385	9/9/91	16/1/07	M	B	Y
Gill Somerton	The Nook Barton Rd Gransford SG10 2QS 07706 523758	12/6/91	16/1/07	F		N
Peter Smith	213 High Street Gransford SG10 1NM 07890 213498	2/3/90	22/1/07	M	A	Y

James French and Dave Williams have left.

- Delete their records from the database.

Helen Brooks has been promoted to the A team.

- Amend Helen's record to show her new ranking.
- Print the table on one sheet of A4 in datasheet view to show the changes you have made. Label it 'Record Handling'.
- Produce a list of club members sorted in alphabetical order of surname.
- Print the sorted table on one A4 sheet. Label it 'List of Members'.
- Search the database for female members of the club.
- Print the results of your search on one A4 sheet showing all the fields. Label it 'Female Members'.

Elaine wants a list of everyone who plays for the A team.

- Search the database to find this information.
- Use the results of your search to produce a report
  - show only First name, Surname and Gender
  - enter the title '**A Team Players**'.
- Print the report on one A4 sheet.

Elaine currently keeps a paper record of the matches played and the results. Here is an example.

Match No	Date of match	Team played	Ranking	Ladies doubles	Mens doubles	Mixed doubles
1	6/9/06	HILLS RD	A	W	L	W
2	"	"	B	W	W	W
3	"	"	C	L	L	L

W = Won L = Lost

She has asked you to create a 'Results' database to store this information.

- Design and create a suitable database structure using appropriate field names, field lengths and data types.
- Print a view of your design which shows all fields and highlights the field length and format of the Ranking field.
- Design a data entry form for Elaine to use. Customise it to make it as user friendly as possible.

**What you need to submit**

- The printout labelled 'Record Handling'.
- The printout labelled 'List of Members'.
- The printout labelled 'Female Members'.
- The 'A Team Players' report.
- The printout showing the design of your 'Results' database.
- A screen dump of your data entry form, labelled to show the features you have used to make it easy to use.
- Your test users' comments about your data entry form.

### **Notes for teachers**

A data file of membership details (BADCLUB database) is provided so that learners do not have to spend a great deal of time keying in records. This can be found in the IT Principal Learning section of the Diploma website.

Learners are not expected to import the data themselves. They should be given the populated BADCLUB database to work with.

However, they must design and create the structure of the 'Results' database and the data entry form themselves.

Paper Reference(s)

IT106/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 1**

**Unit 6: Multimedia**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 1 Unit 6</b>
<b>Unit Title: Multimedia</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Know how multimedia is used in business.	
<b>LO.2</b>	Be able to design, develop and test simple multimedia products.	
<b>LO.3</b>	Be able to seek feedback from test users to identify opportunities for improvement.	
<b>PLTS</b>	CT1, CT2, CT3, CT5, RL4.	

## Scenario

LTK is an advertising company. One of its clients is about to launch a new brand of sportswear. The client wants to use multimedia to promote the new sportswear.

You work at LTK. You have been asked to investigate how and why companies use multimedia to promote their products and summarise your findings for the client.

You must also design and create a set of digital posters and a movie to be used as part of the promotional campaign for the new sportswear.

## What you need to do

- Investigate two different uses of multimedia in business. You should choose two from 'Promotion and Advertising', 'Education and Training' or 'Entertainment and Leisure'.
- Write brief notes describing how and why multimedia is used in each case.

## Digital posters

- Design a set of four digital posters to promote the new range of sportswear that:
  - must run continuously in sequence
  - be suitable for use on a large screen
  - be fun to look at
  - appeal to young people with an active lifestyle.

The designs must be produced before you create the posters.

- Produce a detailed storyboard for each poster.
- Gather and prepare the digital assets needed for the posters. Make sure you record where you got each asset from.
- Using your designs, create your digital posters. Check them carefully and make sure that each one is displayed for long enough to allow viewers to read it but not too long so they get bored.
- Make use of feedback from suitable test users to ensure that the posters will appeal to the target audience and encourage them to buy the sportswear.

## Movie

- Design a movie at least four sports. The movie must:
  - only consist of still images and include an original soundtrack
  - run automatically without user input for between 40 and 60 seconds
  - encourage people to actively participate in a sport.
- Use a timeline storyboard to design the movie. Your designs must be completed before you create the movie.
- Gather and prepare the digital assets needed for your movie. Make sure you record where you got each asset from.
- Using your designs, create your movie. Check it carefully and make sure that it is not too long or too short.
- Make use of feedback from suitable test users to ensure that the movie will appeal to the target audience and encourage them to take up a sport.
- Get at least two people to review your multimedia products. Ask them to tell you:
  - which features they particularly like
  - any improvements they think you should make.
- Write a review of your products. Commenting on:
  - fitness for audience and purpose
  - how well they meet the requirements
  - how well the assets work together.
- Suggest at least one way in which they could be improved.

## What you need to submit

- Your notes describing how and why multimedia is used in business.
- The designs/storyboards for your digital posters.
- Your digital posters.
- The designs/timeline storyboard you used to design your movie.
- The movie.
- The record of which assets you used and where you got them from.
- The feedback you received from reviewers.
- Your review of your products with the suggestion(s) for improvement

### **Notes for teachers**

In producing the two products learners must work with at least five different types of assets (sound, video, still images, animation, text).

Test users and reviewers must be fully briefed on the audience and purpose of each product and the specified requirements.

Whilst specific evidence of testing is not required, it must be possible to infer that testing has taken place by viewing the multimedia products.

The products themselves must be assessed and – if required – submitted for moderation on CD. It is not appropriate for annotated printouts to be supplied as a substitute.



# Level 2



Paper Reference(s)

IT202/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 2: Exploring Organisations**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level: 2 Unit 2</b>
<b>Unit Title: Exploring Organisations</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Know that organisations have different structures, cultures and roles.	
<b>LO.2</b>	Understand the purpose of key business processes.	
<b>LO.3</b>	Understand how and why technology is used to support business processes.	
<b>LO.4</b>	Understand that a number of factors contribute to the success of a business.	
<b>PLTS</b>	SM2, SM4, RL5, RL6.	

## Scenario

According to e-skills UK, the Sector Skills Council for IT and Telecoms, making the most of technology is the single most important step the UK can take to improve productivity.

However, research carried out by e-skills UK indicates that many managers of small and medium sized businesses (SMEs) are unaware of the potential benefits of technology.

Your task is to produce a **Business IT Guide** for these managers, using examples of two successful organisations to illustrate how technology can support key business processes.

## What you need to do

- Ask your teacher to help you to choose **two** suitable organisations to study.
- Produce a profile of each organisation outlining:
  - its purpose
  - its structure
  - its culture
  - the role of key personnel.

Briefly explain how its structure, culture and job roles help it to achieve its objectives, using suitable examples to illustrate this.

- Produce a guide for managers of SMEs explaining the purpose of each of these key business processes and how technology can be used to support them:
  - customer relationship management
  - people management
  - supplier management
  - service delivery.
- Use examples from the organisations you have studied to illustrate the guide.
- Use specialist vocabulary where appropriate.
- Choose a suitable method of presenting this information.

### **Scenario**

Having a bright idea that no-one else has thought of may be the first step to becoming a successful entrepreneur, but there's a lot more to it than that!

Your next task is to use your experience of playing a business simulation game to devise a '**Dummies Guide to Success in Business**' for budding entrepreneurs.

### **What you need to do**

- Your teacher will help you choose a suitable business simulation game. Play the game, making note of factors that contributed to your success or failure.
- Produce a set of recommendations for budding entrepreneurs, using examples drawn from your own experience to illustrate what makes a business successful.
- Choose a suitable method of presenting this information.

### **What you need to submit**

- Your Business IT Guide for managers of SMEs.
- Your Dummies Guide to Success in Business.

## **Notes for teachers**

### **Selecting suitable organisations**

You should help learners to choose two suitable organisations to study. They should be ones that use technology to support key business processes.

It is expected that many centres will make use of:

- visits made to businesses
- visiting speakers
- work placements
- information collected by a teacher on a work placement or visit.

It is highly unlikely that internet research on a company will yield the detail and level of information required to complete this task successfully.

There is no expectation or requirement that learners should each study a different organisation.

### **The Business IT Guide**

The guide can be print or screen-based. It could, for example, be double-pages spread in a trade magazine, an information point, a set of inter-linked web pages.

### **The Business Simulation**

Any suitable business simulation game can be used, providing it allows the learner to extrapolate some general conclusions about what makes a business successful.



Paper Reference(s)

IT203/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 3: Effective Communication**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 2 Unit 3</b>
<b>Unit Title: Effective Communication</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Understand why different types of communication media are used for different purposes.	
<b>LO.2</b>	Be able to use confident, correct and contextually appropriate English in a range of business-related communications.	
<b>LO.3</b>	Understand how different behaviours, attitudes and actions impact on effective communication and performance between individuals and teams.	
<b>LO.4</b>	Be able to work in a team to meet agreed objectives.	
<b>LO.5</b>	Be able to evaluate their own performance as an individual and a member of a team.	
<b>PLTS</b>	TW1, TW2, TW3, TW4, TW5, TW6, RL1, RL4, RL5, EP4.	

## Scenario

### Gone missing!

November 2007: 25 million people's child benefit details, held on two discs

December 2007: 7,685 Northern Ireland drivers' details

December 2007: 3 million learner drivers' details lost in US

January 2008: 600,000 people's details lost on Navy officer's stolen laptop

June 2008: Six laptops holding 20,000 patients' details stolen from hospital

July 2008: MoD reveals 658 laptops stolen in four years

August 2008: A memory stick containing the names, dates of birth and expected release dates of 84,000 prisoners records

Organisations of every kind hold vast quantities of personal data about individuals and are responsible for keeping it safe and secure.

Unfortunately, far too many people are failing to follow their organisation's security policies and procedures. This needs to change! Everyone needs to be aware of the importance of protecting private data and how to go about doing so.

### This is your challenge

You must work in a team of 3 or 4 to plan a communications campaign to raise awareness of the issues and promote good practice.

## **What you need to do**

### **YOUR TEAM**

#### **Form a team**

- Form a team of three or four. Try to ensure that you have a mix of personality types. Check that your teacher is happy with your choice of team members.
- Hold a team meeting to explore what needs to be done and agree your objectives.

#### **Produce a team plan**

- Before you start working on any of the tasks, produce a team plan. Show clearly who will do what. Agree your plan with your teacher.

#### **Use the plan to track progress**

- Use your plan to track your progress.
- Add comments about:
  - what you have done
  - what went well
  - how you dealt with any problems.
- When you finish each main task record the date on the plan.

#### **Keep a record**

- Keep a personal diary or blog to record all that happens to you during the project. Update it every time you work on the project.
- Keep a record of team discussions and key decisions made.
- Note down any occasions when someone's behaviour, attitude or actions had an impact – positive or negative – on the team's performance.

## **YOUR TASK**

### **Investigate the issue**

- Each team member must investigate a different aspect of data security, eg recent breaches of security, legal requirements, policies and procedures
- Hold a team meeting to share your findings with one another.

### **Investigate types of communication media**

- Each team member must carry out an investigation into communication media and prepare a brief presentation covering:
  - the main types of communication media (digital, print and spoken) used in business
  - some examples of their use
  - benefits and limitations.

The team will use this information to help them decide which type of media to use in their communications campaign.

### **Work as a team to communicate the message**

- Make a list of the publications the team will produce. It must include enough items to allow each team member to produce at least three publications.

In addition, one publication must be a joint effort, requiring contributions from all team members, eg a website, an information point, a movie.

- Decide on a set of criteria you will use to judge the success of each publication.
- Decide who will produce each publication. Share the workload so that each of you gets a chance to use different types of communication media.
- Decide who will do what for the joint publication.
- Produce all the items. Check for accuracy and consistency.
- Ask for feedback from each other. Make changes if necessary.
- Make sure that all your publications work together as a set to get your message across.
- Ask members of the target audience to give you feedback. Make changes if necessary.

## LOOKING BACK

At the end of the project spend some time reflecting on your performance.

### Choice of publications

- Did you choose an appropriate set of publications?
- Which publications worked well? Which were less successful?
- How well did they work together as a set?
- Were any other publications needed?
- What feedback did you get? How did you respond?

### Team performance

Consider what went well and what went badly.

- Did the team work well together?
- Did any team members work harder than others?
- Did anyone say or do anything that made it easier or more difficult for the team to be successful?
- How well did you communicate with each other? Were there any blocks to communication? How did you overcome them?
- How useful was the feedback you gave each other?
- What could the team have done better?

### Own performance

How good a team player do you think you are?

- Describe two things that you did that helped your team achieve its objectives.
- How well did you communicate with other team members?
- What feedback did you give to whom? How useful was it?
- What feedback did you receive and how did you respond?
- What could you have done better?

**What you need to submit**

- A copy of the initial team plan.
- A copy of the final version of the team plan.
- Your diary.
- Your record of team discussions and key decisions made.
- Your communications media presentation.
- Details of the publications your team will produce.
- The publications you produced.
- A copy of the joint publication, annotated to show your contribution.
- Your final review.

### **Notes for teachers**

There are two aspects to this assignment. One is the team work, which attracts the bulk of the marks. The other is the communications campaign that the team works on.

The assignment brief for Level 1, Unit 3 has the same scenario and similar activities, so as to facilitate joint delivery of the Foundation and Higher if appropriate.

### **Team work**

The team should produce a joint team plan, but individual team members must keep their own diary and notes about key discussions and decisions made.

If needs be, you should help teams to produce a workable plan. Do not let them proceed until they have one.

Much of the work is carried out by individual team members, but the team should be encouraged to hold regular meetings to monitor progress, update the plan and give each other feedback.

One of the requirements of the brief is that they produce one joint publication. This should provide you with a good opportunity to observe team work in action (Marking grid B).

### **The message**

The message the teams have to communicate is one that's particularly relevant for IT. Breaches of security have been coming thick and fast over the last few months. What the teams have to do is raise awareness of the problem and tell people what they need to do.

A different topic can be substituted if required.

### **Communicating the message**

The assignment uses the term 'publication' in its broadest sense to mean any form of business-related communication.

Each team member must produce three individual publications and contribute to one joint publication.

Paper Reference(s)

IT204/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 4: Skills for Innovation**

**Sample Assignment Brief**

Subject: IT		Level 2 Unit 4
Unit Title: Skills for Innovation		Assessment Time: 20 hours
LO.1	Be able to investigate business challenges and opportunities, using numerical and graphical techniques to analyse and present relevant information.	
LO.2	Know about legal and other constraints that affect what businesses can do.	
LO.3	Be able to present successful business proposals and win support.	
PLTS	CT1, CT2, CT5, IE1, IE2, IE4, IE6, EP2, EP3, EP5.	

## **Scenario**

Vicky Jenkins is a young entrepreneur. She runs a small business selling collectable vinyl records. She started when she was at school, buying old records at car boot sales and auctioning them on e-bay.

Over the years she has made contact with numerous specialist record dealers, both in the UK and internationally. She sends them regular emails with lists of records that she thinks they will be interested in. In return, they send her lists of available records.

Interest in vinyl records is growing and Vicky's business is booming. She expects this upward trend to continue for at least five years.

Vicky works from home. She has converted the garage into an office and stock room.

The business has grown to such an extent that Vicky has recently employed an assistant. Jack works part time, three days a week.

## **Network**

Until recently Vicky has made do with a laptop to run the business, but now that Jack is working with her this is no longer adequate. She wants you to recommend a cost-effective network solution that will allow her and Jack to each have their own computer, share business documents and be on the internet at the same time.

Your solution must include a printer, since – although most of their work is done online – there's still a need to print documents such as invoices and letters.

Vicky has set aside £1,500 to fund this part of the project.

## **Website**

Up to now, Vicky has used e-bay to sell her goods. Now she has decided to have her own website to sell directly to private collectors and traders. She estimates that she will get around 25,000 visitors a year and generate a turnover of around £55,000 from this sales channel.

The website will allow Vicky to capture customer details. She wants to use this information for target marketing.

Vicky has asked a friend to design her website, but wants you to advise her on:

- which ISP to use
- which web hosting service to go for
- how to register a domain name
- a suitable method of handling financial transactions
- any legal or other constraints she needs to be aware of
- how much it is likely to cost to set up and run.

For both projects, Vicky is expecting:

- good value for money
- to stay within the law and follow good business practice
- to be as environmentally friendly as possible.

You must provide Vicky with a detailed proposal in an appropriate format that provides her with all the information she needs to make a decision.

You will meet Vicky and Jack face-to-face, present your proposal to them and answer any questions they may have.

## What you need to do

### Investigation

- Make sure you fully understand the nature of the challenge.
- Summarise Vick's requirements for the network and the website.
- Carry out a thorough investigation:
  - what options are there?
  - what are the 'pros and cons' of each?
  - how much do they cost?
  - do they represent good value for money?
  - are there any legal or other implications?
- Keep a record of the sources you used to find your information.

As well as internet research you could use computer magazines, visit a high street retailer, present your ideas to a focus group or talk to other web retailers.

### Spreadsheet model

How much will it cost? What are the set-up costs, what costs will be ongoing? What variable will affect costs?

- Create a spreadsheet model to find answers to these questions.
- Before you start, decide:
  - what information you need from the model
  - what data must be entered and where it will come from
  - what calculations are needed
  - how can you reduce the likelihood of errors
  - how you want the output presented.
- Test your model using test data and a calculator.
- Ask someone else to try out your model. Make changes where necessary.

## **Proposal**

- Produce a costed proposal for the network and the website. It must include:
  - an overview of the business challenge you have been asked to tackle
  - at least three alternative costed solutions
  - details of any legal or other constraints that must be considered
  - your recommended solution
  - the rationale for your recommendation
  - an appendix giving details of the sources you have used.
- Choose an appropriate medium and format for your proposal.

## **Presentation**

- Set up a meeting with Vicky and Jack.
- Prepare a short presentation for them. Assume that they have already had a chance to read your proposal before the meeting, so use your presentation to remind them of your key findings and recommendations.
- Give your presentation. Be prepared to answer questions. Try to win over Vicky and Jack so they are fully committed to your proposed solution.

## **What you need to submit**

- Your summary of Vicky's requirements.
- Evidence of your investigation.
- Your spreadsheet model (showing both formula and data).
- Your proposal.
- Your presentation and speaker notes.

## **Notes for teachers**

### **The scenario**

Ideally, learners will have the opportunity to develop a proposal for a real business challenge/opportunity rather than the ‘make believe’ one presented here.

However, if they do use this scenario, they will almost certainly want to know more about the challenge than the information provided. You can fabricate as much additional detail as is necessary.

### **Research**

When carrying out research it would be advisable for learners to keep careful records of sources and data to support their proposal.

### **Proposal**

Much of the evidence for LO.1 and LO.2 is likely to be found in the proposal itself. There is no need for learners to submit the ‘raw’ information they have gathered, providing they have included details of their sources in the proposal.

### **Presenting the proposal**

The presentation should be given to an audience of two, ‘representing’ Vicky and her assistant Jack. You should observe the meeting without taking an active part in it. Assessment of this element is made using Marking grid B.



Paper Reference(s)

IT205/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 5: Technology Systems – Networks**

**Sample Assignment Brief**

Subject: IT		Level 2 Unit 5
Unit Title: Technology Systems		Assessment Time: 10 hours
LO.1	Understand the role of key components of networked PC systems.	
LO.2	Be able to assemble, test and troubleshoot a simple computer network.	
LO.3	Understand the principles of systems availability.	
PLTS	SM2, RL4.	

## Scenario

Bryan's Garage employs six mechanics and an office administrator. The business specialises in accident repairs, but also carries out MOT tests and general repairs and servicing.

The garage occupies several different buildings, including a reception area, a paint shop, a panel beating area, an MOT station and an inspection ramp.

The garage already has two computers – one in the reception area and one in the MOT station. The two computers are not connected to each other.

One of the problems the garage has is making accurate bills for customers. The mechanics working in the different areas have to fill out a form for each vehicle they work on listing the parts and materials used and the time spent. The completed forms are taken to the reception area where they are used to generate invoices. Not surprisingly, the forms often get dirty and difficult to read.

The work on any one vehicle may involve several parts of the garage. Also, the work done in different areas may be several days apart. Occasionally, expensive mistakes have been made when an invoice has been sent to a customer before all the completed forms have arrived at reception.

Jo Healy, the office administrator thinks that the installation of a simple peer to peer network is the obvious answer. It will facilitate electronic transmission of data between the various parts of the business and do away with the need for paper forms.

In addition to the two existing computers, three more will be needed – one for each of the panel beating, paint spraying and inspection ramp areas.

There is already a printer in the reception area. This will become a shared network resource, so that any of the five work stations will be able to send print jobs to it.

The administrator, the mechanics and the garage owner must each be allocated a unique ID and password.

Jo, has excellent IT skills. She has suggested that a remote access tool such as VNC is installed on the network so that she can fix any problems that might arise without having to leave the office unattended.

The mechanics have asked if they can use the network in their lunch break to play multi-user games.

Steve Bryan, the garage owner is concerned that the business might suffer if anything goes wrong with the network once it is installed. He needs advice on what he can do to safeguard business continuity.

### **What you need to do**

- Produce a basic design for the network, identifying the components that you will use to create the network with an explanation of their purpose.
- Assemble the network.
- Set up the printer as a shared network resource.
- Create a shared directory that all users can access.
- Implement basic network security, i.e. unique ID and password for each user.
- Install remote control software, with one work station acting as the server and the other the viewer.
- Test for functionality, usability and security.
- Carry out some basic troubleshooting.
- Describe a range of measures designed to safeguard business continuity.
- Produce a review of the network, incorporating feedback from others, considering
  - its fitness for purpose
  - how well it meets the garage's requirements.Suggest at least two improvements that could be made to the network and explain what the benefits would be.

### **What you need to submit**

- Your design for the network
- The description of measures that should be taken to ensure business continuity
- Your review of the network

Your teacher will observe you when you are carrying out the assembly, testing and troubleshooting activities and complete a witness testimony.

## **Notes for Teachers**

You must observe the network assembly, testing and troubleshooting activities and assess how well they were carried out using Marking Grid B. The degree of support the learner required is a key differentiator, although there are others.

### **Network server software**

Remote control software, such as VNC comes in two parts, a server and a client. The server part allows someone to connect to and control that machine. The client part allows them to connect to a machine running the VNC server software. Jo Healy, the office administrator, could have the client installed on her machine and the server part would need be installed on all the user workstations that she might need to control remotely.

The installation of a multi-user game, in which one of the work stations acts as a server and the others are its clients can be used as an alternative.

### **Troubleshooting**

You will need to create some simple problems for the learner to troubleshoot.



Paper Reference(s)

IT205/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 5: Technology Systems – Databases**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 2 Unit 5</b>
<b>Unit Title: Technology Systems</b>		<b>Assessment Time: 20 hours</b>
<b>LO.4</b>	Be able to design, develop, test and troubleshoot a simple database system to meet an identified user need.	
<b>LO.5</b>	Be able to carry out a system review, assessing fitness for purpose and identifying opportunities for improvement.	
<b>PLTS</b>	SM2, CT1, RL4.	

## Scenario

High Fell is a small privately owned hotel in the Lake District. It has 15 bedrooms with en suite facilities. The hotel attracts a mixture of guests. Some are 'regulars' who visit at least once a year. Others just visit once. Business is good in the main season from June to September, but the owners are looking at ways to attract guests back at other times of the year.

The owners already have a lot of information about their guests. They would like to transfer this information to a database.

They would also like to use the database to:

- record details of a guest's stay, such as which type of room they had, what sort of activities they pursued
- send out mailings to selected customers inviting them to 'themed' weekends outside the main season, such as a creative writing, folk music or wild life watching
- analyse bookings to build up customer profiles.

Entering information into the database must be quick and easy, since the reception staff are always very busy.

### What you need to do

- Study the information provided by the hotel.
- Design and build a suitable database structure to store the customer data. Make sure that each field has a suitable name, data type, format and length. Include simple validation rules to help prevent invalid data getting into the database.
- Save evidence of the database structure you have produced.
- Populate the database with at least 100 hundred records. Your teacher will help you to do this.
- Design a data entry form for hotel staff to use. Make it as user friendly as possible and include some automated features.
- Ask a test user to enter three records into the database and give you feedback on your data entry form.
- Demonstrate how the data entry form can be used to edit and delete records.
- Design a set of searches that hotel staff can use to:
  - identify guests with special dietary or other requirements
  - identify 'regular' guests who have stayed in the hotel on more than one occasion
  - select particular groups of guests, eg women over 50 whose interests include painting or crafts.
- Ask a test user to try out the searches and give you feedback.
- Set up a mail merge that can be used to invite selected guests to a forthcoming 'themed' weekend.
- Produce some sample database reports for the hotel owners. Make sure that you:
  - choose a suitable format
  - use sensible headings
  - include at least one relevant image
  - select relevant fields from the search results.
- Ask a test user to review the reports and give you feedback.
- Produce a review of your database system, incorporating feedback from others, considering:
  - its fitness for audience and purpose
  - how well it meets the client's requirements.
- Suggest some improvements that could be made to the database and why.

**What you need to submit**

- Annotated printouts showing the database structure you produced.
- A screen dump of your data entry form, labelled to show how you have made it easy to use.
- Details of the automated features you have included.
- Printouts of your searches, showing both the search criteria and the output.
- Evidence of the mail merge you created.
- The sample database reports you produced.
- Your test users' comments.
- Your review of the database.

### **Notes for teachers**

Ideally, learners should work with a database of at least 100 records. They don't have to enter these all themselves, they can be provided with a CSV file to import into their database structure. Importing data into a database structure is not a requirement of the specification so they can have help to do this if necessary.

Note that only a flat file database is required. Learners won't achieve any extra credit for producing a relational database.

Test users must be fully briefed on the audience, purpose and requirements of the database.

Whilst specific evidence of testing is not required, it must be possible to infer that testing for functionality, usability and fitness for purpose has been carried out.

Additional resource for this assignment can be found in the IT Principal Learning section of the Diploma website.

Paper Reference(s)

IT206/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 6: Multimedia**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 2 Unit 6</b>
<b>Unit Title: Multimedia</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Understand how multimedia is used to meet business-relevant objectives.	
<b>LO.2</b>	Be able to design, develop and test multimedia products that are fit for audience and purpose.	
<b>LO.3</b>	Be able to elicit and use feedback from test users to identify opportunities for improvement.	
<b>PLTS</b>	CT1, CT2, CT3, CT5, RL4.	

## Scenario

Some multimedia products are designed to entertain, others to educate. Some do both successfully.

In this assignment you will create a multimedia storybook. You can choose your target audience and decide whether your story is entertaining, educational or both.

The storybook must:

- be a complete story with a beginning, middle and end
- consist of a sequence of pages
- include a 'front' cover and a contents page
- include a variety of multimedia assets, such as photos, cartoons, video or sound, embedded on the pages
- include some form of narrative
- have an animated finale.

The front cover must attract attention and make the target audience want to read the story

There must be a contents page with links to key points within the storybook. The number of links in your contents page will depend on how your story is structured – whether you have chapters, scenes, or just page numbers, etc. From each page it must be possible to return to the contents page.

The story must end with an animated finale that leaves a lasting impression. It must be a proper animation. A still image moving across the screen is not enough!

The finale must:

- run for at least 20 seconds
- include an original soundtrack you have produced – this doesn't have to be music but it must be original!
- run automatically without user input.

It is important that the audience is in control. The storybook must allow them to:

- decide when to move on
- move forward or back one page from any page
- go to the contents page from any page
- choose which route to take through the story.

## **What you need to do**

### **Investigation**

- Investigate uses of multimedia for entertainment and education.
- Produce a 'fact file' for each use, consisting of:
  - an explanation of how and why multimedia is used
  - an assessment of its fitness for purpose
  - an evaluation of two of the design features used.

### **Proposal**

- Complete a project proposal, giving details of:
  - target audience
  - topic and style
  - characters
  - story outline
  - animated ending.
- Discuss your proposal with your teacher. You **MUST** get their approval before you continue.

## Design work

You must produce your designs before starting to create the storybook.

- Write the script for your storybook. It must tell the story and describe what is happening at each stage – dialogue, what the characters are doing, etc.
- Decide what will happen on each page. This means splitting the story up into sensible chunks.
- Develop a set of detailed storyboards, one for each page. Each storyboard should be detailed enough to show clearly what the audience will see and experience. These can be produced digitally or hand-drawn.
- Remember that all the action should take place on the pages. This means that assets must be embedded and should not open in new windows.
- Each storyboard should include:
  - the part of the story this page tells
  - background/scenery and layout
  - navigation features and links
  - font colours, styles and sizes
  - description of assets needed such as images, sound effects, narration, music video, animation, etc.
- Annotate your designs to help others understand what you plan to do.

## Assets

- Gather and prepare the digital assets needed for your storybook.
- Only use copyright-free material or assets you have created yourself. You could take photographs, produce drawings or make sound recordings.
- Use an asset table to record where you got each asset from. Keep it up-to-date throughout the project.

### **Story pages**

- Create each page using your detailed designs to help you.
- Test each page to make sure it is fit for audience and purpose.
- Make use of feedback from test users, including members of the target audience if possible.
- Check the complete set of pages:
  - are they consistent?
  - do they tell the story in an effective way?
  - are they suitable for your target audience?

### **Contents page**

- Design your contents page using a storyboard. Annotate it to explain your design decisions. It must:
  - include links to key points within the storyboard
  - use a suitable image for each link.
- Make sure you have all the assets you need then create the contents page.
- Ask for feedback and make any changes needed.

### **Cover**

- Design and create the cover page.
- Make use of feedback from test users to ensure that it is fit for audience and purpose.

### **Animated finale**

- Use a timeline storyboard to design the animated finale.
- Make sure that you have all the assets you need then create the animation.
- Test the animation to make sure it is fit for audience and purpose. Make use of feedback from test users, including members of the target audience if possible.

### **Assembly**

- Assemble the storybook using your designs to help you.
- Test your storybook to make sure it works correctly.

### **Review**

- Ask at least two people to independently review your storybook.
- Observe them using the storybook? How easy is it to use? How accessible is it to the target audience?
- Write a review of your storybook incorporating feedback from reviewers. Considering:
  - fitness for audience and purpose
  - usability
  - performance
  - improvements that could be made.

### **What you need to submit**

- Fact files on uses of multimedia for entertainment and education.
- The completed proposal.
- Design evidence (script and storyboards).
- The completed assets table.
- The storybook.
- Your review.

### **Notes for teachers**

It is possible to adapt the scenario and tasks so that they are suitable for Foundation Level learners. This would facilitate joint delivery of Foundation and Higher.

In producing the storybook learners must work with different types of assets (sound, video, still images, animation, text).

Learners can choose the audience and purpose for their storybook, but must make this clear in their proposal, since this is the main criteria for judging the success of their book.

Test users and reviewers must be fully briefed on the audience and purpose of the storybook.

Whilst specific evidence of testing is not required, it must be possible to infer that testing (for functionality, usability, accessibility and performance) has taken place when using the storybook.

The storybook itself must be assessed and – if required – submitted for moderation. It is not sufficient for annotated printouts to be supplied as a substitute.

Paper Reference(s)

IT207/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 2**

**Unit 7: Managing Projects**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 2 Unit 7</b>
<b>Unit Title: Managing Projects</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Understand the key factors that determine the success of IT projects and reasons why some projects fail.	
<b>LO.2</b>	Be able to produce a project proposal and project plan for a small-scale IT project.	
<b>LO.3</b>	Be able to manage a successful project.	
<b>LO.4</b>	Be able to carry out an end-of-project review.	
<b>PLTS</b>	IE3, IE4, IE6, SM2, SM3, SM4, SM5, SM6, RL1, RL2, RL3, RL4, RL5, RL6.	

## Scenario

Chris Kingsley, CTO of UK Games Studio has this advice for project managers who want to avoid project failure:

‘...track stuff as early as you can. Look for problems before they are going to happen, do a continuous process of risk assessment. We do critical stage analysis here every month on projects. You ask what’s the problem, what’s coming up, what’s causing us to be slow? ...Just keep looking at it and when you’re looking at the risks, have a mitigation strategy for everything, have dates by which you need to have decisions or solutions made or by which you can fall back to your mitigation strategy.’

(Source: [www.bcs.org/interviews](http://www.bcs.org/interviews))

In this assignment you will produce a ‘getting started’ guide for new project managers and demonstrate how to be successful by planning and managing a small-scale IT project.

## What you need to do

### ‘Getting started’ guide for project managers

- Investigate two IT projects – one successful and one unsuccessful.
- Use what you have learnt from studying these projects to produce a ‘Getting Start’ guide for new project managers. The guide must include:
  - a description of each project
  - an assessment of factors that contributed to its success or failure
  - a set of ‘hints and tips’ for managing a project successfully.

### Selecting a suitable project

- Ask your teacher to help you select a suitable project. One possibility is to project manage the development of the multimedia storybook you will produce in Unit 6, but there are plenty of others.

## Proposal

- Complete a project proposal, giving details of:
  - objective(s)
  - scope
  - stakeholders
  - resource requirements
  - evaluation criteria
  - timescales
  - risks.
- Discuss your proposal with your teacher. You **MUST** get their approval before you continue.

## **Plan**

- You may use any suitable software to produce your project plan, but it must show:
  - a start date and finish date for the project
  - all the main tasks and sub-tasks
  - the order in which you will carry out the tasks – make sure it is logical
  - how much time you have allowed for each main task and sub-task
  - where you have added contingency time – in case you need it when things don't go according to plan
  - at least three checkpoints when you will review your progress with your teacher and agree any changes to your plan
  - when test users and reviewers will look at your work
- Agree your plan with your teacher before going any further.

## **Project log**

- Keep a project log where you record all that happens during your work on the project. This can be comments on your project plan or a separate document. It should include:
  - what went well
  - what went wrong and what effect it had
  - changes to the plan
  - what happens next
  - how you took account of feedback
  - what happened at interim review points
  - how you made use of contingency time.

If you keep your project log up-to-date it will help you with your end-of-project review.

### **Track and manage progress**

- Whilst working on the project:
  - use your plan to track progress
  - carry out regular progress reviews and record the outcomes.
- Add comments about:
  - what you have done
  - what went well
  - how you dealt with any problems.
- When you finish each main task record the date on the plan.
- Try to spot any risks and take appropriate actions.
- Adjust the plan if necessary.

### **End-of-project review**

- Conduct an end-of-project review. Think about:
    - what you set out to achieve
    - to what extent you have met the objectives
    - how well your plan worked
    - how well you managed your time
    - what, if anything, went wrong
    - what others had to say
    - what you would do differently if you did the project again.
- Use feedback from others to support what you have to say.

### **What you need to submit**

- The 'Getting started' guide.
- The project proposal.
- The initial, up-front plan.
- The final version of the plan and project log.
- The end-of-project review.

## **Notes for teachers**

### **‘Getting started’ guide**

Learners should complete the ‘Getting started’ guide prior to embarking on the practical project work. They must be guided in their choice of small-scale IT project to plan and manage.

### **Selection of a suitable project**

We have suggested that the production of a multimedia storybook for Unit 6 is an appropriate project in terms of scale, scope and difficulty.

### **Proposal and plan**

Learners do not have to use bespoke project management software to produce their plan.

It is likely that many learners will need some degree of support to produce a realistic proposal and workable plan. The mark scheme allows for this. They should not be allowed to proceed until they have achieved this milestone.

Learners must not be awarded any marks for proposals and plans produced retrospectively.

### **Stakeholders**

It is important to establish at the outset who the stakeholders are so that learners have a clear sense of who they are communicating with and what their relationship to the project is. Ideally, stakeholders will have a genuine interest in the project outcomes. They must be sufficiently involved to be able to give an informed opinion when the project is reviewed.

### **End-of-project review**

The project review can be presented as a written report, but – equally – could be presented at an end-of-project review meeting. In the latter case, a recording of the meeting or a copy of the presentation could be presented as evidence.

# Level 3



Paper Reference(s)

IT301/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 1: The Potential of Technology**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 3 Unit 1</b>
<b>Unit Title: The Potential of Technology</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Understand the role of legacy systems and emerging technologies in achieving organisational objectives in a number of sectors	
<b>LO.2</b>	Understand how organisations and individuals innovate through and with technology to improve competitiveness and service	
<b>LO.3</b>	Be able to identify and assess examples of successful and unsuccessful innovations using technology	
<b>LO.4</b>	Understand how new technology can help organisations achieve their objectives, taking account of opportunities and risks	
<b>LO.5</b>	Be able to identify opportunities for innovation using technology-enabled solutions	
<b>PLTS</b>	IE1, IE2, IE3, IE4, IE5, IE6, CT1, CT2, CT3	

## Scenario

### What you need to do

- Produce a series of three reports.

### From legacy systems to emerging technology

- Illustrate how legacy systems and emerging technologies can enable each of your three organisations to achieve its goals and objectives by:
  - Providing an overview of the legacy system and emerging technology
  - Explaining the role that legacy systems and emerging technologies play in helping organisations achieve their goals and objectives, illustrated with relevant examples from three different sectors
  - Discuss the pros and cons of replacing legacy systems with new technology.

### Technology – the winning formula or disaster

- Produce three case studies describing how organisations and individuals use technology to innovate or gain a competitive edge.

Ensure your case studies include:

- Successful examples
- Unsuccessful examples
- Organisations innovating through technology
- Individuals innovating through technology.

Each case study must describe an attempt by both an organisation and an individual to use technology to innovate or gain a competitive edge.

Use both successful and unsuccessful examples.

In each case:

- Describe the nature of the innovation and what it was intended to achieve
- Explore how the introduction of the new technology impacted on competitiveness and service
- Identify key factors contributing to the success/failure of the innovation.

### **Recession-busting technology**

With recession staring them in the face, businesses are facing difficult times.

- Examine how technology that is not currently used can give a small or medium-size enterprise (SME) a competitive advantage in a slowing market.

Present a set of recommendations for innovative technology-enabled solutions for two contrasting organisations, fully assessing benefits and risks.

You must:

- select two contrasting SME
- provide a profile of the business
- suggest ways in which it can implement new and innovative technology-enabled solutions to give it a competitive advantage
- use a SWOT analysis to fully assess the benefits and risks of each innovative technology-enabled solution.

### **What you need to submit**

- The three reports:
- From legacy systems to emerging technology
  - Technology – the winning formula or disaster
  - Recession-busting technology

## Notes for teachers

### Introduction

The 'What you need to cover' section of the specification covers the delivery requirement of this unit. The marking scheme and guidance for allocating marks sections is used for assessment.

In order to meet the requirements of LO.1, learners must cover both legacy systems and emerging technologies in their answer.

'What you need to cover' section of the specification states that legacy system components comprise of hardware, software and data issues. Examples of legacy systems are given in the Chief Examiner report.

Examples of emerging technologies are mashups, location-aware applications, virtualisation, nanotechnology, RFID, VoIP and social software.

Centres should note that work in this mark band must have a full explanation of the role that legacy systems and emerging technology's role in helping organisations achieve their goals such as maximising profits, enhancing efficiency, improving competitiveness and enhancing customer service.

To meet the requirements of LO.2 and LO.3 the learner must have identified at least three well-chosen examples both successful and unsuccessful of organisations and individuals using technology to innovate. In each case, they must have fully assessed the impact on competitiveness, service and factors contributing to their success/failure.

The learner must describe the nature of the innovation and what it was intended to achieve. Explore how the introduction of the new technology impacted on competitiveness and service and identify key factors contributing to the success/failure of the innovation.

Examples of both organisations and an individual who use technology to innovate or gain a competitive edge can be seen in the Chief Examiner report.

How individuals or organisation use technology focuses on how to:

- improve competitiveness eg web presence, online ordering, improved communication, automation, product miniaturisation
- improve service eg customer relationship management, online ordering, webinars, forums
- reduce carbon footprint eg hibernation when not in use, double-sided printing, automated building management (focus should be on the technology involved)

It is also important to consider the impact on competitiveness and service.

### LO.4 and LO.5

These learning outcomes are about recommending innovative technology-enabled solutions for two contrasting organisations, identifying both benefits and risks. The selection of the organisations is important as they must offer full scope for the learner to recommend a set of innovative technologies as required for mark band 3.

Examples of the role of the new technology are:

- to underpin specific business processes
- to safeguard business continuity,
- to drive performance improvements
- to facilitate decision making.

The learner should also assess the objectives of the new technology, eg to increase sales/revenue, to improve service and to gain a competitive advantage. Fully assess the opportunities (eg new markets, new or improved products/services, cost reduction, outsourcing) and risks (eg costs, over expansion, staffing issues).

This could be done through a SWOT analysis or De Bono's 'Thinking Hats' techniques.

In order to achieve full marks in mark band 1 and marks in mark band 2, the learners must present at least three recommendations for two contrasting organisations. To achieve mark band 3 learners must present a set of recommendations (more than three) for innovative technology-enabled solutions for two contrasting organisations, fully assessing benefits and risks.

Paper Reference(s)

IT303/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 3: Professional Development**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 3 Unit 3</b>
<b>Unit Title: Professional Development</b>		<b>Assessment Time: 25 hours</b>
<b>LO.2</b>	Understand differing personal styles and behaviours and their impact on others.	
<b>LO.3</b>	Be able to demonstrate correct, contextually appropriate and effective English (through written, spoken and digital media) in a range of common business situations.	
<b>LO.4</b>	Be able to apply mathematical concepts in order to understand business dynamics and find solutions.	
<b>LO.5</b>	Be able to develop and present compelling business cases for technology-enabled solutions.	
<b>LO.6</b>	Understand how ethical, social, professional and legal constraints affect what organisations can do.	
<b>LO.7</b>	Be able to take part in a team enterprise activity to meet agreed objectives.	
<b>LO.8</b>	Be able to evaluate personal and team performance.	
<b>PLTS</b>	CT1, CT2, CT4, CT5, CT6, IE1, IE2, IE3, IE4, IE5, IE6, RL1, RL3, RL4, RL5, SM3, SM6, SM7, TW1, TW2, TW3, TW4, TE5, TW6.	

## Scenario

Jonathan Burns has a 200 acre farm in Yorkshire. He wants to reduce his dependency on agricultural production and make better use of the farm's natural resources, which include a 3.5 acre lake stocked with around 500 carp, a small acreage of moor land and 33 acres of deciduous woodland, home to a large number of wild birds, including a family of red kites.

Jonathan's plans for diversification are nothing if not ambitious! He wants to:

- start a farm-based bed and breakfast business. The farm can cater for up to 16 guests, most staying in bedrooms in the main house, but some staying in converted farm buildings. All accommodation will have en suite facilities, digital television and WIFI access
- open a tea room and shop selling home-made produce
- offer a range of specialist short holiday breaks, including traditional English cookery, bird watching, rural crafts (dry stone walling and hedge laying), mountain biking, pony trekking, walking and fishing
- go cashless. Guests will use the same plastic card to access their rooms and pay for their meals, equipment hire and any purchases they make during their stay.

Jonathan and his partner Sue work full time in the business. In addition, they employ three people full time and up to fifteen part time, casual staff (numbers fluctuate according to the time of year).

Jonathan and Sue are keen ornithologists. They are delighted to have a pair of red kites nesting on their land and are keen for others to share the experience. However, they don't want the birds to be disturbed, specially when there are young chicks in the nest.

Jonathan's objectives are to increase farm revenue, gain a competitive advantage over other similar farm enterprises and raise awareness of the natural world.

He has identified the following ways in which he thinks technology can help him achieve his goals:

- administration, eg pay roll, ordering, invoicing and customer records
- sales and marketing, eg web advertising, mail shots, newsletters, online bookings and payments, targeted marketing campaigns
- security, eg CCTV surveillance, fire and burglar alarms
- telecommunication, eg wireless connectivity, location tracking of guests out walking or riding, a webcam to capture the activity of the red kites and relay it to bird lovers round the world.

Jonathan has set aside £20,000 to purchase and install the technology he needs.

This is your challenge. Working in a team of 3 or 4, you will develop a costed business case that addresses Jonathan's requirements.

## **What you need to do**

### **Team set up and planning (team)**

- Form a team of three or four. Try to ensure that you have a mix of personality types.
- Hold a meeting to explore the business challenge you have been given and agree objectives. Each team member must take responsibility for a different aspect of the challenge.
- Divide the project into roughly comparable workloads and decide who will do what.
- Produce a detailed team plan.
- The team must use the plan throughout the project to track and communicate progress. The plan must always be kept up-to-date and accurate.
- Agree procedures for communicating with each other.
- Hold regular team meetings to check the team's progress and give each other feedback and support.

### **Monitoring progress (individual)**

- Keep a personal record (eg diary or blog) throughout the project, commenting on team discussions, decisions made and your personal contribution to team work.
- Keep a note of any of anything that you do or say that affects the performance of the team either positively or negatively. Similarly does the personal style or behaviour of another team member have an impact on teamwork?

### **Developing a business case (individual)**

- Fully research your aspect of the challenge:
  - make sure you understand the client's requirements
  - identify a number of alternative solutions and research each of them thoroughly
  - identify any legal, ethical or other constraints that need to be taken into account
  - keep a record of the sources you use to find your information
  - create a spreadsheet model to explore the financials and explore alternative solutions.
- Decide which option you will recommend and why.
- Prepare your contribution to the proposal.

### **Proposal (team)**

- Work together to produce a comprehensive, costed proposal. It must:
  - use a suitable format and style and be consistent
  - include a summary of the client's requirements
  - outline a number of alternative costed solutions
  - make recommendations that are fully justified
  - highlight any legal, ethical, social or professional constraints that need to be considered
  - provide accurate information about the sources you have used.

### **Presentation (team)**

- Arrange a meeting with your client.
- Prepare a short presentation for the team to deliver at the start of the meeting. Assume that the client will have read your proposal before attending the meeting, so use your presentation to focus on your key findings and recommendations.
- After giving the presentation, be prepared to answer questions. Try to ensure that the client leaves fully committed.

### **Evaluation (individual)**

At the end of the project spend some time reflecting on what went well and what went badly.

#### **Own performance**

How good a team player do you think you are? Ask other people – including team members – to comment on your performance.

- What do you think were your strengths and weaknesses? Do your team mates agree?
- How well did you communicate with other team members?
- What feedback did you give to whom? How was it received?
- What feedback did you receive and how did you respond?
- What would you need to do to be a better team player

### **Team performance**

How good a team were you? Ask other people – including team members – to comment on the team's performance.

- What went well, what went badly?
- Did some team members work harder than others?
- How did personal styles and behaviour affect the performance of the team?
- Give examples of how members of the team adapted (or should have adapted) their behaviour so as to enable the team to achieve its objectives.
- How well did you communicate with each other? Were there any blocks to communication? How did you overcome them?
- How useful was the feedback you gave each other?
- What would you need to do to be a better, more successful team?

### **What you need to submit**

- The initial team plan.
- The final version of the team plan.
- Your personal record of team discussions, key decisions made and your own contribution to team work.
- The business case you put together for your part of the proposal.
- Your spreadsheet model (showing both formula and data).
- The team proposal.
- The presentation and speaker notes.
- Your evaluation.

### **Notes for teachers**

This assignment generates the evidence required for LO.2, LO.4, LO.5, LO.6, LO.7 and LO.8, ie Working in a team to produce a proposal.

It may be possible to extend the assignment so that it also covers LO.1 and LO.3 – communication. However, it was felt that this might be too much for some learners to cope with.

There is a separate, short assignment using the same scenario that covers LO.1.

Learners will collect some of the evidence required for LO.3 by completing these two assignments. However, we suggest that they put together a portfolio of evidence from across their course that fully demonstrates their ability to produce effective business-related communications for a range of business situations.

### **The client**

Ideally, the scenario provided here should be replaced by one involving a real client, with whom the team can interact either F2F or via email, so that they have a real sense of audience and purpose and can clarify requirements, ascertain preferences etc.

### **The scenario**

There is more than enough scope in the scenario provided for each member of the team to focus on a different aspect of the challenge. Indeed, there may be some aspects they decide to shelve initially.

### **Record keeping**

The team should produce a joint team plan, but individual team members must keep their own record of key discussions and decisions made.

Do not let teams proceed until they have a workable plan.

### **Presentation and team work**

Marking grid B must be used to assess the learner's contribution to teamwork and the presentation (which is a team effort).

### **Evaluation**

The team should be encouraged to meet together to discuss their performance, but each learner must produce their own evaluation.



Paper Reference(s)

IT303/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 3: Professional Development**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 3 Unit 3</b>
<b>Unit Title: Professional Development</b>		<b>Assessment Time: 5 hours</b>
<b>LO.1</b>	Understand the principles of effective communication in business and the implications of using different communications media	
<b>LO.3</b>	Be able to demonstrate correct, contextually appropriate and effective English (through written, spoken and digital media) in a range of common business situations	
<b>PLTS</b>	IE3	

## Scenario

Jonathan Burns has a 200 acre farm in Yorkshire. He wants to reduce his dependency on agricultural production by diversifying. Jonathan's plans for diversification include:

- Starting a farm-based bed and breakfast business.
- Opening a tea room and shop selling home-made produce.
- Offering a range of specialist short holiday breaks.

Jonathan and his partner Sue recognise that effective communication is the key to their success.

Your task is to advise them on their choice of communications media.

## What you need to do

### How to get the message across

- Although Jonathan and Sue have been farming for many years, their plans for diversification mean that they need to hone their communication skills. Explain the principles of effective communication in business to them.

Here is a list of some of the communications requirements that Jonathan and Sue have identified.

They hope to attract visitors from all over the world to the farm. Their target is to achieve at least 60% occupancy of all rooms throughout the year, rising to 100% in peak periods (between May and September and over Christmas and New Year).
Once a guest has stayed at the farm, Jonathan and Sue are keen to stay in touch, so as to encourage them to book again. They are determined to build a reputation for personal service.
They want to share their experience of 'life on the farm' and their enthusiasm for wildlife with as wide an audience as possible. They also want others to share their experiences with them.
The farm employs a number of full and part time staff. Jonathan and Sue must keep them up to date with what is happening on the farm. In emergencies, they need to be able to communicate with them all as quickly as possible.
Sue uses fresh, locally sourced produce for the restaurant and her cookery courses. Her aim is to keep waste to a minimum by ordering just in time from her suppliers.
Although Jonathan and Sue aim to give their guests a personal service, they can't be everywhere all of the time. Guests need to be able to help themselves to information as and when they require it.
Farms can be dangerous places. It is essential that guests are aware of the health and safety requirements and that Jonathan and Sue.
Jonathan and Sue want to be able to cater for disabled visitors. How will this affect their choice of communications media?

- Explain to Jonathan and Sue the implications of using different communications media to meet their objectives. Illustrate your explanation with relevant examples. Summarise the benefits and limitations and recommend what Jonathan and Sue should do to get their message across.

### What you need to submit

- Your explanation of the principles of effective communication in business.
- Your advice to Jonathan and Sue regarding choice of communications media to meet their objectives.

## **Notes for Teachers**

This assignment uses the same scenario as Professional Development – teamwork and generates the evidence required for LO.1.

It was felt that it might be too much for some learners to cope with having one big assignment covering all the learning outcomes.

Learners will collect some of the evidence required for LO.3 by completing these two assignments. However, we suggest that they put together a portfolio of evidence from across their course that fully demonstrates their ability to produce effective business-related communications for a range of business situations.



Paper Reference(s)

IT304/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 4: Creating Technology Solutions**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 3 Unit 4</b>
<b>Unit Title: Creating Technology Solutions</b>		<b>Assessment Time: 30 hours</b>
<b>LO.1</b>	Understand the role and interaction of the key components of database systems.	
<b>LO.2</b>	Understand the principles of the solutions life cycle.	
<b>LO.3</b>	Be able to design, develop, test and implement a relational database solution with a three-tier architecture.	
<b>LO.4</b>	Be able to produce operating information for users.	
<b>LO.5</b>	Be able to seek feedback, review the system and prioritise opportunities for improvement.	
<b>PLTS</b>	CT5, CT6, EP3, EP4, RL3, SM2, SM3, SM6.	

## Scenario

eRadio MXFM is a web-based music radio station. It wants to set up its own discussion forum on the web. Listeners will be encouraged to register for the forum by filling in an online form. The details of people who register will be stored in a database. If their registration is accepted, they will be contacted by email and provided with a username and password to log onto the forum.

The Marketing Department at eRadio MXFM is keen to use this registration as a means of gathering useful information from its listeners. One of the aims is to provide third-party companies with the email addresses of those listeners who want to be contacted about products and services that meet their musical interests. In particular, the department wants to put some specialist music magazines in touch with potential listeners. The music magazines have agreed to pay eRadio for the purchase of listener mailing lists.

In addition, the department wants to use the information to build up a profile of its listener base. The aim is to use this analysis to gain more advertising revenue and increase listening figures by focusing on the right kind of music.

eRadio MXFM has outsourced the hosting of its website to an external Internet Service Provider (ISP). The ISP will forward data captured from the on-line registration on a regular basis in the form of a comma separated variable (csv) file.

You have been asked by eRadio MXFM to produce a suitable database solution.

## Additional information

- The database is to be stored on eRadio's main server and will not be linked to the internet in any way. Only specified employees of eRadio will have access to the database.
- The text file containing all the details of listeners, who want to register, will be imported into the database. If an application is valid, an email will be generated to the listener confirming acceptance.
- Registration is only accepted if an email address is provided and is valid. A valid email address is one that contains an @ symbol and does not have any invalid symbols for an email address.
- The imported text file will contain a number of fields.

This table lists the fields that will appear on the online registration form.

Field	Comment
Title	eg Mr, Miss, Ms, Mrs
First name	eg Dee
Last name	eg Smith
Email address	eg dee_smith@anisp.com
Date of birth	eg 26/05/1979
Gender	Male or Female
Country of residence	The listener can only select one country from a list provided
Favourite musical styles	The listener can select as many musical 'genres' as they want from a list, eg Jazz, Hip-Hop, R&B, Garage, Pop, Ska
Music magazines purchased recently	The listener can select as many as they want from a specified list
Cover price of magazine	eg £1.50
Acceptance of 3 <sup>rd</sup> party contact	Whether the listener has ticked the box to state that they are happy to receive emails from other companies

The first few lines of the imported text file might, therefore, look like this:

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","African",
"JazzMaga Monthly",£2.50,"yes"
```

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","Jazz",
"JazzMaga Monthly",£2.50,"yes"
```

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","Hip-Hop",
"JazzMaga Monthly",£2.50,"yes"
```

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","African",
"HipHopMaga Monthly",£3.50,"yes"
```

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","Jazz",
"HipHopMaga Monthly",£3.50,"yes"
```

```
"Ms","Dee","Smith","dee_smith@anisp.com",26/5/1979,"Female","UK","Hip-Hop",
"HipHopMaga Monthly",£3.50,"yes"
```

- Once validated, the valid imported data must be copied to a 'valid data' table with the same structure. This second, 'valid data' table will be used to split and copy the data to appropriate tables within the database.
- Each listener in the database must be provided with a unique identifier (primary key). The format for this unique identifier is: the first letter of listener's first name, followed by the first letter of the last name, then the date of birth and, finally, today's date in a ddmmyyyy format. Using the example in the table above, and assuming that the imported data was transferred to the appropriate tables on 01/03/2008, this would give DS2605197901032008.
- The Marketing Department has managed to get the names of a number of music magazines, plus details of a contact at the magazine (name, phone number and email address).

### **Files available**

- A text file (in csv format) containing all the data gathered so far from on-line registrations.
- A text file (in csv format) containing the names of a number of music magazines, plus details of a main contact for each.
- A text file (in csv format) containing a list of music styles/genres.

### **What you need to do**

#### **Database systems**

- Investigate at least three different database systems.
- Produce a fact file for each system, explaining:
  - role, ie tasks performed, inputs and outputs, processing and security
  - key components, ie input, output and storage devices, user interface, data structures and reports
  - interaction, ie components, systems, data.

#### **Functional specification**

- Write a functional specification that covers:
  - the nature of the problem
  - what the solution is required to do
  - hardware and software required
  - inputs to and outputs from the system
  - the processing that is required
  - the level of security needed
  - how the success of the solution will be measured.

#### **Design**

- Produce an entity relationship (ER) diagram normalised to third normal form.
- Provide a detailed specification (data dictionary) for each table required in the database, including table name, field name, data type, length, format, validation and any additional comments you think would be helpful, eg whether the field is a primary key or not, or any assumptions you are making.
- Explain the data handling procedures the database will undertake.
- Provide a strategy for testing and evaluating the database solution.

## Implementation

- Create the database structure and set up the required relationships.
- Import the data.
- Implement a solution to validate the email addresses contained within the imported data.
- Implement a solution (or sequence of solutions) to copy the data from the imported table to the 'valid data' table and then to the appropriate related tables. This solution (or sequence of solutions) should reject duplicate data and generate the Listener Unique Identifiers.
- Implement a solution to generate usernames and passwords.
- Implement a solution to archive the original imported data and valid data tables for future reference.
- Carry out testing for functionality and performance.

## Output

- Create an appropriate chart to show 'Favourite Music Style' for men and women.
- Produce mailing lists for JazzMaga and PopMaga.
- Produce a list of accepted forum members. This will be used as a 'distribution group' for emailing listeners. The company wants this list to be exported in a spreadsheet format, eg an Excel workbook.
- Carry out testing for functionality and usability.

## User interface

- Create a listener form for viewing and updating listener records.
- Create a main menu form that users of the database are presented with when opening the database.
  - add a button to open the listener form
  - include a 'Quit' button on this form to allow the user to exit the database
  - on clicking this button, a message box should appear asking the user whether they really want to exit, eg 'Click the Yes button if you are sure you want to exit the database'
  - provide buttons to generate the two mailing lists
  - provide a button to open a form that displays all the magazine data. This will be used by the company to add more magazines manually.
- Carry out testing for functionality and usability.

### **Security**

- Recommend suitable measures to keep the database secure.

### **Operating information**

- Produce a user manual with instructions for using the system and troubleshooting.

### **Acceptance testing and review**

- Carry out acceptance testing with at least two users.
- Identify and prioritise actions to be taken and produce an implementation schedule.

### **What you need to submit**

#### **Database systems**

- Fact files of the three database systems you have investigated

#### **Functional specification**

- The functional specification for the database system required by eRadio MXFM.

#### **Design**

- The ER diagram.
- A data dictionary for each table required.
- Your explanation of the data handling procedures to be undertaken.
- Your testing strategy.

#### **Implementation**

- A screen dump of each table you have created showing the table structure.
- A screen dump showing the relationships between tables.
- Screen dumps and/or code showing how you implemented the various processes required.

#### **Output**

- A printout of the chart showing the favourite music styles of male and female listeners.
- A printout of the mailing lists.
- A printout showing the method used to create the list of forum members.
- A printout showing the output data in spreadsheet format.

**User interface**

- Screen dumps of all the forms you have created, including any program code used.

**Testing**

- Notes explaining how and when you carried out testing and what changes you made as a result.
- Your recommendations for keeping the database secure.

**Operating information**

- The user manual.

**Acceptance testing and review**

- Evidence of how you tested the system.
- Your implementation schedule.

**Notes for teachers**

An alternative scenario and set of user requirements can be provided providing they are similar in complexity.

Learners are expected to use some program code in their solution.

An electronic copy of the working database should be submitted for moderation.

The text files (in csv format) available for this assignment can be found in the IT Principal Learning section of the Diploma website.



Paper Reference(s)

IT305/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 5: Managing Technology Systems**

**Sample Assignment Brief**

<b>Subject: IT</b>		<b>Level 3 Unit 5</b>
<b>Unit Title: Managing Technology Systems</b>		<b>Assessment Time: 20 hours</b>
<b>LO.1</b>	Be able to configure and test a small-scale technology system suitable for business use.	
<b>LO.2</b>	Be able to plan the implementation and testing of systems change in response to new business requirements.	
<b>LO.3</b>	Be able to apply the principles of effective change management for technology systems.	
<b>LO.4</b>	Be able to assess the impact of problems in technology systems.	
<b>LO.5</b>	Be able to handle problems in technology systems.	
<b>LO.6</b>	Be able to produce technical support information for managing the availability and security of technology systems.	
<b>PLTS</b>	IE1, CT5, SM2, SM3, SM4, SM6.	

## Scenario

Bryan's Garage currently employs six mechanics and an office administrator. The business specialises in accident repairs, but also carries out MOT tests and general repairs and servicing.

The garage occupies several different buildings, including a reception area, a paint shop, a panel beating area, an MOT station and an inspection ramp.

The garage already has two computers – one in the reception area and one in the MOT station. The two computers are not connected to each other.

One of the problems the garage has is making accurate bills for customers. The mechanics working in the different areas have to fill out a form for each vehicle they work on listing the parts and materials used and the time spent. The completed forms are taken to the reception area where they are used to generate invoices. Not surprisingly, the forms often get dirty and difficult to read.

The work on any one vehicle may involve several parts of the garage. Also, the work done in different areas may be several days apart. Occasionally, expensive mistakes have been made when an invoice has been sent to a customer before all the completed forms have arrived at reception.

Jo Healy, the office administrator thinks that the installation of a simple peer to peer network is the obvious answer. It will facilitate electronic transmission of data between the various parts of the business and do away with the need for paper forms.

In addition to the two existing computers, three more will be needed – one for each of the panel beating, paint spraying and inspection ramp areas.

Two portable, handheld devices will also be required to make it easier for mechanics to carry out vehicle system testing and diagnostics.

There is already a printer in the reception area. This will become a shared network resource, so that any of the five work stations will be able to send print jobs to it.

The administrator, the mechanics and the garage owner must each be allocated a unique ID and password.

Jo, has excellent IT skills. She has suggested that a remote access tool such as VNC is installed on the network so that she can fix any problems that might arise without having to leave the office unattended.

Steve Bryan, the garage owner is concerned that the business might suffer if anything goes wrong with the network once it is installed. He needs advice on what he can do to safeguard business continuity.

Steve has a number of ideas for growing his business and wants to have an idea of any additional hardware and/or software requirements that may be necessary to support business growth in the future.

## What you need to do

### Network assemble, configuration and testing

- Design a suitable network for the garage.
- Produce a plan for testing the functionality, usability and security of the network once it is up and running.
- Assemble the network.
- Set up the printer as a shared network resource.
- Create a shared directory that all users can access.
- Set up a private directory for each user, which only they can access.
- Implement basic network security, ie unique ID and password for each user.
- Implement your test plan.

### Trouble shooting

There are bound to be problems with any new system.

- Demonstrate your ability to handle a range of problems using standard incident management techniques.

### Technical support

- Produce technical support information for the network, covering:
  - how to keep company data and systems secure
  - routine and non-routine maintenance procedures
  - backup and recovery procedures.
- Steve has a number of ideas for growing his business. Provide advice on capacity planning for business growth.

### Risk assessment

Although Steve recognises the benefits of using technology to improve the efficiency of his business, he is aware that there is a downside to being dependent on technology. He is concerned that the business might suffer if anything goes wrong with the network once it is installed.

- Carry out a risk assessment considering the impact on the business of any system problems that might occur.
- Explain the risks involves and provide advice on how to handle any problems that might arise.

### **System change**

Steve is considering taking on a dealer franchise to sell new and second hand commercial vehicles. This will require a significant system change.

- The dealership has bespoke software for managing stock and sales.
- Dealers are kept up to date with latest offers and promotions, information about new models etc via the dealership intranet.
- Email is used as the main means of communication and dealers are expected to have a PDA device so that they are always contactable via emails.

Steve needs to know what system changes will be necessary if he decides to go ahead and how these can be managed without causing major disruption.

- Produce a plan for managing system change and safeguarding business continuity.

### **What you need to submit**

- Your network design.
- Your test plan.
- The technical support manual.
- The risk assessment.
- Your plan for managing system change.

Your teacher will observe you when you are carrying out the assembly, testing and troubleshooting activities and complete a learner observation form.

## **Notes for teachers**

### **Scenario**

The scenario can be modified to fit the kit that learners have available to them in your centre, though the network assembly task that learners carry out should be of comparable difficulty.

Centres are not expected to have hand-held vehicle testing equipment. Any suitable portable, wireless device, eg a PDA or a laptop can be used to simulate the garage situation.

You must observe the network assembly, testing and troubleshooting activities and assess how well they were carried out using Marking Grid B. The degree of support the learner required is a key differentiator, although there are others.

### **Trouble shooting**

You will need to create a variety of problems for the learner to handle. These must include hardware failings, problems with the software, user errors and virus alerts.

### **System change**

Learners are not expected to carry out the system change outlined in the scenario, simply to plan for it.

Paper Reference(s)

IT306/01

**Edexcel**

**Principal Learning**

**Information Technology**

**Level 3**

**Unit 6: Multimedia and Digital Projects**

**Sample Assignment Brief**

Subject: IT		Level 3 Unit 6
Unit Title: Multimedia and Digital Projects		Assessment Time: 20 hours
LO.1	Know about different types of digital media and their use for a variety of purposes.	
LO.2	Be able to establish business requirements and audience needs.	
LO.3	Be able to create, edit and integrate multimedia assets.	
LO.4	Be able to design, develop and test informational websites.	
LO.5	Be able to design, develop and test multimedia products.	
LO.6	Be able to assess the effectiveness of multimedia products, identifying opportunities for improvement.	
PLTS	CT1, CT2, CT3, CT4, CT5, SM2, RL4, RL5.	

## Scenario

In this assignment you will create an information website and a multimedia product to meet a client's requirements.

Here are some possibilities, but feel free to choose something else instead.

- Jonathan Burns has a 200 acre farm in Yorkshire. He wants to reduce his dependency on agricultural production by diversifying. Jonathan's plans for diversification include:
  - starting a farm-based bed and breakfast business
  - opening a tea room and shop selling home-made produce
  - offering a range of specialist short holiday breaks.

Jonathan wants a website to promote the farm and advertise the short break holidays on offer. He would like to be able to provide guests with a virtual tour of the farm, highlighting its unique selling points (including a 3.5 acre lake stocked with around 500 carp, a small acreage of moor land and 33 acres of deciduous woodland, home to a large number of wild birds, including a family of red kites).

- The Tiny Steps nursery wants a digital storybook that will be fun to use and help children aged 4 to 7 to learn about numbers and colours.
  - The nursery also wants to create a website informing people of services and facilities it offers.
- The IT Diploma is a new qualification. Your local consortium wants to launch a website for parents and local employers. The website will provide information about the structure and content of the qualification, as well as the personal learning and thinking skills learners are expected to acquire.
  - In addition, it wants to encourage learners currently studying for an IT Diploma to produce a multimedia product that showcases their experience and achievements.

## **What you need to do**

### **Types of digital media**

- Produce a fact sheet describing different types of digital media. Explore examples of how they are used – on their own or combined together – in entertainment and leisure, education and training, marketing, publishing and customer services.

### **Proposal**

- Complete project proposals for your informational website and multimedia product, giving details of:
  - the client
  - their business requirements
  - the profile of the target audience.
- Discuss your proposals with your teacher. You **MUST** get their approval before you continue.

### **Website design**

- Produce a complete set of up-front design documentation for the website.

Your designs must be sufficiently detailed and clear enough to enable others to understand what you are intending to do.

### **Assets**

- Gather and prepare the multimedia assets needed for your website.
- Only use copyright-free material or assets you have created yourself. You could take photographs, produce drawings or make sound recordings.
- Use an asset table to record where you got each asset from. Keep it up-to-date throughout the project.

### **Website development**

- Develop the website.
- Make sure that it meets all the specified requirements.
- Carry out extensive testing, making use of feedback from test users, including members of the target audience if possible to

### **Multimedia product design**

- Produce a complete set of up-front design documentation for the multimedia product.

Your designs must be sufficiently detailed and clear enough to enable others to understand what you are intending to do.

### **Assets**

- Gather and prepare any additional multimedia assets needed:
  - only use copyright-free material or assets you have created yourself. You could take photographs, produce drawings or make sound recordings.
- Use your asset table to record where you got each asset from. Keep it up-to-date throughout the project.

### **Development**

- Develop the multimedia product.
- Make sure that it meets all the specified requirements.
- Carry out extensive testing, making use of feedback from test users, including members of the target audience if possible.

### **Review**

- Ask at least two people to independently review your website and multimedia product.
- Evaluate both products, taking account of feedback from your reviewers.
- Suggest at least two improvements that could be made to each product. Explain how each improvement would enhance the product.

### **What you need to submit**

- Digital media fact sheet.
- Completed project proposals for the informational website and multimedia products.
- Design evidence for the website.
- The website.
- Design evidence for the multimedia product.
- The multimedia product.
- The completed assets table.
- Your review of the website and multimedia product and suggestions for improvement.

## **Notes for teachers**

### **Scenario**

Learners should work with one client (real or imaginary) for the website and the multimedia product, although each can have a different audience and purpose.

The example scenarios given are just that. Ideally, learners will work with real clients and real sets of requirements.

### **Design work**

Learners are expected to carry out up-front design work. They should not be given credit for designs produced retrospectively. The type of designs produced will be determined by the nature of the product.

### **Finished products**

Both the website and the multimedia product themselves must be assessed and submitted for moderation. It is not sufficient for annotated printouts to be supplied as a substitute.

## List of annexes

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# Annexe A: Internal Assessment of Principal Learning Units: Controls for Task Setting, Task Taking and Task Marking

Consortia must conform to the requirements published in the latest edition of the Joint Council for Qualifications instructions for controlled assessment relevant to Principal Learning qualifications, available from the JCQ website, [www.jcq.org.uk](http://www.jcq.org.uk)

## Section 1: Introduction

It is a requirement of the *Criteria for accreditation of Diploma qualifications at Levels 1, 2 and 3* that:

‘Internal assessment [of Principal Learning] must normally be supervised and conducted under controlled conditions to ensure reliability and fairness.’

Further guidance from the Qualifications and Curriculum Authority has identified three stages of assessment for which control must be specified:

- **Task setting**
- **Task taking** (controls on time, resources, supervision, and collaboration)
- **Task marking.**

Further to the areas specified above, this annexe in collaboration with the individual specifications also sets the parameters for:

- guidance and support;
- submission, revision, re-working;
- the involvement of parents/carers;
- malpractice; and the authentication of learners’ work.

This annexe details the controls that normally apply to all Edexcel Principal Learning internally assessed units. However tutors and assessors must also apply any specific controls or additional requirements that may be identified within the *Assessment information for assessors* section in individual units.

There are three levels of control that can apply to each stage.

<b>High control</b>	Where the assessment requirements are tightly prescribed.
<b>Medium control</b>	Where the assessment requirements are specified in terms of parameters that allow consortia some flexibility to suit local circumstances.
<b>Limited control</b>	Where the assessment requirements are specified in terms of broad parameters that allow consortia to determine the details of the assessment.

It is the responsibility of the consortium to ensure that internal controlled assessment for Principal Learning is conducted and marked in accordance with the requirements specified by Edexcel and conducted in line with the JCQ Instructions for controlled assessment.

## Section 2: Edexcel Controlled Assessment Profile

In Edexcel's internally-assessed Principal Learning units, some aspects are subject to medium control and others have limited control. The table below shows the standard profile for all Edexcel Principal Learning internally-assessed unit specifications. Individual unit specifications will indicate where a divergence has occurred from this profile.

Aspect	Level 1	Level 2	Level 3
Task setting	Limited	Limited	Limited
Time	Limited	Limited	Limited
Resources	Limited	Limited	Limited
Supervision	Medium	Medium	Medium
Collaboration	Limited	Limited	Limited
Marking	Medium	Medium	Medium

## Section 3: Assessment controls

### 3.1 Task setting

#### Limited control

Edexcel will publish, as part of its tutor support materials, at least one model assignment for each internally assessed unit. It is recommended that these model assignments are used in the assessment of each unit. However in order that these assignments can best meet learner interests and local needs they will include guidance for tutors and assessors to show the ways in which they may be adapted and contextualised. If the tutor decides to either adapt or write their own assignments then each assignment must meet the following conditions:

- each internally assessed unit must be assessed through a single coherent assignment which addresses the overall theme of the unit to emphasise how the different learning outcomes all relate to each other. Each assignment may be broken down into a series of related tasks
- assignments must have an applied work-related context
- across all tasks, assignments must address all learning outcomes and assessment criteria, and must give access to the full range of marks
- the evidence produced must conform to the requirements published in the *How you will be Assessed* section of the relevant unit specification
- in some units the marking grid is divided into parts A and B. All tasks which will be marked against the A grid must generate learner evidence that can be re-assessed at a later stage during internal standardisation activity or external moderation
- where tutors decide to set their own assignments, another person, who understands the requirements of the specification, **must** check that each new assignment is appropriate for the line of learning and the level, and also that a new assignment will allow candidates full access to the marking criteria. This is especially important when a new tutor/assessor is required to produce assignments. Suitable people may include a Domain or Lead Assessor. This review process must be documented and the evidence of the review must be made available for the external moderator if requested

- if the assignment is to be produced outside the teaching institution, for example by a supervisor at the learner's work experience placement, then the tutor or assessor at the teaching institution responsible for that unit, must sign off the assignment for validity before the learner attempts the assignment.

In addition to these requirements, further guidance on writing assignments is provided in this specification, in the section 'Assessment and grading of the principal learning specifications'.

### *Complexity*

If the level of complexity of the evidence required is not already identified within the specification, then an indication can be assumed from the amount of time set within the specification for the production of the assessment evidence, considering the level at which the specification is being taken. The expectations of what a Level 1 learner can accomplish in 10 hours are far different from that which can be expected from a Level 3 learner in the same time period.

Unless it is otherwise specified, learners should be set a task of equivalent complexity, whether they are expected to achieve marks at mark band 1 of the marking grid or mark band 3.

## **3.2 Task taking (controls on time, resources, supervision, and collaboration)**

If not specified within the unit, it is to be assumed that tasks or the whole assignment will normally be attempted at the end of the learning process.

### **Time – Limited control**

Each unit has a time for assessment allocated. While it is not a requirement that this time should be observed to the minute for internal assessments, it should be taken as strong guidance and variance should not normally be by more than plus or minus 10%. Learners given significantly less time may well be disadvantaged in relation to the quality and breadth of work they can produce, while those given significantly more may well be disadvantaged by an excess of time spent on assessment rather than learning.

If a learner has special requirements which may require more significant deviation from the stated assessment time, further guidance is available in the JCQ instructions.

### **Resources – Limited control**

Unless otherwise stated in the individual unit specification, learners are entitled to have full access to all resources seen fit for purpose by the centre tutor/assessor. Any specific resources (eg equipment, published material) required or prohibited for assessment will be detailed in the individual unit.

### **Supervision – Medium control**

Learners must normally be supervised by the centre tutor/assessor whilst producing evidence for the summative assessment activity, unless otherwise stated in the individual unit specification. Supervision is defined as normal classroom/workshop/studio working conditions, with the tutor/assessor being present in the same room whilst the summative assessment evidence is produced by the learner, but not requiring examination conditions.

Where supervision is relaxed:

- because it is not possible to directly supervise the activity that is required to produce summative assessment evidence, eg researching data, then the tutor/assessor must authenticate the learner work following the process identified in the section headed 'Authentication'; or
- because the most suitable environment for producing the evidence means the tutor/assessor cannot be present, eg work experience, the tutor/assessor must ensure an appropriate person supervises the evidence production. All such evidence must be authenticated (see *Authentication* below) and, where this covers performance evidence, a signed learner observation record must be completed with enough reliable information to allow the tutor to accurately assess the evidence (see *3.4 Task marking* below).

It is not permissible for summative assessment evidence to be produced in the learner's home environment, without the direct supervision of their assessor.

Due to the nature of producing an artefact, its production as part of the summative assessment will often be dictated by the availability of materials, equipment etc, therefore it may well be produced outside of the centre. However, the assessor must be confident that the work is that of the learner. In order to be confident, Edexcel requires one of the following situations to apply:

- the work is carried out under the direct supervision of the teaching centre assessor. This is the most desirable option
- the learner demonstrates to the teaching centre assessor equivalent levels of skill in each of the processes included in the production of the final artefact. Ideally this would be in the course of the regular teaching/learning programme, but exceptionally, if the assessor feels a skill has been assessed at a level beyond expectations, the assessor may require the learner to repeat that skill before authenticating the work.

If the artefact can only be produced remotely, for example during work experience, the assessor must have enough reliable information to allow them to both accurately assess the outcome and have a signed learner observation record from an appropriate person who directly observed the learner producing the artefact. An 'appropriate person' is defined as someone with a supervisory role within the workplace (or equivalent), and who has the required skills. This person must not be a family member, and must record and supply the required information for the assessor.

### **Collaboration (Group work) – Limited control**

Some units may require learners to work as part of a group. In other units, unless it is specifically forbidden, tutors may choose to have learners working collaboratively. When producing assignments which require or allow learners to work in groups, tasks must be written to allow each group member to fully meet the requirements of the assessment criteria.

Learners must not have their assessment opportunities reduced by the poor performance of other group members. Where this becomes apparent the tutor or assessor should intervene, or provide suitable alternative activities which do not greatly add to the learners' workloads.

Group tasks should not rely on the performance of individual members of the group to allow other group members to meet all of the assessment criteria.

It is important that each learner is assessed on their individual contribution to the achievements of the group. Where several individuals contribute to a single piece of work, individual contributions must be clearly shown on the work to enable external moderation to take place. This can be indicated by learners or through the tutor's annotations.

## Guidance and support

At the start of the assignment learners will often be required to plan out their programme of work. The tutor/assessors should agree these plans and where appropriate agree milestones where they can monitor learners' responses. Appropriate intervention is to be encouraged to ensure learners have every opportunity of success. However, if the planning process forms part of the assessment criteria, care must be taken to ensure that the plan remains the learner's own work.

Within some unit specifications, the level of assistance given to a learner is a discriminating factor used to decide a learner's positioning within the marking bands. To aid the assessor in selecting the appropriate level of assistance given to the learner a glossary of descriptors is included in the units and should be used for guidance when marking the learners work. In some cases, where a glossary doesn't exist, the following definitions should be used:

- *Assistance* – The learner has to be guided and advised to make progress, and responds to ideas suggested. The tutor/assessor needs to direct significant aspects of the work.
- *Limited assistance* – The learner suggests ideas for themselves, but makes use of guidance and advice from the tutor/assessor to make progress. The tutor/assessor assists in some aspects of the work, but generally does not direct it.
- *Independently* – The learner develops ideas themselves, using the tutor/assessor as an advisor rather than as a director. The tutor/assessor facilitates the work but does not need to direct its progress.

It is expected that all learners should develop as independent learners, but this does not mean that they should not be given any support in order to be able to research, write up and complete their reports. The hallmark of the independent learner, whatever the level, is knowing when and whom to ask for support in helping to carry the work forward.

All learners must be fully and equally briefed at the start of any task or assignment about the requirements of that task, including how they will be marked. They should be given the opportunity to ask any questions in order to clarify the requirements.

Once the assignment is under way, the tutor should respond to questions and requests for advice, but should normally refrain from intervening unasked. Responses can advise the learner on such matters as further sources of information, and can point out where further work is needed, but must always stop short of actually stating what to write.

In some units the amount of support and guidance a learner may receive in the course of carrying out the task or assignment is specified. This occurs, for example, when differentiation between mark bands is achieved in part by the support the learner needs to complete a practical task safely.

Tutors or assessors must always intervene where matters of health and safety are concerned. When this happens, the assessor should make a judgement about the appropriate marks that can be applied to the learner's work in the light of the intervention, and attach to the work a record of the intervention and justification for the marks awarded.

### 3.3 Feedback, re-working and submission

Please refer to the latest edition of the Joint Council for Qualifications instructions for controlled assessment relevant to Principal Learning qualifications.

Candidates are free to **revise and redraft** a piece of coursework without teacher involvement before submitting the final piece. Candidates should be advised to spend an appropriate amount of time on the work commensurate with the marks available.

Teachers may review coursework before it is handed in for final assessment. Provided that advice remains at the general level, enabling the candidate to take the initiative in making amendments, there is no need to record this advice as assistance or to deduct marks. Generally one review should be sufficient to enable candidates to understand the demands of the assessment criteria. Advice may be given in either oral or written form.

Having reviewed the candidate's coursework **it is not acceptable** for teachers to give, either to individual candidates or to groups, detailed advice and suggestions as to how the work may be improved in order to meet the assessment criteria. Examples of unacceptable assistance include:

- detailed indication of errors or omissions
- advice on specific improvements needed to meet the criteria
- the provision of outlines, paragraph or section headings, or writing frames specific to the coursework task(s)
- personal intervention to improve the presentation or content of the coursework.

As indicated above, a clear distinction must be drawn between any interim review of coursework and final assessment for the intended examination series. Once work is submitted for final assessment it may not be revised: in no circumstances are 'fair copies' of marked work allowed. **Adding or removing any material to or from coursework after it has been presented by a candidate for final assessment will constitute malpractice.**

Where coursework is submitted in digital format there may be instances where the construction of the e-coursework does not attract any marks, in which case this construction may be done by the teacher instead of the candidate.

If a candidate requires additional assistance in order to demonstrate aspects of the assessment, the teacher should award a mark which represents the candidate's unaided achievement. The authentication statement should be signed and information given on the Candidate Record Sheet.

Teachers must keep live coursework secure and confidential at all times whilst in their possession. It is not acceptable for teaching staff to share coursework with other candidates.

There may be occasions when a learner needs to retake a task or assignment. This is acceptable at the discretion of the tutor, but the assignment should normally be set in a different context so that the learner is not repeating exactly the same tasks which they have had the chance to practise beforehand. Individual units will have further guidance where appropriate.

### **Authentication**

All candidates must confirm that any work they submit for assessment is their own.

Where learners are required to gather information and resources, tutors or assessors should take the opportunity to discuss authentication and plagiarism at the outset.

Where learner observation records and practical activity logs are required Edexcel will provide exemplar pro formas. Centres may choose to develop their own documentation, but they must record at least the information contained within the exemplar pro formas.

Once the assignment has been completed the assessor may need to interview or test the learner on their understanding of the information and/or the resources that they have identified and used. This may be necessary if, for example:

- the assessor needs to confirm the authenticity of the work
- the unit marking grid carries marks for information and/or resource gathering.

It will be up to the centre assessor to decide on the appropriate format, although the activity should be of a 'closed book' nature.

If the assessor decides to interview the learner, the assessor is required to question the learner regarding their information or resources until the assessor is sufficiently satisfied with the authentication. Whilst the interview is in progress the learner should not have access to the information or resources unless the individual unit specifies otherwise. It can be either a group or individual interview.

If the assessor decides to test the learner, the assessor is required to follow the usual testing format, with learners working in silence, and placed in a manner so that they do not see other learners' responses. The questions are at the discretion of the assessor, as is the length and timing of the test. Learners are not permitted to view the questions prior to the test and should not have access to their work during the test unless the individual unit specifies otherwise.

The documented outcome could be either notes following an interview with one or a group of learners and signed by the assessor, or marked test papers.

Each candidate is required to sign a declaration before submitting their coursework to their subject tutors/assessors for final assessment, to confirm that the work is their own and that any assistance given and/or sources used have been acknowledged. Ensuring that they do so is the responsibility of the candidate's centre.

It is also a requirement that tutors/assessors confirm to the awarding body that all of the work submitted for assessment was completed under the required conditions and that they are satisfied that the work is solely that of the individual candidate concerned. Where assessment is supervised by someone other than the tutor, additional confirmation is required from the person who has supervised the assessment.

All tutors/assessors who have assessed the work of any candidate entered for each component must sign the declaration of authentication.

### **3.4 Task marking (standardisation and marking) – Medium control**

#### **Marking**

Edexcel requires all consortium assessors to use only Edexcel authorized documentation in the assessment of its Principal Learning internal assessed units. All Edexcel Principal Learning internal assessed unit specifications have mark descriptors, and these must be used when assessing learner work. Consortium assessors must not try to re-interpret the mark descriptors, or use any other unauthorised publication which aims to do so.

If written evidence and artefacts are completed under the supervision of someone else (see *Supervision* above), this person may comment upon what is produced, but only the tutor can allocate marks.

Where performance evidence is observed by someone other than the tutor, this person must record their comments on the learner observation record. It is then the responsibility of the tutor to judge this evidence and allocate marks.

## **Standardisation**

*All Principal Learning awarding bodies are required to follow the instructions for standardisation specified by the JCQ.*

Centres should use reference and archive materials (such as exemplar material provided by the awarding body or, where available, work in the centre from the previous year) to help set the standard of marking within the centre.

Prior to marking, a trial marking exercise should be undertaken. Teachers mark the same relatively small sample of work to allow for the comparison of marking standards. The exercise can take place at appropriate stages during the course and has three beneficial effects: it helps to bring about greater comparability in the marking standards; it may identify at an early stage any teachers whose standards are out of line with that of their colleagues; and it alleviates a heavy marking load at the end of the course.

Where the work for a unit has been marked by more than one teacher in a consortium, standardisation of marking should normally be carried out according to one of the following procedures:

**Either** a sample of work which has been marked by each teacher is re-marked by the teacher who is in charge of internal standardisation – normally the Domain Assessor;

**Or** all the teachers responsible for marking a component exchange some marked work (preferably at a meeting led by the Domain Assessor) and compare their marking standards.

Where standards are found to be inconsistent, the discrepant teacher(s) should make adjustments to their marks or re-consider the marks of all candidates for whom they were responsible. The new marks should be checked by the teacher in charge of internal standardisation.

Following completion of the marking and of internal standardisation, the coursework must be retained within the consortium and not returned to the candidates.

Consortia should retain evidence that internal standardisation has been carried out.



