



Ysgol Uwchradd Y Frenhines Elisabeth  
Queen Elizabeth High School

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## ICT POLICY

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### INTRODUCTION

In creating the school's ICT Policy the ICT Strategy Group has set out how we aim to achieve the vision we hold for ICT. In setting out our vision we are mindful that BECTA believes that the main components of an ICT Policy should include:

- Strategic management
- Curriculum organisation and administration
- Human and physical resource management
- Management Information System (MIS)
- Equal opportunities
- Evaluation

This policy document sets out the school's aims, principles and strategies for the delivery of Information and Communication Technology. It will form the basis for the development of ICT in the school over the next five years.

This policy was developed in the autumn term of 2006 by the members of the ICT Strategy Group. It was presented to the Curriculum and Staffing Committee on 23 January 2007.

The school endorses the findings of the schools' inspectorate that the co-ordination of ICT demands a considerable range of expertise, requiring good ICT understanding and knowledge, technical skills and the ability to provide professional support. Too many demands are placed on some ICT co-ordinators, most of whom have a full teaching commitment and few opportunities for monitoring the subject adequately across the school. In recognition of the demands of the role, the school has convened an ICT Strategy Group whose main function is to coordinate the implementation of the ICT policy and provide advice to the Leadership Group and the Governing Body on ICT related issues.

Throughout this ICT policy there will be many references made to current whole school policies. To avoid too much duplication the ICT Strategy Group sought to embed the following whole school policies:

- Asset Disposal Policy;
- Curriculum Policy;
- Equal Opportunities Policy;
- Health and Safety Policy;
- Inclusion Policy;
- Key Skills Policy;
- Teaching and Learning Policy.

Where appropriate, the whole school policy may be supplemented by additions that are more relevant to the work being carried out by the ICT Strategy Group. These additions will be included within the ICT Policy.

## THE SIGNIFICANCE OF INFORMATION AND COMMUNICATION TECHNOLOGY

Information and Communications Technology (ICT) prepares pupils to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technology. Pupils use ICT tools to find, explore, analyse, exchange and present information responsibly, creatively and with discrimination. They learn how to employ ICT to enable rapid access to ideas and experiences from a wide range of people, communities and cultures. Increased capability in the use of ICT promotes initiative and independent learning; with pupils being able to make informed judgements about when and where to use ICT to best effect, and consider its implications for home and work both now and in the future (DfEE/QCA '99).

## THE SCHOOL'S AIMS FOR ICT

The overall aim for ICT is to enrich learning for all pupils and to ensure that teachers develop their confidence and competence to use ICT in the effective teaching of their subject. ICT offers opportunities for pupils to:

- Develop their ICT capability and understand the importance of information and how to select and prepare it;
- Develop their skills in using hardware and software so as to enable them to manipulate information;
- Develop their ability to apply ICT to support their use of language and communication;
- Explore their attitudes towards ICT, its value for themselves, others and society, and their awareness of its advantages and limitations;
- Develop good Health and Safety attitudes and practice.

To aid the creation of this ICT Policy, and to provide greater clarity and coherence, the ICT Strategy Group decided to sub-divide it into a number of sub-sections. All members of the ICT Strategy Group contributed towards the formulation of this document.

## POLICY REVIEW PROCEDURES

The contents of the ICT Policy will be reviewed annually, with a major review after a three-year period. However, there may be occasions when elements will require a more regular review. The members of the ICT Strategy Group will carry out this review.

The review will focus on:

- Whether there is a mismatch between policy and practice. The ICT Strategy Group will monitor the progress that is being made to achieve the goals set out in the ICT Policy;
- Whether additional training/support is required to implement improvements in teaching;
- Which aspects of the ICT Policy will be given the greatest priority;
- Whether there are any shortcomings in the ICT Policy itself.

## STRATEGIC MANAGEMENT

### The ICT Development Plan

The development plan, although contained within the ICT Policy, will actually sit alongside it. It is an expression of how the vision is to be achieved within an intended timeframe.

In formulating the development plan, the ICT Strategy Group is mindful of the need for short-term plans for the duration of the current buildings and longer-term plans that will be implemented when the new school building opens in September 2008.

Vital in both short and long-term development plans is the provision of quality hardware and software. We are equipping our pupils with the necessary ICT skills that will prepare them for life after school.

## **Financial Planning**

The ICT Strategy Group is allocated funds annually by the Governing Body. The Senior Learning Coordinator is the named budget holder and is responsible for sanctioning all spending. The allocated funds are divided into the following categories:

### **1. New Equipment**

Hardware or software that is required throughout the school. When making major purchasing decisions the ICT Strategy Group follows County and School guidelines, which may involve obtaining at least three quotes before making any financial commitment. The County and school policies in this respect state that:

*For items valued up to £5,000, the school is responsible for exercising best value and there is no requirement for 3 quotes. Items valued between £5,000 and £75,000, 3 quotes are required on paper by either letter, fax or email.*

### **2. Fixed Costs**

These fixed costs are currently the Microsoft software licenses (Schools Agreement).

### **3. Repair and Maintenance**

Any maintenance that is required on current ICT-related equipment. The Systems Managers will obtain at least three quotes before making any financial commitment.

### **4. Contingency**

Any unforeseen ICT-related eventualities that may crop up throughout the school.

### **5. Consumables**

Faculty heads are responsible for the cost of consumables; this includes items such as printer paper, ink cartridges, toner cartridges and fuser units for printers. The Systems Managers will seek authorisation from the Senior Learning Coordinator prior to ordering the required consumables. The Systems Managers will advise HOFs of the amount being spent and subsequently inform the finance office which Faculty account has to be debited.

## **STAFF & PUPIL LAPTOP/NOTEBOOK/PDA POLICY**

### **Staff - School Laptop/Notebook/PDA**

When members of staff are provided with a school laptop/notebook/PDA they must bear in mind that it is the property of the school and ensure it is used for school-related work. This work may include lesson preparation, used as a teaching tool during lessons and any related assessment work in the form of record keeping or writing reports. School laptop/notebook/PDA will also be used to carry out administrative tasks that include writing school policy and preparing schemes of work.

Members of staff must present their laptop/notebook/PDA as requested by the Systems Managers. The Systems Managers are to carry out any maintenance that needs to be undertaken, whether hardware or software related.

Members of staff are expected to bring their laptop/notebook/PDA into school on a daily basis.

### **Staff - Personal laptop/notebook/PDA**

Staff will be allowed to use their own, personal, laptop/notebook/PDA computer in school. The use of the laptop/notebook/PDA will be entirely the responsibility of the individual member of staff. The school will not be responsible if the laptop/notebook/PDA is lost or if any damage is caused whilst on school premises.

Members of staff are encouraged to transfer files from home to school, and vice versa, using either a portable data storage device or suitable web based software.

### **Pupil - Personal laptop/notebook/PDA**

Pupils will not be allowed to use their own personal laptop/notebook/PDA computer on school premises.

Pupils are encouraged to transfer files from home to school, and vice versa, using either a portable data storage device or suitable web based software.

## **PORTABLE DATA STORAGE POLICY**

With the advent of portable data storage devices (USB thumb drives, mobile phones, MP3 players, etc) pupils, and staff, can introduce software onto the school computer network in many ways. It is a very simple process to copy data from the portable data storage device onto the school network.

In our endeavours to reduce the risk of a computer virus infecting the school network or the installation of software capable of damaging the network in some way, the members of the ICT Strategy Group reserve the right to check the contents of portable data storage devices. If the contents of the portable data storage device raise concern then the device may be confiscated to remove the offending file(s). The portable data storage device will be returned to its owner once the offending file(s) has been removed.

## **CURRICULUM ORGANISATION AND ADMINISTRATION**

### **1. Key Stage 3 ICT**

As an important element of the National Curriculum, ICT is taught to all pupils in Years 7, 8 and 9. The Key Stage 3 ICT Strategy is delivered through discrete lessons as well as across the curriculum. All Key Stage 3 pupils have 1 hour per fortnight of taught lessons in computer rooms where they work at their own pace. The school is well-equipped, with computer facilities that ensure pupils develop their ICT skills.

The National Curriculum programme of study for ICT in Key Stage 3 groups the knowledge, skills and understanding that pupils need to acquire into themes.

These themes, which characterise what people normally do when they work with ICT, are:

- Finding things out
- Developing ideas and making things happen
- Exchanging and sharing information

A critical feature of the development of ICT capability, which is also integrated into each theme, is 'reviewing, modifying and evaluating work as it progresses'.

The outline below provides pupils, staff and parents with a scheme of work for ICT for each year group in Key Stage 3. Lessons are delivered in form groups.

In addition to the timetabled and assessed ICT lessons shown below there are many other opportunities for delivery of ICT throughout Years 7, 8 and 9 across the curriculum. These are subject-based activities and not a formal part of the assessed ICT lessons shown below.

## Year 7 Scheme of Work

Topic (POS)	Teaching Aims	Learning Activities
Introduction	<p>Introduction to ICT and basic ICT terms that will be used throughout the year</p> <p>The pupils are expected to be able to log on to the computers individually</p> <p>Pupils will be shown how to save work and create folders to save their work in</p> <p>Pupils must learn how to work safely on computers and the health and safety aspects that arise from computers</p>	<p>Pupils will learn the meaning of the terms used throughout ICT and the correct names for items of the computer</p> <p>Pupils will learn their own usernames and passwords for the computer and how to log on</p> <p>Pupils will learn how to manage files within their areas and save work effectively within those files</p> <p>Pupils will learn what correct equipment should be placed in a computer room, what lighting and furniture are suitable. Pupils will also learn about health problems and how they can be protected from these problems</p>
Internet	<p>Introduction to the Internet to give pupils an understanding of how the Internet is used and the variety of terms used when talking about the Internet.</p> <p>Pupils must learn how to search the Internet using key words with a variety of search engines</p> <p>Pupils must use the search engines provided to search for information on a given topic and gain the answers to the questions</p> <p>Pupils must learn how to define the correct answer from a multiple choice to complete sentences about the internet</p> <p>Pupils must work in pairs and place the correct two cards together to make 6 correct sentences relating to the Internet</p>	<p>Pupils to use the key terms when using the Internet e.g. World Wide Web, hyperlinks, homepage, search engines</p> <p>Pupils will know how to search several search engines of their choice to gain the answers to the questions and also learn to use key words that will help them find the answer</p> <p>Pupils will learn how to use given search engines to gain answers to questions on one given topic.</p> <p>Pupils will learn how to get the correct answer from a multiple choice and complete sentences all relating to the Internet</p> <p>Pupils will learn further about the Internet by placing 2 cards together to create 6 sentences</p>
Word Processing	<p>An introduction to Word giving pupils an understanding of Word and the key terms used when talking about Word</p> <p>Pupils must learn how to create a profile about themselves and following instructions set for them</p> <p>Pupils must learn to create a menu or poem ensuring that they are using all techniques that they have previously learnt</p> <p>Pupils must learn how to follow instructions to cut and paste sentences of a poem into the correct order. Pupils will also insert a border and a clipart picture</p>	<p>Pupils to use the key words e.g. Word wrap, cursor, WYSIWYG, font</p> <p>Pupils will learn how to use the program and create a profile about themselves, including borders, shading, clipart, word art</p> <p>Pupils will create a menu or poem ensuring that they are using bold text, borders, clipart, word art etc.</p> <p>Pupils will learn how to cut and paste words to create a poem that rhymes paragraph by paragraph.</p>
Project	<p>Pupils must learn how to use features of Word to produce a project on their Home Town. (Year 7 - Project)</p> <p>Pupils will also learn how to evaluate their project at the end using guidelines (My Evaluation)</p>	<p>Pupils will Create an Information Booklet on their Home Town. Pupils must ensure that the following are included</p> <ul style="list-style-type: none"> <li>• A map from the Internet</li> <li>• Statistics e.g. how many people live in the town</li> <li>• Food places available in the town</li> <li>• What have we got available to us in the town?</li> </ul> <p>Pupils will use guidelines to help them create an evaluation on their project and what could be improved with extra time.</p>

## Year 8 Scheme of Work

Topic (POS)	Teaching Aims	Learning Activities
Introduction to the school computing system	<p>Introduction to ICT recapping on basic ICT terms learnt throughout Year 7</p> <p>The pupils are expected to be able to log on to the computers individually</p> <p>Pupils will be reminded of how to save work and create folders to save their work</p>	<p>Pupils will learn the meaning of the terms used throughout ICT and recap on words that they have previously learnt</p> <p>Pupils will learn their own usernames and passwords for the computer and how to log on</p> <p>Pupils will learn how to manage files within their areas and save work effectively within those files</p>
Publisher	<p>Introduction giving pupils an understanding of the activities that can be carried out using the program</p> <p>They must learn to create a greeting card using Publisher and learn how to follow the steps to complete the card</p> <p>Pupils must learn to participate in groups to create and complete a newspaper of their choice and to meet a deadline</p>	<p>Pupils will learn the key publications that can be carried out and how to complete them</p> <p>Pupils will learn how to follow a set of instructions to create a document and complete a greeting card</p> <p>Pupils will learn to work as part of a team to complete a 4 page newspaper in a given deadline ensuring that all aspects have been covered</p>
Databases	<p>Introduction to give pupils an understanding of the use of a database and the variety of terms used within databases.</p> <p>Pupils must learn to set up a database table using a variety of field names and data types</p> <p>Pupils must learn how to enter details into the table under the field names that they have already produced</p> <p>Pupils must learn to sort the information in a table, showing an understanding of adding, editing and deleting information from an existing table</p> <p>Pupils must learn to extract information from the table and achieve the answers to the questions provided by the means of carrying out queries</p> <p>Pupils must learn how to create both forms and reports to present the information in the table. Pupils must also learn how to create navigation buttons on the forms</p>	<p>Pupils to know the key terms within databases e.g. the variety of data types, records, fields, key field, tables</p> <p>Pupils will learn how to work individually to create the initial stage of a database table following a set of instructions and using a variety of data types</p> <p>Pupils will learn how to complete the table by entering a variety of information including names into the table that they have already created with field names and data types</p> <p>Pupils will learn how to sort information in to both alphabetical and numerical order. Pupils will also learn how to add information, edit information and also delete information from the existing table</p> <p>Pupils will learn how to query a database and retrieve the answers that are required for the questions</p> <p>Pupils will learn how to create forms and reports following a set of instructions. Also creating navigation buttons that will assist the user in moving around the forms</p>
Project	<p>Pupils must learn how to search for information using the Internet to obtain information needed for a news report on famous people. (Famous People Project Sheet)</p> <p>Pupils will also learn how to evaluate their project at the end using guidelines (My Evaluation)</p>	<p>Pupils will learn how to search the internet using criteria to gain information on two famous people. Pupils will then select information found to create a new report on their chosen famous people.</p> <p>Pupils will use guidelines to help them create an evaluation on their project and what could be improved with extra time.</p>

## Year 9 Scheme of Work

Topic (POS)	Teaching Aims	Learning Activities
Introduction to the school computing system	<p>Introduction to ICT recapping on basic ICT terms learnt throughout Year 7 and 8</p> <p>The pupils are expected to be able to log on to the computers individually</p> <p>Pupils will be reminded of how to save work and create folders to save their work</p>	<p>Pupils will learn the meaning of the terms used throughout ICT and recap on words that they have previously learnt</p> <p>Pupils will learn their own usernames and passwords for the computer and how to log on</p> <p>Pupils will learn how to manage files within their areas and save work effectively within those files</p>
Spreadsheets (Excel)	<p>Introduction to Spreadsheets to give pupils an understanding of the use of spreadsheets and the variety of terms used within spreadsheets.</p>	<p>Pupils to know the key terms with spreadsheets e.g. Workbook, worksheets, column, row and cells.</p>

	<p>They must learn to create a spreadsheet using formulas and analyse the methods that are being used</p> <p>Pupils must learn how to set up a spreadsheet from a set of instructions and carry out a variety of formulas to complete the spreadsheet</p> <p>Pupils must learn how to complete a spreadsheet individually through research and present their findings in a graph and short report</p> <p>The teacher will support and advise the individual pupils whilst they complete the tasks.</p>	<p>Pupils will learn how to use formulas effectively and analyse the methods being used with Rich Aunt to give an accurate answer to the question</p> <p>Pupils will learn how to follow a set of instructions to create a spreadsheet, create formulas and evaluate the end result</p> <p>Pupils will learn how to research for figures on the Internet, creating a spreadsheet and evaluate the findings.</p>
Project - Llangain Towers	<p>Pupils will learn how to work as part of a group (no more than four) to publicise a new theme park opening.</p> <p>Pupils will also learn how to evaluate their project at the end using guidelines (My Evaluation)</p>	<p>Pupils will complete a variety of tasks to advertise a new theme park. Pupils must ensure that they</p> <ul style="list-style-type: none"> <li>• Decide who is going to be in charge of the group</li> <li>• Share out the tasks equally</li> <li>• Meet a given deadline</li> </ul> <p>Pupils will use guidelines to help them create an evaluation on their project and what could be improved with extra time.</p>
Project - Business Documents	<p>Pupils will learn how to several Office programs to produce a wide variety of documents to advertise their chosen business within a given timeline. (Major Assessed Project)</p> <p>Pupils will also learn how to evaluate their project at the end using guidelines (Evaluation on business documents)</p>	<p>Pupils will decide upon a business that they wish to advertise and then produce several documents for this business. Some documents include</p> <ul style="list-style-type: none"> <li>• Business cards</li> <li>• Poster</li> <li>• Mail merge letter</li> <li>• PowerPoint</li> <li>• Income and expenditure</li> </ul> <p>Pupils will use guidelines to help them create an evaluation on their project and what could be improved with extra time.</p>

## 2. Key Stage 4 ICT (GCSE)

The WJEC ICT syllabus covers a wide range of topics and incorporates a large amount of coursework. In Year 10 pupils complete three pieces of coursework - one involves a DeskTop Publishing (DTP) exercise, one involves the creation of a Database and the other involves the creation of a spreadsheet exercise. These take up a vast amount of lesson time in Year 10 and homework is used to support theory activities.

### 2.1 Year 10 Scheme of Work - GCSE

Topic	Teaching Aims	Learning Activities
<p><b>Term 1 Portfolio - Data Handling</b></p> <p>To produce a system using a database package capable of being fully interrogated</p>	<p>Introductory work tasks will be practised to ensure pupils have an understanding of the package</p> <p>The pupils are expected to produce an information handling system using a database package (Microsoft Access)</p> <p>They must analyse, design, develop, test and evaluate their chosen system and present a written report of the task.</p> <p>The teacher will support and advise the individual pupils whilst they complete this task.</p>	<p>Pupils will learn to identify information needed and suitable sources</p> <p>They will carry out effective sorts and searches of a complexity commensurate with their ability</p> <p>They will learn to select information that is relevant to their purpose</p> <p>They will learn to present analytical reports and evaluations of a format suitable for a computer project report.</p>
<p><b>Term 1 - Theory</b></p> <p>Input and Output Devices</p> <p>Advantages and disadvantages of ICT</p> <p>Networks and network topologies</p>	<p>An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.</p> <p>The teacher will cover a variety of theory aspects using different techniques.</p>	<p>Pupils will understand and have knowledge of all the topics being covered.</p> <p>Pupils will compile a set of notes on various areas covered by the teacher.</p> <p>Pupils will research information for topics using the Internet</p>

The Internet  Databases, validation, verification and data types		
<b>Term 2 - Portfolio</b>  <b>Spreadsheet and Software Modelling</b> To produce a system using a spreadsheet package capable of carrying out a variety of functions and formulas	Introductory work tasks will be practised to ensure pupils have an understanding of the package  The pupils are expected to produce a spreadsheet to keep track of a businesses accounts throughout the year (Microsoft Excel)  They must design, create, develop, test and evaluate their chosen system and present a written report of the task.  The teacher will support and advise the individual pupils whilst they complete this task.	Pupils will learn to identify information needed and suitable sources  They will carry out effective simple and complex formulas  They will learn to select information that is relevant to their purpose.  They will learn to present analytical reports and evaluations of a format suitable for a computer project report.
<b>Term 2 - Theory</b> Spreadsheets  GUI's  Fax, email and mobile phones  File Safety and Data Protection	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet

Topic	Teaching Aims	Learning Activities
<b>Term 3 - Portfolio Presenting Information</b> To produce a variety of advertising documents for their chosen business	Introductory work tasks will be practised to ensure pupils have an understanding of the package  The pupils are expected to produce a variety of documents that may be used with a business of their choice (Microsoft Publisher and Microsoft Word)  They must design, create and test their documents to ensure that the documents created have an overall professional appearance.  The teacher will support and advise the individual pupils whilst they complete this task.	Pupils will learn to identify information needed and suitable programs that are to be used  They will complete a selection of documents for advertising purposes  They will learn to create a mail merge letter and create a macro within a document.  They will learn to present their work professionally and suitable for a business.
<b>Term 3 - Theory</b> Copyright, Viruses and Hacking  Health and Safety  Simulation Software  Working safely with computers	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet

## 2.2 Year 11 Scheme of Work - GCSE

Topic	Teaching Aims	Learning Activities
<b>Term 1 - Major Project</b> Introduction to the project  Statement of problem and analysis  Alternative methods and software	Teacher introduction where pupils are required to submit a report on the solution to a problem, which demonstrates their information capabilities.  Pupils must find a problem area, research the background and find problems encountered with the current paper system.  Pupils must suggest alternative ways of solving these problems and computer software that could be used.	Pupils will base their coursework on a real life situation and try and identify a business that has problems that need to be solved.  Pupils will describe the background to their chosen business; carry out research to find problems that are associated with the business.  Pupils will list possible non-computer solutions to the problems and also state the types of application software that they will use.
<b>Term 1 - Theory</b> Encryption  Computer Misuse	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas



Real Time and Batch Processing Expert Systems	The teacher will cover a variety of theory aspects using different techniques.	covered by the teacher. Pupils will research information for topics using the Internet
<b>Term 2 - Major Project</b> Information Handling Modelling Communicating Information	The pupils are expected to produce an information handling system using a database package (Microsoft Access)  They must analyse, design, develop, test and evaluate their chosen system  The pupils are expected to produce a spreadsheet to keep track of a businesses accounts throughout the year (Microsoft Excel)  They must design, create, develop, test and evaluate their chosen system  The pupils are expected to produce a variety of documents that may be used with a business of their choice (Microsoft Publisher and Microsoft Word) They must design, create and test their documents to ensure that they are professional.	Pupils will create pencil designs of a data capture form, data structure table and validation techniques.  Pupils will create a database; carry out simple editing, sorting, searching and testing the table.  Pupils will create pencil designs of the sheets; design the simple and complex formulae.  Pupils will create an accurate spreadsheet and include evidence of graphs, "What ifs" - Changing data and formula  Pupils will create pencil designs of all 4 documents created; annotate the designs and design the data flow (mail merge). Pupils will create 4 accurate presentations. Pupils will ensure that advanced techniques are covered for example hyperlinks. Pupils will also create a mail merge letter using a data source.

Topic	Teaching Aims	Learning Activities
<b>Term 2 - Theory</b> Impact of ICT on Society System Life Cycle Computer crime and security systems	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet
<b>Term 3 - Major Project</b> User Documentation Evaluation	The pupils are expected to create a document that will enable users of the system to access the information needed.  An evaluation is also required on the project as a whole and what would be improved next time.	Pupils will provide information for the users as to how to load and run the software. Provide examples of error messages that may occur and information on security levels.  Pupils will also demonstrate how to create and use mail merge  Pupils will create their own evaluation of the project e.g. what went well and what could be improved
<b>Term 3 - Theory</b> Medical Applications Money and Banking Retailing Libraries and Booking Systems	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet

### 2.3 Key Stage 4 ICT (CiDA)

The Edexcel CiDA syllabus incorporates a large amount of coursework with no final examination at the end. In Year 10 pupils complete one unit (AiDA), this takes up a vast amount of lesson time in Year 10 and homework is used to support both theory practical activities related around the course.

Pupils in Year 11 complete the final second unit to gain the full CiDA qualification. Pupils are actively encouraged to ask for help and interact with their teachers via VLE. The VLE provides assistance both during and outside school hours and is particularly important for help with homework and coursework, at weekends, during holidays and when preparing for exams.

## Year 10 Scheme of Work - CiDA

Topic	Teaching Aims	Learning Activities
Project Planning - Plan a project	Pupils must learn how to: - Use features of the Internet and Search Engines i.e. bookmarks, select and print, multiple searches, refine searches. - Use features of Word Processing i.e. headers, footers, line spacing, page numbering, margins	Pupils will review the scenario for the given project.  Word process the project plan as a table with task number, description, start date, end date and comments
Standard Ways of Working - Create a File Structure	Pupils must learn how to: - Use ICT effectively, legally and safely, including managing folders and files, create read me files where appropriate, choose appropriate file formats	Pupils will create a detailed Project Folder for the given scenario.  Move all documents relating to the scenario into this folder
Creating an ePortfolio - Preparation for ePortfolio	Pupils will learn how to: - Use features of Word Processing i.e. insert tables, bullets, page breaks, wrap text	Pupils will create an outline plan for their ePortfolio.  Plan the ePortfolio, Create a site map, prepare the files, Create PDF files, save excel page as web page

Topic	Teaching Aims	Learning Activities
Creating an ePortfolio - Create the ePortfolio	Pupils will learn how to: - Use features of Word Processing i.e. insert tables, bullets, page breaks, wrap text - Receive and send an email - Create simple web pages, select colour schemes, create and select text and graphics	Pupils will create an ePortfolio for the given scenario
Using Surveys - Creating Questionnaire	Pupils will learn how to: - Use features of Word Processing i.e. use paragraph formatting features, use images and mail merge	Pupils will create a Questionnaire.  Use Word Processing to make a questionnaire, using features such as: Style, format, margins, line spacing, add special symbols
Information Handling - Questionnaire Results	Pupils will learn how to: - Enter, cut, copy, paste and move data in a spreadsheet. Format cells, enter formulae, sort data	Pupils will create a design for a spreadsheet, sketched on blank paper.  Pupils will create the Spreadsheet using features such as: formatting cells, formulas, paste special
Spreadsheet Software - Graphs for Questionnaire	Pupils will learn how to: - Use spreadsheet software and its special features to produce graphs with titles, axis and data labels	Pupils will use features of MS Excel to create a pie and bar chart, insert headers and footers, format and centre data
Database Software - Creating a Database	Pupils will learn how to: - Create simple flat file database structures. Set and modify field characteristics including name, data type, size and format. Create simple validation rules. Export data i.e. mail merge	Pupils will create a database table using the features of MS Access to: Add field names, add data types, create validation rules, create a primary key, import data
Database Software - Data Entry Forms	Pupils will learn how to: - Design data entry forms	Pupils will design a data entry form.  Pupils will then use features of MS Access to create a data entry form and add images, labels etc.
Database Software - Queries	Pupils will learn how to: - Sort on one field with a secondary sort on another field. - Create and use searches to extract relevant information using single and multiple criteria	Pupils will use features of MS Access to create several queries
Database Software - Reports	Pupils will learn how to: - Produce a variety of reports to show selected information	Pupils will use features of MS Access to create reports
Presenting Information - Information Point	Pupils will learn how to: - Design and create structure of presentations - Select and create colour schemes - Create and select text and graphics components	Pupils will design a PowerPoint Information point creating plans and sketches.  Pupils will also create a PowerPoint Information Point through implementing the plans and sketches.
Presenting Information - Interactive Information Point	Pupils will learn how to: - Design and create structure of presentations - Create slide transitions - Add hyperlinks	Pupils will create the interactivity of the PowerPoint Information Point through adding navigation buttons, home buttons, hotspots and animation
Imaging Software - Leaflet	Pupils will learn how to: - Select and capture images using i.e. scanner, digital camera - Modify images	Pupils will design a 3 panel double sided leaflet through producing a variety of sketches.

	- Choose appropriate image resolutions and file formats for print and digital publications	Pupils will use MS Publisher to create a 3 panel leaflet following their design.
Imaging Software - Poster and Flyer	Pupils will learn how to: - Select and capture images using i.e. scanner, digital camera - Modify images - Choose appropriate image resolutions and file formats for print and digital publications	Pupils will use MS Publisher features to create a poster  Pupils will also use MS Publisher to create a flyer
Word Processing Software - Mail Merge Letter	Pupils will learn how to: - Use features of Word Processing i.e. paragraph formatting, using mail merge	Pupils will create a mail merge template to use.  Pupils will also create a letter using standard and advanced features of MS Word
Review and Evaluation - Evaluation of Project	Pupils will learn how to: - Use features of Word Processing i.e. headers, footers, line spacing, page numbering, margins	Pupils will create an evaluation of work done to date
Update e-Portfolio	Pupils will learn how to: - Copy all their documents and represent them as PDF documents	Pupils will PDF all their documents and link to ePortfolio

### 2.3.1 Year 11 Scheme of Work - CiDA

Topic	Teaching Activities	Learning Outcomes
Project Planning - Plan a project	Pupils must learn how to: - Use features of the Internet and Search Engines i.e. bookmarks, select and print, multiple searches, refine searches. - Use features of Word Processing i.e. headers, footers, line spacing, page numbering, margins	Pupils will review the scenario for the given project.  Word process the project plan as a table with task number, description, start date, end date and comments
Standard Ways of Working - Create a File Structure	Pupils must learn how to: - Use ICT effectively, legally and safely, including managing folders and files, create read me files where appropriate, choose appropriate file formats	Pupils will create a detailed Project Folder for the given scenario.  Move all documents relating to the scenario into this folder
Creating an ePortfolio - Preparation for ePortfolio	Pupils will learn how to: - Use features of Word Processing i.e. insert tables, bullets, page breaks, wrap text	Pupils will create an outline plan for their ePortfolio.  Plan the ePortfolio, Create a site map, prepare the files, Create PDF files, save excel page as web page
Creating an ePortfolio - Create the ePortfolio	Pupils will learn how to: - Use features of Word Processing i.e. insert tables, bullets, page breaks, wrap text - Receive and send an email - Create simple web pages, select colour schemes, create and select text and graphics	Pupils will create an ePortfolio for the given scenario
Information Handling - Gathering Elements	Pupils will learn how to: - Find relevant information needed and save in a logical area - Create a table to keep track of the elements being used	Pupils will create an elements table to ensure that they are using both primary and secondary resources throughout their documents
Imaging Software - Creating the Logo	Pupils will learn how to: - Design and create their own logo that can be reproduced on to other products	Pupils will design a range of logos and gain feedback from potential users.  Pupils will also design and annotate the final logo ensuring it works: <ul style="list-style-type: none"> <li>• on a variety of backgrounds</li> <li>• in different sizes</li> <li>• on different materials</li> </ul>
Imaging Software - Creating Flyer	Pupils will learn how to: - Select and capture images using i.e. scanner, digital camera - Modify images - Choose appropriate image resolutions and file formats for print and digital publications	Pupils will design and create an A5 flyer that will inform students about the activities.  Pupils will also gather feedback from potential users.
Imaging Software - Creating Banner	Pupils will learn how to: - Select and capture images using i.e. scanner, digital camera - Modify images - Choose appropriate image resolutions and file formats for print and digital publications	Pupils will create two vertical banners (must work as a pair) to welcome visitors to the fair.  Each banner must include: <ul style="list-style-type: none"> <li>• your logo</li> <li>• an image that reflects the purpose of the fair</li> </ul> Pupils will gather feedback from potential

Imaging Software - Creating wristband	Pupils will learn how to: - Use features of imaging software to create a wristband using a single colour	users Pupils will design and create a single coloured wristband to be given to visitors at the fair  Designs must be annotated and wristband must contain logo
Imaging Software - CD Case and Cover	Pupils will learn how to: - Use imaging software to create a CD case of any size - Use imaging software to create a CD cover for the case previously created	Pupils must design, annotate and create a CD case that must show <ul style="list-style-type: none"> <li>the inside view of the case opened up</li> <li>the dimensions of the case</li> <li>how the CD and the insert will be held inside the case</li> </ul> Pupils will design, annotate and create the CD cover that will be designed to attract interest in one club.  Feedback must be gained for both products.

Topic	Teaching Activities	Learning Outcomes
Presenting Information - Digital Posters	Pupils will learn how to: - Design and create a digital poster that can be displayed on a larger screen	Pupils must create a digital poster for the chosen club and must include <ul style="list-style-type: none"> <li>a visual link to the promotional CD</li> <li>at least two images from primary sources</li> </ul> The final design must be annotated and feedback must be gained.
Review and Evaluation - Evaluation of Project	Pupils will learn how to: - Use features of Word Processing i.e. headers, footers, line spacing, page numbering, margins	Pupils will create an evaluation of work done to date
Update e-Portfolio	Pupils will learn how to: - Copy all their documents and represent them as PDF documents	Pupils will PDF all their documents and link to ePortfolio

### 3. Key Stage 5

#### Key Stage 5 Computing

The WJEC A level Computing syllabus covers a wide range of topics and incorporates a large amount of coursework. The discrete ICT provision offered at Key Stage 5 is nine lessons per cycle i.e. nine lessons per fortnight. In Year 12 pupils complete three units (CP1, CP2 and CP3). These are then followed by CP4, CP5 and CP6 during Year 13. Units 1,2,4 and 5 take up a vast amount of lesson time and homework is used to support coursework activities.

#### 3.1.1 Year 12 Scheme of Work

Topic	Teaching Aims	Learning Activities
CP1 - Software and System Development <ul style="list-style-type: none"> <li>System Analysis and Design</li> <li>Algorithms</li> <li>Data Types and Data Structures</li> <li>Sorting and Searching</li> <li>Program Production</li> <li>Nature and Type of Software</li> </ul>	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet and discussions will take place within the class.
CP2 - The Computer, Data and Applications <ul style="list-style-type: none"> <li>Computer Architecture</li> <li>The Operating System</li> <li>Storage Hierarchy</li> <li>Input/Output peripheral Equipment</li> <li>Interfacing</li> <li>Communication Networks</li> </ul>	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.  The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet and discussions will take place within the class.

<ul style="list-style-type: none"> <li>• File Organisation</li> <li>• Software Packages</li> <li>• Database Systems</li> <li>• Data Capture, Verification and Validation</li> <li>• Typical computer applications and their associated hardware</li> <li>• Consequences of current trends in the uses of computers</li> <li>• Privacy and security</li> </ul>		
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Topic	Teaching Aims	Learning Activities
<b>CP3 - Coursework</b> <ul style="list-style-type: none"> <li>• Analysis</li> <li>• Design</li> <li>• Planning</li> <li>• Implementation</li> <li>• Program Documentation</li> <li>• Testing</li> <li>• Evaluation</li> <li>• User Documentation</li> </ul>	<p>Introductory work tasks will be practised to ensure pupils have an understanding of the package</p> <p>The pupils are expected to produce an information handling system using a database package (Microsoft Access)</p> <p>They must analyse, design, implement and document their chosen system and present a written report of the task.</p> <p>The teacher will support and advise the individual pupils whilst they complete this task.</p>	<p>Pupils will analyse a real problem, identify the requirements of a potential user and identify the parts that are appropriate for a computer solution.</p> <p>Determine the requirements for a computer solution, specify possible solution(s) and select an appropriate solution.</p> <p>Select and apply appropriate techniques and principles to design and develop a solution of the problem.</p> <p>Implement the proposed solution.</p> <p>Produce an evaluation of the solution.</p> <p>Produce appropriate program and user documentation</p>

### 3.1.2 Year 13 Scheme of Work

Topic	Teaching Aims	Learning Activities
<b>CP4 - Software and System Development</b> <ul style="list-style-type: none"> <li>• System Design</li> <li>• Representation of data as bit Patterns</li> <li>• Logical Operations</li> <li>• Algorithms</li> <li>• Data Types and Data Structures</li> <li>• Software Engineering</li> </ul>	<p>An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.</p> <p>The teacher will cover a variety of theory aspects using different techniques.</p>	<p>Pupils will understand and have knowledge of all the topics being covered.</p> <p>Pupils will compile a set of notes on various areas covered by the teacher.</p> <p>Pupils will research information for topics using the Internet and discussions will take place within the class.</p>
<b>CP5 - The Computer, Data and Applications</b> <ul style="list-style-type: none"> <li>• The Operating System</li> <li>• Input/ Output</li> <li>• Data Transmission</li> <li>• Communication Networks</li> <li>• Databases</li> <li>• Distributed Systems</li> <li>• File Organisation</li> <li>• Typical applications of computers and communications systems</li> <li>• Data security and integrity processes</li> <li>• Disaster Planning</li> </ul>	<p>An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.</p> <p>The teacher will cover a variety of theory aspects using different techniques.</p>	<p>Pupils will understand and have knowledge of all the topics being covered.</p> <p>Pupils will compile a set of notes on various areas covered by the teacher.</p> <p>Pupils will research information for topics using the Internet and discussions will take place within the class.</p>
<b>CP6 - Coursework</b> <ul style="list-style-type: none"> <li>• Feedback</li> <li>• Design</li> <li>• Planning</li> <li>• Implementation</li> <li>• Maintenance Documentation</li> <li>• Testing</li> <li>• Evaluation</li> <li>• User Documentation</li> </ul>	<p>Introductory work tasks will be practised to ensure pupils have an understanding of the package</p> <p>The pupils are expected to improve an information handling system using a database package (Microsoft Access)</p> <p>They must give feedback on original system, design, implement and document their chosen system and present a written report of the task.</p>	<p>Candidates will analyse the outcome of the solution prepared for module CP3, and develop an enhanced computerised solution for the problem.</p> <p>The solution should include, the feedback obtained, the re-analysis and enhancement of the problem where feedback has indicated the need, the modification of the problem formulation as a result of the re-analysis undertaken.</p>

	The teacher will support and advise the individual pupils whilst they complete this task.	
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### 3.2 Key Stage 5 ICT

The WJEC A Level ICT syllabus covers a wide range of topics and incorporates both a large amount of coursework and a controlled task. The discrete ICT provision offered at Key Stage 5, is nine lessons per cycle i.e. nine lessons per fortnight. In Year 12 pupils complete three units (ICT1, ICT2 and ICT3). These are then followed by ICT4, ICT5 and ICT6 during Year 13. Units 2,3,5 and 6 take up a vast amount of lesson time and homework is used to support theory activities.

#### 3.2.1 Year 12 ICT Scheme of Work

Topic	Teaching Aims	Learning Activities
<b>Theory - ICT1</b> <ul style="list-style-type: none"> <li>• Data Information and Knowledge</li> <li>• The Value and Importance of Information</li> <li>• Quality of Information</li> <li>• Validation and Verification</li> <li>• Capabilities and Limitations of ICT</li> <li>• Uses of ICT</li> <li>• Presenting Information</li> <li>• Networks</li> <li>• Human Computer Interface</li> <li>• Social Issues</li> </ul>	An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations. The teacher will cover a variety of theory aspects using different techniques.	Pupils will understand and have knowledge of all the topics being covered.  Pupils will compile a set of notes on various areas covered by the teacher.  Pupils will research information for topics using the Internet and discussions will take place within the class.
<b>Controlled Task - ICT2</b>  Task 1 - DTP	The following areas will be covered: Design of document	Pupils will describe the purpose of document / intended user. The image / ethos being conveyed and create detailed design of documents
	Use of basic features	Pupils will use: Different font styles and sizes Use of bold, centre and underline Justification Bullet points WordArt Shading effects Headers and footers Use of at least two forms of electronic combination of graphical images e.g. scanned images, graphics from the Internet, clipart from disc, digital camera images, graphs from a spreadsheet, graphics from a paint or CAD package Tables
	Use of advanced features	Pupils will have: Different paragraph formats Different line spacing Superscript and subscript Customised tables Page or frame borders Set and use own tabs Set and use own indents Watermarks Pagination Use of layering

Topic	Teaching Aims	Learning Activities
Task 2 - Automated Documents	The following areas will be covered: Design of document	Pupils will describe the purpose of document / intended user. The image / ethos being conveyed and create detailed design of documents
	Use of basic features	Pupils will: Import data from an external source Use of suitable format and layout for data Ensure automated routines work

	Use of advanced features	Pupils will create: Individual macros or modules created using internal programming capabilities of the software package Individually designed templates
Task 3 - Presentation	The following areas will be covered: Design of document	Pupils will describe the purpose of document / intended user. The image / ethos being conveyed and create detailed design of documents
	Use of basic features	Pupils will include: Background styles Animation effects Transition effects Hypertext Hotspots Bookmarks
	Use of advanced features	Pupils will include: The use of sound The use of original video The use of original animation / Flash graphics
Compression Techniques	The following areas will be covered: Compression techniques used during task	Pupils will identify methods that they could have used within the task and also justification of their chosen methods
Evaluation	The following areas will be covered: Evaluation of task	Pupils will create a detailed and critical evaluation of all three tasks which examines the data, system and suggests future modifications
Coursework - ICT3  <ul style="list-style-type: none"> <li>• User requirements</li> <li>• Design specification</li> <li>• Implementation</li> <li>• Testing</li> <li>• Project Planning</li> </ul>	<p>Introductory work tasks will be practised to ensure pupils have an understanding of the package</p> <p>The pupils are expected to produce a spreadsheet model using a spreadsheet package (Microsoft Excel)</p> <p>They must analyse, design, implement and test their chosen system and present a written report of the task.</p> <p>The teacher will support and advise the individual pupils whilst they complete this task.</p>	<p>Pupils should consider the following:</p> <p>(i) the production of a clear set of user requirements for the spreadsheet model;</p> <p>(ii) development of design specifications for a workbook which should include at least three related sheets;</p> <p>(iii) implementation of the design for the spreadsheet model to the stated specification;</p> <p>(iv) a test plan to fully test the spreadsheet model, including annotated printed copies of all test results;</p> <p>(v) project management: managing their work effectively, including a project time plan.</p>

### 3.2.2 Year 13 ICT Scheme of Work

Topic	Teaching Aims	Learning Activities
<b>Theory - ICT4</b>  <ul style="list-style-type: none"> <li>• Networks</li> <li>• The Internet</li> <li>• Human Computer Interface</li> <li>• Working With ICT</li> <li>• ICT Security Policies</li> <li>• Database Systems</li> <li>• Management of Change</li> </ul>	<p>An introductory work task to be carried out to cover all topics, where pupils must have an understanding of what information is required during examinations.</p> <p>The teacher will cover a variety of theory aspects using different techniques.</p>	<p>Pupils will understand and have knowledge of all the topics being covered.</p> <p>Pupils will compile a set of notes on various areas covered by the teacher.</p> <p>Pupils will research information for topics using the Internet and discussions will take place within the class.</p>

Topic	Teaching Aims	Learning Activities
<b>Controlled Task - Either ICT5a</b>  Analysis of existing system and feasibility report	<p>The following areas will be covered: Analysis of current system</p>	<p>Pupils will complete the following:</p> <p>a) Existing Hardware and Software</p> <p>b) Definition of the scope of the present system</p> <ul style="list-style-type: none"> <li>• Organisational chart</li> <li>• Define sources of data.</li> <li>• Methods of data capture</li> </ul> <p>c) Major data processing functions and processes</p> <ul style="list-style-type: none"> <li>• High level (contextual view) data flow</li> </ul> <p>d) Identification of problems with the present system</p> <p>e) Identify user requirements for the new system</p> <p>f) Analysis of costs and benefits of the new system</p>
System specification and design	The following areas will be covered:	Pupils will complete the following:

	Specification requirements for new system	<p>a) Developments required in ideal hardware and software</p> <p>b) System specification of proposed system including suitable Low level DFDs, to describe the main data processing events.</p> <p>c) A detailed process specification in the form of a systems diagram.</p>
System Implementation	The following areas will be covered: Report on suitable methods for implementing the system and justification of the chosen solution	Pupils will create a report on suitable methods for implementing the system and justification of the chosen solution.
System Maintenance	The following areas will be covered: Report on suitable methods for maintaining the system	Pupils will create a report on suitable methods for maintaining the system.
System Evaluation	The following areas will be covered: Criteria for evaluating the system  Cost benefit analysis to support recommendations	<p>Pupils will complete the following:</p> <p>a) Criteria for evaluating a system</p> <p>b) Cost benefit analysis to support recommendations</p>
Project Planning & Standard Ways of Working	The following areas will be covered: Working to a time plan and adopting standard ways of working	<p>Pupils must manage their work effectively and include a project time plan.</p> <p>They will be expected to:</p> <ul style="list-style-type: none"> <li>• save work regularly</li> <li>• keep dated backup copies of files on another disk, in another location</li> <li>• work to a time plan</li> <li>• protect confidentiality and observe copyright laws</li> </ul>
<b>Controlled Task - ICT5b OR</b>  Analysis of Existing Publications	The following areas will be covered: Describing the current system in place	<p>Pupils should:</p> <p>Outline the background to the organisation or user and produce a description of existing hardware and software and/or production techniques;</p> <p>Examine an existing publication or range of documents presently produced by the user and produce a report of its function or purpose.</p> <p>Detailed descriptions of page orientation, graphics used, text positioning and styles;</p> <p>Identify user requirements for the new publication;</p> <p>Identify potential limitations to design and production of the new publication.</p>

Topic	Teaching Aims	Learning Activities
Specification and Design	The following areas will be covered: Designing the new system	<p>Pupils should;</p> <p>Identify user requirements for the publication of at least 10 A4 pages or its equivalent. Within these 10 pages there must be a front page and an automatically produced contents page;</p> <p>Produce a report on the capabilities of hardware and software to be used;</p> <p>Produce an initial draft hand drawn 'mock up' design plan;</p> <p>Produce a second draft design plan using standard proofreading symbols;</p> <p>Provide evidence of feedback from clients with suggestion for improvements;</p> <p>Produce a third draft design plan incorporating clients comments and showing evidence of text and image enhancement and using standard proofreading symbols;</p> <p>Produce a report showing evidence of stages of image manipulation techniques to improve its quality for the final document;</p>



		Produce a report outlining production methods and costs.
Implementation	The following areas will be covered: Prototype solution to the problem	Pupils should: Produce the publication in camera ready copy format.  Follow a consistent 'house style' of the user and make good use of standard formats. The document should contain appropriate, plausible and accurate information and images;  Demonstrate use of a variety of publishing tools techniques.
Maintenance	The following areas will be covered:	Report on how the user can: <ul style="list-style-type: none"> <li>• access the files</li> <li>• edit , print and save any future developments / backup procedures</li> </ul>
Evaluation	The following areas will be covered:	Criteria for evaluating the publication: <ul style="list-style-type: none"> <li>• evaluation against the user specification</li> <li>• identification of problems in production and methods used to solve those problems</li> <li>• identification of future potential developments and improvements</li> </ul>
Project Planning & Standard Ways of Working	The following areas will be covered:	Pupils must manage their work effectively and include a project time plan. They will be expected to: <ul style="list-style-type: none"> <li>• save work regularly</li> <li>• keep dated backup copies of files on another disk, in another location</li> <li>• work to a time plan</li> <li>• protect confidentiality and observe copyright laws</li> </ul>
<b>Coursework - ICT6</b> <ul style="list-style-type: none"> <li>• User Requirements</li> <li>• Design</li> <li>• Implementation</li> <li>• Testing to a plan</li> <li>• User documentation</li> <li>• Evaluation</li> <li>• Project planning and standard ways of working</li> </ul>	<p>Introductory work tasks will be practised to ensure pupils have an understanding of the package</p> <p>The pupils are expected to produce an information handling system using a database package (Microsoft Access)</p> <p>They must analyse, design, implement and document their chosen system and present a written report of the task.</p> <p>The teacher will support and advise the individual pupils whilst they complete this task.</p>	Pupils will explore a complex problem, plan and implement at least one option for solving a problem and apply agreed methods to check if the problem has been solved.

## KEY SKILLS

Key Skills are most commonly needed to succeed in a range of activities - at work, education, training and in everyday life. The Key Skills qualifications are designed to enable pupils to progress at their own pace. The Key Skills qualifications not only recognise pupil's current capabilities, they also require pupils to identify how they can further improve their skills to meet new demands at higher levels. There is a variety of Key Skills that are covered throughout the ICT schemes of work, with ICT Level 2 being completed during Key Stage 4 and Level 3 being completed during Key Stage 5.

## RECORD KEEPING

All pupils are assessed on an ongoing basis during the schemes of work. Assessments are recorded half termly on the school Management Information System (MIS). Teacher assessed National Curriculum Levels are reported to parents at the end of every year along with target levels for the pupils at the end of Key Stage 3. A cross section of work is retained for future reference. At Key Stages 4 and 5 all coursework is kept and is used to form part of the assessment.

## CURRICULUM PLANNING

The school follows the National Curriculum for ICT as the basis for its curriculum planning. The school carries out the curriculum planning in ICT in two phases (long-term and short-term). The long-term plan maps the ICT topics that the pupils study in each term during each key stage. The assistant Head of Faculty - ICT carries this out in conjunction with teaching colleagues in each year group.

The pupils study ICT as part of their work in other Faculties. Heads of Faculty are responsible for ensuring that ICT activities and skills are incorporated into their schemes of work. The long-term ICT plan shows how teaching units are distributed across the year groups and how these fit together to ensure progression within the curriculum plan.

The class teacher is responsible for writing the short-term plans with the ICT component of each lesson. These plans list the specific learning objectives of each lesson. The class teacher keeps these individual plans and the assistant Head of Faculty - ICT often discuss them on an informal basis.

The topics studied in ICT build upon prior learning. Whilst the school offers opportunities for pupils of all abilities to develop their skills and knowledge in each unit, progression is incorporated into the schemes of work. Therefore pupils are increasingly challenged as they move up through the school.

## E-LEARNING POLICY

### Overview

The school places significant importance on the inclusion of e-learning in the development of the school. It is the aim of the staff of the school to use ICT and e-learning to provide pupils with support and encouragement to become independent learners and to enable personalised learning whenever possible. Once embedded in the pedagogy of the school the application of e-learning will be an added strategy used by staff to raise attainment and become a natural part of their teaching toolkit.

The introduction of learning technologies to teaching in QEHS will be supported by a system of training that focuses firstly on the technology and then the pedagogical requirements of the changes involved. No innovation will be introduced until staff are both comfortable with the systems used and the way in which they are used with pupils.

To oversee and drive this implementation the school has appointed an e-learning co-ordinator. The purpose of the e-learning co-ordinator is to lead the transformation of the use of ICT for teaching and learning. To achieve this goal the e-learning co-ordinator will:

- Help staff identify suitable, existing, uses of ICT to support and develop their subject area.
- Lead a team of champions in the identification of new, technology mediated learning, appropriate to their subject.
- Consult with subject champions in order to develop a three year innovation plan leading to the implementation, testing and evaluation of new ways of teaching and learning. This plan to be based on contemporary research and for the provision of appropriate levels of technology to allow the testing and evaluation to be valid. New approaches must be exciting and challenging for both pupils and staff and offer increased levels of engagement and involvement for learners.
- Assist in implementing and testing new systems for use across the school together with the schools System Managers.
- Devise and assist with the introduction of training programmes to support the introduction of new technology.

A detailed description of the role of the e-learning co-ordinator is available.

### Learning Platforms

The school has introduced and is currently developing the use of a learning platform (Moodle1). Staff receive initial training from the e-learning co-ordinator and can then provide on-line material for pupils to access.

The learning platform can provide any combination of:

- Support notes for lessons and courses created by both pupils and teachers
- Assignments including grade tracking and feedback (formative and summative assessment)
- Quizzes and tests including result tracking
- Project guidance ranging from independent working to teacher led
- Video, graphical, pictorial, textual and audio guidance
- Communication systems. Peer to peer, teacher to pupil or pupil to teacher
- Web-links to educational support material including games, notes or tutorials

### Pupil access

Pupils gain access to resources whether network, learning platform or internet2 based by use of a username and password provided upon reading and signing an acceptable use policy. Infringement of rules will result in disciplinary action in accordance with school discipline policy.

### Digital divide

Staff are increasingly aware that the provision of web based learning materials whilst providing opportunities for increased learning possibilities for many pupils can disadvantage some pupils where no access to such resources is available at home. To address this problem initially, pupils may access resources during the lunch break in a variety of locations. Further access is provided after school if requested.

Additional consideration is being given to this problem by the innovation team and e-learning co-ordinator. Proposals will be drawn up in due course.

### Appendices

1. Moodle has been selected as the learning platform for the current development for the following reasons

- Moodle is designed with teaching and learning as a priority
- Moodle is open-source software and therefore requires minimal capital investment to establish and maintain. This low initial cost allows the school to grow the resources at the pace that best suits staff.
- Moodle has one of the largest user bases in the world
- Collaboration with other agencies or partners is easy. QEHS currently uses Moodle to collaborate with both its partner primary schools and Coleg Sir Gar
- It is easy to add and edit content with Moodle and to start using it with pupils. It is however also possible to use very sophisticated tools and techniques with Moodle as teacher skills develop
- Pupils like the collaborative and supportive online community that can develop when Moodle is used for courses
- Accredited training from the OCN is available to all staff
- Courses are designed specifically for the pupils in QEHS by staff at QEHS. The material presented accurately reflects the educational approach of the teacher
- Personalised learning becomes realistic
- Gifted pupils can be stretched
- Different learning styles can be addressed as well as different abilities.

- Pupils can learn at their own pace in a location of their own choosing
- Departments can share good practice easily

A few disadvantages can also be identified

- Assessment data is not immediately available in the school management system
- Co-ordination of user data between systems is not currently available at QEHS

Further considerations

Staff can only use Moodle effectively once they have received training. Although initial training is simple the target of producing high quality learning material consistently is a major challenge. The time required to train staff is too limited to satisfy the demand. GTCW grants have been used as well as INSET time within the school allocation. Courses are now available online to further assist but the challenge is massive.

Some staff want off the peg packages to use with pupils. Previous experience with such systems has been either excellent or disappointing.

Commercial learning platform solutions are very expensive to establish and expensive to maintain. After spending large sums of money on a product pressure is put on staff to use the system, this can be counter productive in the long term. Educational material would tend to be generic if it is to satisfy different regional variations in curriculum in one go.

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## Website policy

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Purpose of Website

Queen Elizabeth High School values the contribution that a school website can make towards:

- Providing information for and communication between
  - The parents of existing pupils
  - The parents of prospective pupils
  - The larger community outside school
- Staff and pupils
- Assist with raising standards in
  - Teaching and learning
  - Independent study
- Promote
  - The values, aims and philosophy of the school.
  - The achievements of the pupils.

Website Structure

The school website address is <http://www.qehs.org>. The site is accessible by the general public.

Administration

The Site Administrator has full access to the school published website. Editing of site pages is undertaken by a small web team but work is only published to the website after content has been checked and approved by the Site Administrator.

The School Systems Manager undertakes uploading of material after receiving written approval from the Site Administrator.

## Safety

It is the duty of the school to ensure that every child in its care is safe. The same principles apply to the virtual presence of the school as much as the physical presence. The school will ensure that no pupil can be identified or contacted either via or as a result of using, the school website.

- Images, examples of work and privacy: -
- No individual image of a pupil will be used on the school website.
- Group images will be used wherever possible.
- No names will appear beside the images of pupils.
- Permission will be obtained from parents or carers before any image is used.
- Permission will be obtained from parents or carers before publishing the work of any pupil. Only first names and year group will be used to identify the work.
- After permission has been obtained images of adults will be identified by the use of their title and last name only.
- No personal details, addresses or e-mail addresses will be published for adults or pupils.

## Content

Links to external websites will be checked thoroughly before inclusion on the school website. The sites will be checked for the suitability of their content for their intended audience.

Text written by pupils will be reviewed before inclusion to ensure that no personal details are accidentally included that could lead to the identification of the pupil e.g. membership of after school clubs.

All written work will be reviewed to ensure that it is in no way defamatory.

Written work will be checked as far as is possible to ensure that no copyright or intellectual property rights are infringed.

All written material will be checked for its suitability for its intended audience.

## Maintenance

The school website will be monitored and updated regularly to ensure that it complies with the rules stated above.

This website policy will be reviewed annually and updated in line with any changes in guidance or regulation that may have occurred.

The website policy will be one part of a suite of policies created to ensure the safety of pupils while working online.

This policy has been written in accordance with the guidance provided by: -

Becta ([www.becta.org.uk](http://www.becta.org.uk))

Superhighway safety for schools (DFES) <http://safety.ngfl.gov.uk/schools/index.php?S=4>

A copy of this policy may be viewed on the website [www.qehs.org](http://www.qehs.org) by following the link to information and publications.

## EMAIL POLICY

The school uses email as one of its main sources of communication. The email server and software is supplied by Carmarthenshire County Council (CCC) and is supported via a Service Level Agreement (SLA). All emails destined for QEHS go through a spam filtering and anti-virus scanner.

All Staff can be issued with a QEHS email address on request from the Systems Manager's (SMs). The SMs will issue them with an email address and password.

The mail is backed up daily by the SMs.

The QEHS email system is accessible from within school and from home using the internet.

The following are conditions of use for the QEHS email service:

- Staff are not to use the email system for 'non-educational' purposes
- If Staff leave QEHS, the email address will be deactivated and/or deleted
- Do not share your password with anyone
- If the users password is compromised, they must change it immediately by contacting the SMs
- Spam mail is not to be replied to or forwarded to any other Staff
- Staff should be aware that sarcasm, humour, abuse, or tone can easily be misunderstood in e-mail
- Staff should carry out regular housekeeping on your mailbox. Delete all e-mails as soon as possible and ensure that there is only one copy of any attachment in your mailbox
- Staff should check their personal address book regularly and remove unwanted and incorrect entries
- Always check that the email addressee names are correct
- Staff should always log out of the email system or close their email application whenever they are not in use

## INTERNET POLICY

Internet access is provided to all pupils and staff.

Access to the internet is controlled via an electronic filtering system.

The electronic filtering system controls access to web sites based on lists of banned / allowed websites, keywords and file extensions.

Where access to a particular web site is required but is filtered by the filtering system, permission may be requested by users and granted by one of the two Systems Managers. This is achieved by means of a list of allowed web sites.

Before access to the computer network and internet is allowed pupils and staff are required to sign the Computer Usage Consent Form which in the case of pupils is countersigned by an appropriate adult.

Any breach of this agreement by a pupil results in the pupil being placed on a restricted access list from which only prescribed websites may be reached.

Pupils remain in this list until the start of the following term.

Their name is also recorded in the Banned Users spreadsheet.

In the case of a member of staff breaching the agreement a report is sent to the Headmaster who takes any appropriate action.

Filter logs are checked on a regular basis by the Systems Managers to ensure compliance.

## INCLUSION POLICY

By definition, educational inclusion involves increasing the participation of students in, and reducing their exclusion from, the cultures, curricular and communities. The school agrees with the BECTA viewpoint that inclusive learning can be understood as a process of increasing the presence, participation and achievement of all learners in educational

settings. In a sense inclusive learning can be seen as a form of personalised learning, and ICT can play a key role in supporting this process.

The school endeavours to meet the needs of all our pupils, including:

- Girls and boys;
- Minority ethnic and faith groups and refugees;
- Pupils who need support to learn English as an additional language;
- Pupils with additional educational needs;
- Gifted and talented pupils.

There is a growing awareness that access to ICT and the resources it offers is a powerful tool for inclusion. Where possible the school exploits the multi-sensory opportunities of ICT, thus is able to support the different learning styles of pupils. These styles include materials being presented in a variety of forms: images, text, spoken word, movie clips and animation.

## HUMAN AND PHYSICAL RESOURCE MANAGEMENT

### TECHNICAL SUPPORT POLICY

Two Systems Managers provide technical support located on two sites.

There are currently two systems in operation for the resolution of technical support issues:

- Upper Campus issues are reported to the Systems Manager on the Upper School Campus via telephone, e-mail or by word of mouth and resolved in a timely manner.
- Lower Campus issues are reported to the Systems Manager on the Lower School Campus via telephone, e-mail, word of mouth or via the Technical Support log book located in the reception area. Issues are then logged into a database, prioritised based on defined criteria and resolved in a timely manner.

Priorities are allocated in the following manner:

- Issue affects a key member of staff, key task or large number of users.
- Issue affects a small number of users.
- Issue affects a single non-essential user or task.

Where appropriate the two Systems Managers work together to resolve more complex issues.

### ICT RESOURCES POLICY

Both Systems Managers are responsible for ICT Resources, one on each of the two sites.

#### Hardware:

The ICT Strategy Group agrees the purchase of large items of hardware in line with the school's Expenditure and Budgeting Policy. Smaller items are purchased at the discretion of the two Systems Managers in conjunction with the Senior Learning Coordinator. All items of value are branded with the school postcode and added to the Asset Register.

The Systems Managers install both hardware and software after consultation with Faculty Heads.

#### Software:

The ICT Strategy Group agrees the purchase of expensive items of software in line with the school's Expenditure and Budgeting Policy. Less expensive items are purchased at the

discretion of the two Systems Managers in conjunction with the Senior Learning Coordinator. High valued items of Software are added to the Asset Register.

**Resources:**

The Lower School Campus has several bookable computer suites, which may be reserved via sheets in the Staff Room.

The school operates a loans procedure, on the Lower Campus details are recorded in a designated loans book whilst the Upper Campus use individual record sheets.

## NETWORK SECURITY POLICY

Both Systems Managers are responsible for Network Security across the whole school. Network security is provided on several levels:

- Physical access to server rooms, network infrastructure and computer suites is controlled via a mechanism of shared keys;
- Operating System access to file servers and users areas is controlled via a system of passwords and designated computer restrictions;
- Anti Virus protection is provided centrally administered by software that gets updated automatically on a regular basis. The software scans both server and workstation drives on a per access basis and performs a full File Server scan every day. Detected viruses are reported to both Systems Managers via e-mail;
- Wireless access is protected using a Wireless Encryption Protocol (WEP) key;
- Carmarthenshire County Council provides internet protection by means of a firewall. The firewall filters out any websites that is held on the County “Banned list”. In addition the County host a SPAM and Virus filter system to reduce the threat of spam or virus infiltrating the school’s email system.

## MANAGEMENT INFORMATION SYSTEM (MIS)

A Management Information System (MIS) is a computer program that allows for the strategic management of important data. A MIS gives the opportunity to analyse and store information, within agreed procedures designed to minimise bureaucracy and clarify process.

QEHS uses a number of MIS within the school in order to achieve its objectives.

All data stored on the school’s MIS, is held and processed in accordance with the Data Protection Act.

The aim of this policy is to outline to staff the purpose and uses of MIS within QEHS and what decisions have been made in respect of the future development for the MIS.

The main uses of the MIS within the school are:

- Pupil Information;
- Leadership and Monitoring;
- Assessment and monitoring of Pupil Progress;
- AEN;
- Reporting;
- Attendance;



- Information Exchange;
- Finance;
- Staff Data;
- Internal and External Communication;

**Pupil Information** - Pupil information is stored and managed electronically. The school complies with the statutory requirement to provide a Pupil Level Annual School Return (PLASC) and aims to produce a checked return within 4 working days of the census date. The information the school holds complies with the Common Basic Data Set. The accuracy of the pupil and staff data held on the MIS is the responsibility of the Data Manager and Office Manager respectively.

**Leadership and Monitoring** - The Leadership Group use the MIS to assist with all aspects of teaching and learning. Pupil progress is reviewed and appropriate measures are taken to resolve any issues that are discovered.

**Assessment and Monitoring of pupil Progress** - Assessment information is stored on the school's MIS. Ongoing assessments are updated to allow for the analysis of pupil progress. This data aids Faculties in grouping and target setting at school and individual pupil level, as well as supplementing teacher judgements. It also helps identify pupils who are underachieving or performing exceptionally well across all subjects.

**AEN** - The MIS is used to record a wide range of AEN related data.

**Reporting** - Interim and full subject reports are generated from the school's MIS for parents. Pupils are allowed to self-evaluate which is then included in their reports. Any assessment/reporting data is accessible by Heads of Learning, Heads of Faculty and Senior Staff at all times.

**Attendance** - Pupil attendance is recorded on the schools MIS system by staff. This allows for regular analysis of pupil attendance.

**Information Exchange** - The school is able to send and receive a Common Transfer File (CTF) via a secure website in accordance with all current statutory requirements. Pupil attainment data is also sent and received securely.

**Finance** - Financial data is managed electronically.

**Staff Data** - In addition to staff personal details, the MIS holds information such as INSET history, job descriptions, performance management records and contract details.

**Internal and External Communication** - All staff have access to the school email system. Whenever possible communications both internally and externally are managed electronically.

#### **Staff induction/training:**

Support and Training - Support is provided for all Staff:

- Internally - Systems Managers and Data Manager
- Externally - LEA

These are either during pre-arranged INSET sessions or e-learning workshops.

## **FUTURE DEVELOPMENTS**

Additional policies that will be included in the future months include:

- Links with parents.

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**Date established by governing body: 23<sup>rd</sup> January 2007**

**Date Reviewed: 10<sup>th</sup> February 2010**

**To be reviewed on: 10<sup>th</sup> February 2011**