

# Examiners' Report

June 2010

Principal Learning

Information Technology Level 3 Controlled Assessments



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Principal Learning IT Level 2 Examiners' Report June 2010

## Principal Examiners' Report

## Principal Learning - Information Technology - Level 3

#### **General Comments**

It was pleasing to see that the work seen for this moderation window was much improved from the last.

The majority of centres were using the Tutor Support assignments, applied to different contexts depending on the organisations available to the centre or consortia. The centres that derived their own centre assessment on local concepts or needs achieved higher marks.

Centres are advised to review closely the quantitative requirements of the 'what you need to cover' and 'guidance for allocating marks' section of the unit specification when assessing learners work.

Majority of centres submitted the Principal Learning Learners Record Sheets with their portfolios and provided evidence of awarding marks, either through portfolio annotations or comments made on a copy of the marking grid. However it was difficult sometimes to identify the learners work due to the complexity of the centres assessment records and supporting documentation.

Majority of the centres provided the appropriate evidence for Marking Grid B by providing detailed witness statements, annotated photographs and videos.

It was evident in some cases that not all assessments were carried under Controlled Assessment requirements. Centres should refer to the 'Centre Guidance on Controlled Assessments' requirements for the Principal Learning for further clarification and guidance.

It was disappointing to see that many learners did not appear to have taken the opportunity to use the pre-release in preparing for the examination with limited investigation into the topics that were highlighted in the pre-release for each of the externally assessed units.

In terms of administration, work was well presented and organised. However it was disappointing to see the limited number of electronic submissions. Centres that submitted electronic documents used the Principal Learning Learners Record Sheets as the index page of the eportfolio structure with links to each of the unit LO evidence or saved the work in a named folder for each of the learners, clearly identifying evidence location.

Principal Learning IT Level 3 Examiners' Report June 2010

## Level 3 Unit 1 - The Potential of Technology

#### **General Comments**

A lot of the work submitted by centres for the June 2010 series was found to be leniently assessed in terms of the assessment criteria, but it did appear that learners are choosing more suitable case studies for their portfolios. Centres are advised to review closely the quantitative requirements of the 'what you need to cover' (WYNToC) and 'guidance for allocating marks' section of the unit specification when assessing learners work. Learners should be advised that when they are selecting case studies for each learning outcome that they need to choose case studies that allow them to fully explore the range of evidence required, for each of the learning outcome, to enable them to achieve marks across the three mark band ranges.

#### Learning Outcome 1

Marking was sometimes over generous in crediting the role of legacy systems and emerging technologies in achieving organisational objectives. Some learners had discussed what legacy systems and emerging technologies were but failed to identify an appropriate organisation using the legacy system or emerging technology. It was disappointing to find that in some instances learners are still selecting inappropriate examples of legacy systems for example Microsoft XP and were then unable to discuss the elements of the legacy system: hardware, software and data compatibility issues.

Common examples of Legacy systems were:

- Banks Barclay , NatWest, Lloyds TSB
- Graybar Electric Company
- British Rail use of Total Operations Processing System (TOPS)
- Various NHS Legacy systems
- Britain's Serious Organised Crime Agency Legacy Systems
- Charities use of Legacy systems
- South Wales Police (SWP) various Legacy systems
- British Telecom System X
- NASA's Space Shuttle

Some centres had awarded marks in MB3 that were not appropriate. Centres should note that work in this mark band must have a full explanation of the role that legacy systems and emerging technologies play in helping organisations achieve their goals, illustrated with relevant examples from three different sectors.

The role of emerging technologies was also sometimes confused. Centres are advised to review closely the quantitative requirements of the 'what you need to cover' and 'Guidance for allocating marks' section of the unit specification for examples of emerging technologies, such as:

- Mashups
- Location-aware applications
- Virtualization
- Nanotechnology
- RFID
- VoIP
- Social software

It is important to consider emerging technologies where real examples can be studied, rather than thinking about theoretical or future technologies.

#### Learning Outcome 2 and 3

In general these learning outcomes were more accurately assessed with learners providing several relevant and current examples of technology used by organisations and individuals and providing some explanation as to how they were being used to innovate. Common examples used for organisations successful use of technology were:

- Oyster Card System
- Norwich Union Pay As You Go insurance initiative
- Environmental Agency on-line rod licence
- Business Link
- Post Office
- Banks
- Next online shopping
- ASOS online shopping
- Virgin Mobile data Migration

Common examples used for organisations unsuccessful use of technology were:

- BAA Terminal 5 Baggage System
- NHS computerised patient health records, eRecords
- London Ambulance
- EDS and the Child Support Agency (2004)
- Passport Agency 1999
- Student Loan Company
- Education Maintenance Allowance (EMA)
- Craven Books
- Royal Mail Track & Trace

Common examples used for individual successful use of technology were:

- Jack Dorsey Twitter
- Pierre Omidyar eBay
- Mark Zuckerberg Facebook
- Bill Gates, Paul Allen Microsoft
- John Shepherd-Barron Automated Teller Machine (ATM)

For learners to achieve marks at the higher end of MB1 they must have identified at least one unsuccessful and one successful example of organisations and individuals innovating through technology. To achieve marks in MB2 and 3 learners must use three relevant examples (both successful and unsuccessful) of organisations and individuals using technology to innovate.

Most learners did not fully explain the technology used or assess the impact of the innovations. More discussion is required on how organisations and individuals innovate through and with technology, focusing on the requirements of the 'what you need to cover' and 'guidance for allocating marks' section of the unit specification, for example:

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

 On the whole it was felt that learners commented on factors affecting success or failure, but often didn't develop this into considering the impact on competitiveness and service.

#### Learning Outcome 4 and 5

Similarly the marking of these learning outcomes was over generous. These learning outcomes are about recommending innovative technology-enabled solutions for two contrasting organisations, identifying both benefits and risks. The organisations chosen in some cases seemed to have limited scope for motivating learners, which was evident in some of the evaluative work produced.

It was found that most learners had not fully assessed the possible role of the new technology as outlined in the 'what you need to cover' section of the unit specification, for example:

- underpins specific business processes
- safeguards business continuity
- drives performance improvements
- facilitates decision making.

Learners did not fully assess the possible objectives of the new technology, eg to increase sales/revenue, to improve service and to gain a competitive advantage.

Whilst many learners had produced some good work and had presented some recommendations for some innovative technology-enabled solutions, most learners had not fully assessed the opportunities (eg new markets, new or improved products / services, cost reduction, outsourcing) and risks (eg costs, over expansion, staffing issues). The learners that used a SWOT analysis to identify the opportunities and risks achieved a higher grade. Centres might wish to employ methods such as a SWOT analysis or De Bono's 'Thinking Hats' techniques in order to get learners to assess the opportunities and risks that their recommendations will bring.

Centres should note that the specification requires a number of recommendations to be made and marks are awarded accordingly. For example, to achieve full marks in MB1 and marks in MB2, the learners must have presented at least three recommendations for two organisations. Centres often awarded marks from MB3 inappropriately. To achieve MB3 learners must have presented a set of recommendations (more than three) for innovative technology-enabled solutions for two contrasting organisations, fully assessing benefits and risks.

#### Lessons to be Learned

Learners did not clearly identify the elements of the legacy system such as hardware, software and data compatibility issues. Some learners had discussed legacy system and emerging technologies but failed to identify how they achieved the organisational goals. In some instances learners selected inappropriate examples of emerging technologies and legacy systems and were then unable to achieve the higher MBs requirements. For MB1 learners must have identified at least one unsuccessful and one successful example of organisations and individuals innovating through technology to achieve marks at the higher end of MB1.

To achieve marks in MB2 and 3 learners must use three relevant examples (both successful and unsuccessful) of organisations and individuals using technology to innovate. Some inappropriate organisations chosen for learning outcome 4 and 5 that provided limited scope for motivating learners, which was evident in some of the evaluative work produced. Learners should be discouraged from focusing on 'Blue chip' companies (as a majority will already be using new technologies) but instead focus on SME's. It was found that most learners had not fully assessed the possible role of the new technology as

outlined in the 'what you need to cover' section of the unit specification. Learners did not fully assess the possible objectives of the new technology for example to increase sales/revenue, to improve service and to gain a competitive advantage.

## Level 3 Unit 3 - Professional Development

#### **General Comments**

In this unit the learners will investigate different kinds of communication methods; language, style, format, conventions and identify their fitness for audience, purpose and medium.

Learners also need to produce a collection of business-related communications eg

- electronic eg websites, blogs, emails, text messaging, and information points
- print eg newspapers, magazines, reports, brochures, poster
- voice eg telephone, face-to-face, radio and podcast

Learners must present their individual documents to the rest of the team so that the team collectively decides on the best communication model to use to communicate their findings. They must also work together as a team to prepare a well-researched, fully justified and persuasive proposal for stakeholders and create spreadsheet models that applies mathematical concepts to generating ideas to produce alternative solutions. To do this the team must identify the teams differing personal styles and behaviour and explain how their behaviour affected team work and could be adapted to suit different roles and situations.

The majority of centres had used the sample assessment in the Tutor Support Material.

#### Learning Outcome 1 and 3

Most learners achieved high marks in the learning outcome. The learners had given an explanation of the principles of effective communication in business today, for example the use of language, style, format, conventions, fitness for audience and purpose, and assessed the implications of using different communication media to meet objectives in a range of business contexts, using relevant examples and including comments on benefits and limitations.

Learners had also produced an individual collection of business-related communications for a range of common business situations.

#### Learning Outcome 2

Some learners had identified the teams differing personal styles and behaviours and explained how their behaviour could be adapted to suit different roles and situations, although this component was not present in all portfolios. Centres are advised to review the 'what you need to cover' section of the specification which gives examples of personal styles and behaviours i.e. aggressive, responsive, professional/unprofessional, helpful/obstructive, organised/disorganised, positive/negative; verbal clues, body language; speed and quality of work and their impact on others.

Learners achieved the higher MBs when they considered and identified each member's personal style and behaviour using online questionnaires eg Belbin Team Roles, and then allocated roles and responsibilities to suit the team member's style and then fully assessed the impact on teamwork. They also fully explained how behaviour can be adapted to suit different roles and situations, illustrated with some well chosen examples of team work activities.

#### Learning Outcome 3,4,5 and 6

The MB3 learners had produced a bibliography that demonstrated how they investigated the challenge or opportunity in a business context, using a range of appropriate sources to gain a sound understanding of its nature and scope. They also used an appropriate spreadsheet model and complex mathematical concepts to explore and understand business dynamics and find solutions that demonstrated sound awareness of audience and purpose.

Some learners use of mathematical concepts were a little restricted and limited to the use of the SUM function, these learners achieved the lower MBs. The spreadsheet model should be used to fully explore business dynamics such as sales forecasting, cash flow, five-year plans, net present value and profit and loss. Other mathematical concepts could include statistical analysis, probability, estimation, projection and trends using complex mathematical formulas and functions eg IF statements, lookup functions, pivot tables and macros to create a costed proposal.

The learners who prepared an individual complete well-researched, fully justified and persuasive proposal for stakeholders that made recommendations with written justification that considered ethical, social, professional and legal constraints achieved the higher MBs.

#### Learning Outcome 7

The higher Mark band learners produced an effective team plan and made individual notes throughout the team activity to monitor progress and record team discussions, which included initial meetings, agreed objectives, allocated roles, a clear plan or schedule, decisions made and their individual contribution to teamwork. They agreed objectives and identified what needed to be done, by whom and by when. They also used Gantt Charts to track and record team progress. Created a document to record the allocation of roles and responsibilities that provided evidence of how the team worked cooperatively, provided examples of effective communication, created a record of team meetings to monitor progress and provided a summary to demonstrate consideration for others and how they respond constructively to feedback.

The learners that achieved the higher MBs also provided a continuous individual commentary on progress.

#### Learning Outcome 2 and 8

No MB3 work was seen for this learning outcome evaluation' as one of the requirements for MB2 include that the learners should have made evaluative comments on the performance of the team, "including feedback from a reviewer". It wasn't always clear in the evaluations presented that such feedback had been sought or referred to, therefore, it was considered that some work in this section had been over-generously marked. The learners should also evaluate their own personal performance, identify some strengths and weaknesses, record and respond the feedback from others, identify areas for improvement, contribution to team effort and interaction with others. They should also identify feedback offered to others on the team activity including contribution to team, personality mix, and contribution of individuals and provide feedback from a reviewer. Some detailed Observation Report and Peer Assessment seen for the presentation and teamwork elements of Mark Grid B.

#### Lessons to be Learned:

Centres that derived their own centre assessment on local concepts or needs achieved higher marks. It was very pleasing to see that a number of centres included electronic copies of learners created media. Very few examples of voice business communication method seen eg telephone, face-to-face, radio seen for LO.1, this limited the opportunity for the learners to achieve the higher MBs.

Some clear evidence that the learners had investigated the challenge and used a range of appropriate sources to gain an understanding of requirements. These MB3 learners had produced a bibliography that demonstrated how they investigated the challenge or opportunity in a business context, using a range of appropriate sources to gain a sound understanding of its nature and scope.

The learners that achieved the higher MBs used a 'blog or diary' to provide a continuous commentary on progress achieved both on their own and the team's progress during team activities. The use of blogs provided a valuable platform and opportunity for the learners to provide commentary on team and individual performance and progress throughout the assessment activity. Record of feedback from a reviewer is also required for the high MBs. Some poor spreadsheet models seen that evidenced limited use of mathematical concepts ie SUM only. The learners should have used an appropriate spreadsheet model and complex mathematical concepts to explore and generate sound alternative solutions that demonstrated sound awareness of requirements. Most of the models seen had not provided alternative solutions and therefore limited the learners' opportunity to achieve the higher

MBs.

The use of Gantt charts to track and record team progress was effective. The learners that achieved the higher MBs also provided a continuous commentary on progress.

Some centres did not clearly identify individual contribution to the team work elements of the unit. Some of the team work seen was identical in each team member portfolio and it was difficult to mark as the centre had not identified the individual team member contribution.

The learners should review communication media and produce individual copies of the different communication media required for LO.1

For LO.2 each team member should individually identify and consider how their personal style and behaviour impacts on others. Explain how this behaviour can be adapted to suit different roles and situations.

The team can investigate the business challenge to present a business proposal but the individual contribution should be clearly identified. Each member of the team should create an individual spreadsheet solution and apply mathematical concepts in order to find alternative solutions to a given problem.

To evidence LO.7 the learners can present the team derived team plan or Gantt chart for evidence but each learners should make their own notes on the performance of the team. The learners that achieved the higher MBs used a 'blog or diary' to provide a continuous commentary on progress achieved both on their own and the team's progress during team activities. The use of blogs provided a valuable platform and opportunity for the learners to provide commentary throughout the assessment activity.

The use of Gantt charts to track and record team progress was effective. The learners that achieved the higher MBs also provided a continuous commentary on progress.

The ability to evaluate personal and team performance was for the most part, weakly addressed. Response to feedback from others and feedback offered to others was also found to be weakly addressed. Record of feedback from a reviewer is also required for the high Mark bands.

It was evident that the work submitted for LO2 had an impact on LO.2 & LO.8 the evaluation. If the learners had not clearly taken into account the team's personal styles and behaviour in they could therefore not evaluate to achieve the higher Mark bands.

The content of the Observation reports/Witness statements seen for Mark grid B had improved and in some cases they clearly support the marks awarded by the centres. However it was sometimes difficult to identify the learners' contribution to teamwork activities.

An electronic copy of the spreadsheet solution would make the process of moderating this unit simpler for the moderator, as it is difficult to assess the functionality of the spreadsheet system.

# Level 3 Unit 4 - Creating Technology Solutions

#### **General Comments**

In this unit the learners is asked to identify the role and interaction of key components of different database systems and to apply industry standard approaches to design, develop and test small-scale technology-enabled solutions to create a database system with a three-tier architecture relational database, program code and user interface. Use an event-driven programming language such as Visual Basic for Applications (VBA) to customise and enhance the functionality of the database systems they produce. The work seen for LO.4 was disappointing. The majority of the operating information had no real structure or index/content page. Only a small number included any information on troubleshooting, this limited the mark achieved for this LO to the lower mark bands. In general the assessment of the work seen was found to be at the required level. However some of the work seen was non-descriptive and lacked depth of knowledge and application.

#### Learning Outcome 1

For this learning outcome the learners are required to investigate the role and interaction of the key components of database systems. The learners should be able to explain the following in relation to databases and how they work together, using examples to illustrate their explanation.

- Role: tasks performed, inputs and outputs, processing, security
- Key components: input, output and storage devices, user interface, data structures, database reports
- Interaction: compatibility of components, linking systems, sharing/transferring data

The learners that used live databases to interrogate for LO.1 were able to provide a more detailed explanation as to the role of the database, discuss the tasks performed, system inputs and outputs, data processing and an overview of security. They also discussed database interaction ie compatibility of components, linking systems, sharing and transferring data and identify all of the key database components such as input, output, storage devices, user interface, data structures and database reports.

Some examples used of online database systems did not allow the learners to fully investigate the roles, interaction and key components of the database systems and only achieved the lower MB requirements.

Common examples of databases seen:

- Northwinds
- National Rail Enquire
- Screwfit Direct
- Play.com
- Amason.co.uk
- The Internet Movie Database (IMDb)
- Waterstones.com
- Centre derived databases

#### Learning Outcome 2 and 3

Most learners had produced a comprehensive functional specification that covered all of the requirements of the database such as hardware and software, inputs, outputs, processing, performance, security requirements and success criteria. Some of the specifications were vague when setting the success criteria, and there was little evidence of validation being planned for or used within the systems produced. Normalisation was referred to in some cases in the design of the databases showing little or no evidence of normalisation and therefore limited the learner's marks to MB1. Some examples of coding provided slight differences in the marks awarded between the centre and the moderator, these arose because of the requirement at MB2 and MB3 to use program code to customise the application. The program code used should handle database objects and controls or locate and edit information. This was not present in some of the samples provided and centres should ensure that evidence of program code ie SQL printouts for the lower MBs and VBA for the higher MBs is seen in future series. For the learners to achieve the higher MBs evidence of the normalisation process and clear evidence of the database structure is required, such as tables, relationships, primary and foreign keys, data types and validation rules.

Clear evidence of efficient data handling procedures that meet all of the specified criteria (eg add, import, export, amend, delete data and extract information) that met the specified requirements.

Testing for functionality, performance and usability was poor in some cases which limited the learner's opportunity to achieve the higher MBs. The learners that achieved the higher MBs produced a detailed test plan that evidenced thorough testing for functionality, performance and usability.

#### Learning Outcome 2 and 3 (user interface)

The MB3 learners developed a HCI user interface to team properties and objects, buttons, validation and created some automation. Produced accurate report formats for example features, field selection, teaming and sorting that met all of the specified requirements, including an effective user-friendly interface with list and drop down boxes that aided accurate data entry and reports that presented information effectively.

The user interface should demonstrate some form of properties and objects, buttons, validation and automation. The reports should evidence format, features, field selection, teaming and data sorting.

Some learners produced a test plan that evidenced thorough testing for functionality, performance and usability.

#### Learning Outcome 4

Some poorly formatted operational information was presented by the learners to demonstrate how to use the system. A troubleshooting section should be included in the user guide in every case, and learners should use a simple layout along with a contents page in order to help the user understand how to use the system. Over-use of arrows pointing to different parts of a screenshot can make user guides more complex and hard to understand.

#### Learning Outcome 5

To be eligible for MB3 the learners must have reviewed the system using acceptance testing and observation, making full use of the feedback to identify errors and possible enhancements. Prioritised action to be taken and have produced an effective workable implementation schedule, demonstrating an astute awareness of user needs.

Some learners had created a testing document and asked others to fully review the system using acceptance testing and observation, making full use of the feedback to identify errors and identify possible improvements achieved the higher Mark bands.

#### Lessons to be Learned:

The learners that used live databases or centre derived databases to interrogate were able to provide a more detailed explanation as to the role of the database, discuss the tasks performed, system inputs and outputs, data processing and an overview of security. They also discussed database interaction ie compatibility of components, linking systems, sharing and transferring data and identify all of the key database components such as input, output, storage devices, user interface, data structures and database reports. Testing for functionality, performance and usability was poor in some cases which limited the learners' opportunity to achieve the higher mark bands.

Providing a print out and annotating the program code SQL or VBA would demonstrate how it was used to maximise efficiency, for example handling database objects and controls, locating and editing information would support the mark band requirements.

The work seen for the operational information was disappointing. The majority of the operating information had no real structure or index/content page. Only a small number included any information on troubleshooting, this limited the mark achieved for this LO to the lower mark bands.

The learners who carried out a review of the system using peer testers to undertake acceptance testing achieved higher marks as they received a useful feedback from their users. Learners were then able to identify errors and possible improvements and showed that they had been able to prioritise the improvements.

Learners are required to produce a prioritised implementation schedule to move out of MB1.

An electronic copy of the database would make the process of moderating this unit simpler for the moderator, as it is difficult to assess the functionality of the database system.

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## Level 3 Unit 5 - Managing Technology Systems

#### **General Comments**

Centres should refer to the Centre Guidance on Controlled Assessments requirements for the Principal Learning.

In terms of administration the centre are reminded that the course work learner's sheet identifying the mark awarded for each learner is required to accompany the sample, and that the assessor should clearly indicate the page number or file name that provides the evidence to support the marks awarded. In many cases, especially where work was submitted digitally, many, vaguely named Office documents were provided with little indication of which file related to which section.

Simple web pages that linked files together into a coherent e-portfolio were provided by some centres, and these were helpful and well received. Some centres presented work for marking grid A that is more appropriate for marking grid B.

#### Learning Outcome 2 and 3

The tutor support material was often followed well except in one case where the centre did not approach it as a real business scenario. Instead learners produced research on all the areas of the WYNTOC without relating and applying their findings to the client's needs. Some marking of this component was considered to be a little generous when compared to national standards. Learners spent a considerable amount of their portfolios defining the various methods of implementation available, but then did not sufficiently, in some cases, apply these principles to the proposal in hand. Centres should ensure that learners clearly show why the chosen method of implementation safeguards business continuity, including planning, procedures and people management.

Some learners demonstrated some of the requirements of system change, but for higher marks learners should demonstrate a sound awareness by discussing the purpose of the system change, applying the principles of change management including planning, procedures and people and focus more on procedures and the people elements of the change management process.

In some cases no workable plan was presented for the required system change and business requirements were unclear.

#### Learning Outcome 4

Some learners produced a risk assessment that identified several types of problems in technology systems such as human errors, equipment errors, natural disasters and deliberate acts and gave an indication of the risks involved.

Some learners also briefly explained the risks involved, the likelihood of risk occurring, the effect of the risk and provided some advice on how to handle the problem in each case. To be eligible for MB3, learners must have fully assessed the impact of several types of problem in technology systems such as software bugs, viruses and/or user errors. They must also have explained the risks involved, impact on the user, business, system and data, fully assessing the impact and providing detailed advice on how to handle the problem in each case.

#### Learning Outcome 6

Centres should ensure that learners include recovery procedures in their documentation in all cases.

To be eligible for MB3, the learners must have produced comprehensive support information which is easy to follow, covering the requirements of the WYNToC such as:

- Security: securing data and systems from internal and external threats (eg firewalls, virus checking, passwords, access rights, physical security).
- Maintenance: routine and non-routine procedures (eg managing file systems and storage, database administration, replacing consumables and damaged components, updating security software, installing patches).
- Capacity planning: forecasting hardware and software requirements linked to business growth and replacement policies (eg planning for the anticipated number of hits on a database or web page).
- Backup and recovery procedures: frequency; backup media, procedures for recovery.

To achieve full marks in this band, the technical support information must be user-friendly and presented clearly, demonstrating astute awareness of audience needs. Some technical support information was poorly presented and demonstrated little awareness of audience needs.

#### Mark grid B - Moderation

Some centres demonstrated an example of good practice by providing detailed observation reports, test plans, implementation plans, password conventions, user request logs, or solution log as evidence for Mark grid B.

## Level 3 Unit 6 - Multimedia and Digital Projects

#### **General Comments**

Centres are thanked for providing CDs and DVDs containing the multimedia products themselves.

Generally centres set their own tasks for this unit. Where this is the case, centres should make sure that they provide learners with the opportunity to access the full range of marks.

#### Learning Outcome 1

The tasks set for LO.1 tended to be very open-ended, which was not to the benefit of most learners. Learners would be better served investigating specific examples of the use of multimedia, and drawing out the different types of multimedia during the course of that investigation. Instead, most learners started with generic descriptions of the types of multimedia without context, which seemed to confuse them. In some cases learners were tasked with investigating very recent developments such as the <video> tag in the new HTML5 standard, but spent too much time doing this rather than describing the different types of multimedia such as video, sound and so on from the What You Need to Cover section. Learners must describe the types of multimedia and their use.

#### Learning Outcome 2, 3 and 4 (Website)

Centres should be careful not to set tasks that require few, if any, primary assets. There should be evidence of primary and secondary assets across the website and multimedia product.

The quality of the websites produced in this series was good, with a lot of centres choosing to embed the multimedia product within the website. Although this is not a requirement, it does make the evidence for the unit a little more cohesive for the learners. Centres are reminded for the need for design and testing evidence to support the informational websites in this section. Designs should be up-front designs such as structure diagrams, not screenshots of the website being produced.

#### Learning Outcome 2, 3, and 5 (Multimedia Product)

The contexts used for most tasks were sound, but some learners were not set tasks with sufficient scope in the main when it came to the multimedia products in some cases. Examples still included simple Movie Maker videos and PowerPoints; centres should pay close attention to the What You Need to Cover section when it comes to the multimedia product and take their inspiration for their tasks from the examples suggested such as elearning products or computer games.

While PowerPoints are acceptable to a degree, timeline based animation was often absent, especially as a primary asset, and Movie Maker videos provide no interactivity for the user and aren't in the spirit of the suggested types of product in the specification.

Some good quality multimedia products were seen for this section including interactive presentations on road safety and a virtual tour of a sixth form. Centres are producing work that is more in the spirit of the specification which is pleasing. Assessment of this section is still slightly generous in some cases and centres should always consider the multimedia product along with the design and testing evidence that should accompany it.

#### Learning Outcome 6

To achieve full marks in this LO, the learners must have fully evaluated each of their products, giving a sensible assessment of their fitness for audience and purpose, and made some sensible suggestions for improvement in each case, noting how each improvement would enhance the product, demonstrating astute awareness of audience needs. Some evaluations were generally marked too generously and focused on the difficulty encountered by the learners rather than the quality, and most notable by its absence, impact of the multimedia products and websites. Accessibility was also poorly addressed.

#### Lessons to be Learned

- Centres need to note the specification suggestion of a "computer game, simulation, discovery board, e-book, virtual tour or e-learning package" for the multimedia product
- Evaluations should take impact and accessibility into account
- For LO1, centres should investigate existing multimedia as a "way in" to the assignment
- Movie Maker and PowerPoint aren't the most appropriate tools for the multimedia products
- Timeline animations should be created where possible as a primary asset
- The best quality work contained a good mix of primary and secondary assets, with assets being created for purpose where necessary
- Designs should be up-front designs, not work-in-progress

## Statistics

#### Level 3 Unit 1 - The Potential of Technology

Grade	Max. Mark	A*	A	В	С	D	E
Raw boundary mark	60	52	46	40	34	28	22
Points score	14	12	10	8	6	4	2

#### Level 3 Unit 3 - Professional Development

Grade	Max. Mark	A*	A	В	С	D	E
Raw boundary mark	90	77	68	59	50	41	33
Points score	21	18	15	12	9	6	3

#### Level 3 Unit 4 - Creating Technology Solutions

Grade	Max. Mark	A*	A	В	С	D	E
Raw boundary mark	90	79	70	61	52	43	35
Points score	21	18	15	12	9	6	3

#### Level 3 Unit 5 - Managing Technology Systems

Grade	Max. Mark	A*	A	В	С	D	E
Raw boundary mark	60	51	45	39	33	28	23
Points score	14	12	10	8	6	4	2

#### Level 3 Unit 6 - Multimedia and Digital Projects

Grade	Max. Mark	A*	А	В	С	D	E
Raw boundary mark	60	52	45	39	33	27	21
Points score	14	12	10	8	6	4	2

#### Notes

Maximum Mark (Raw): the mark corresponding to the sum total of the marks shown on the mark scheme or marking grid.

Raw boundary mark: the minimum mark required by a learner to qualify for a given grade.

<u>Please note:</u> Principal Learning qualifications are new qualifications, and grade boundaries for Controlled Assessment units should not be considered as stable. These grade boundaries may differ from series to series.

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