Independent Schools
Examinations Board

CERTIFICATE OF ACHIEVEMENT IN ICT

SPECIFICATION

(Revised July 2009)

INTRODUCTION

This specification is vocational in nature and is intended to give candidates the opportunity to develop some of the skills laid out in the National Curriculum, the DfES framework and the New Skills 2000 guidelines. It has been designed to meet the needs of learners in Years 5 to 8. Candidates will gain a knowledge and practical use of ICT skills which are relevant to their everyday learning experiences as well as laying solid foundations for future ICT courses at higher levels.

AIMS

The aims of the specification are to:

(i) develop candidates' ICT skills so that they can select the appropriate skill(s) for any task undertaken;

(ii) encourage candidates to use ICT independently, confidently and efficiently;

(iii) enable candidates to achieve the maximum benefit from using the correct ICT skills in terms of the quality of the work produced and the time taken to produce it.

ASSESSMENT OBJECTIVES

Candidates should have the knowledge, understanding and skills to:

AO1 present information electronically;

AO2 handle data electronically;

AO3 manipulate graphics software;

AO4 program control systems;

AO5 use computers and networks to produce and save information;

AO6 search the Internet, design simple web pages and handle emails.

SPECIFICATION CONTENT

The specification consists of six modules. Modules or skills marked with an asterisk (*) will not be externally assessed as part of the on-line tests.

1. PRESENTATION OF INFORMATION

(a) Word processing

- open a new / existing document
- save documents
- manipulate text
- spell-check work
- change font size, type and colour
- align text to the left, centre and right
- change line and/or paragraph spacing
- use tabulation
- add bullet points and/or single-level numbering
- insert page breaks
- add page numbers
- add headers and footers
- preview documents*
- change document orientation
- use the format painter*
- import images and/or clip art
- resize images
- wrap text round images
- create Word Art objects

(b) Presentation software*

- create a presentation using a consistent style / layout
- add bullet points to a presentation
- add pictures to a presentation
- add new slides to a presentation

2. DATA HANDLING

- enter text, numbers and formulae into a cell
- construct simple formulae using basic operators and simple built-in functions, e.g. SUM, AVERAGE, COUNT, MAX, MIN
- format cells as date and/or currency
- edit and delete data
- replicate formulae
- sort data (in one column only)
- change the font size, colour and type of text in a cell
- align text in cells

- alter the row height and column width of cells
- merge cells
- copy / move cells
- set the border style of a cell or range of cells
- preview a spreadsheet*
- use landscape orientation
- create a pie chart or bar chart
- put a title on a chart
- add or remove a legend from a chart
- add data labels to a chart

3. GRAPHICS*

- create simple images using basic shapes and colours
- flip, rotate and stretch images
- convert images into different formats (.jpg, .tif, .gif)
- save images in different sizes
- save images with different resolutions
- manipulate images from a digital source, e.g. scanner, camera, video camera

4. PROGRAMMING CONTROL SYSTEMS*

- identify data input, e.g. from a sensor or other input device
- identify data output, e.g. to an actuator or other output device
- sequence events
- make control choice, e.g. by using the IF … THEN … ELSE… END IF statement
- repeat events, e.g. by using the WHILE … DO … WEND statement
- store data in a logical way, e.g. by using variables
- program with structure, e.g. by writing reusable code

5. BASIC COMPUTER USE*

- log on to a network
- change a password
- navigate round the desktop
- find local and external drives
- find any network drives
- find and select a printer
- distinguish between a file and a folder
- view file details
- sort files in different orders
- navigate round a folder structure
- create, rename and delete folders
- view folder properties
- move, copy and paste files and folders

- compress (zip) folders
- manage My Documents*
- search for files using a simple criterion*

6. INTERNET AND EMAIL

(a) Internet search*

- perform a simple search on the Internet
- search for a string on the Internet
- find, copy and save an image off the Internet
- navigate to a given URL
- check Internet history for sites visited
- be familiar with copyright and plagiarism issues

(b) Web-page design

See Appendix III for html tags.

- write html to put a title on the browser of a web page
- write html to format fonts on a web page
- write html to add images to a web page
- write html to add hyperlinks to a web page
- choose font sizes, typefaces and colours which are appropriate to the target audience*
- position objects on a page so that they enhance audience understanding*
- ensure personal identity / security on web pages*
- ensure web pages use language appropriate to the target audience*

(c) Email*

- read emails
- forward emails
- send emails to more than one person
- reply to emails
- send attachments
- manage emails

SCHEME OF ASSESSMENT

The assessment is in three parts.

Part 1

Internal assessment of skills

Candidates will be required to demonstrate internally that they have used correctly each of the skills defined in modules 1, 2, 3, 4 (extension candidates only), 5 and 6. These skills will be assessed on a pass / fail basis by the examination centre. See Appendix I.

Part 2

External test

There will be an external test which will be conducted online across the Internet. The test will be divided into three modules (see Appendix II), each designed to be taken within a normal 35-minute teaching period. The modules are not designed to catch candidates out but constructed in a way which allows them to demonstrate their grasp of the skills. The test will be assessed on a pass / fail basis.

Part 3

Coursework

All candidates will be expected to produce an electronic portfolio of work. This portfolio will contain pieces of work which demonstrate the use of a range of skills across modules 1, 2, 3, 4 (extension candidates only) and 6. It will be assessed by the school and also by externally-appointed moderators on a distinction / pass / fail basis.

Certificate of Achievement

In order to gain the Certificate of Achievement, candidates must:

- demonstrate that they can correctly use all the skills required for their level
- pass the external test for their level
- gain a pass for their portfolio

In order to gain a distinction, candidates must gain a distinction for their portfolio.

APPENDIX I

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ICT SKILLS ASSESSMENT

Candidate number: .....

School: .....

Please tick boxes to indicate a pass and retain this form for three years.

1. (a) Word processing		use the format painter		replicate formulae	
open a new / existing document		import images and/or clip art		sort data (in one column only)	
save documents		resize images		change a cell font size, colour and type of text	
manipulate text		wrap text round images		align text in cells	
spell-check work		create Word Art objects		alter the row height and column width of cells	
change font size, type and colour		**1. (b) Presentation software**		merge cells	
align text to the left, centre and right		create a presentation		copy / move cells	
change line and/or paragraph spacing		add bullet points to a presentation		set the border style of a cell or range of cells	
use tabulation		add pictures to a presentation		preview a spreadsheet	
add bullet points and/or single-level numbering		add new slides to a presentation		use landscape orientation	
insert page breaks		**2. Data handling**		create a pie chart or bar chart	
add page numbers		enter text, numbers and formulae into a cell		put a title on a chart	
add headers and footers		construct simple formulae		add or remove a legend from a chart	
preview documents		format cells as date and/or currency		add data labels to a chart	
change document orientation		edit and delete data		**3. Graphics**	

create images using basic shapes / colours		find local and external drives		check Internet history for sites visited	
flip, rotate and stretch images		find any network drives		be familiar with copyright issues	
convert images into different formats		find and select a printer		**6. (b) Web-page design**	
save images in different sizes		distinguish between a file and a folder		write html to put a title on a web-page browser	
save images with different resolutions		view file details		write html to format fonts on a web page	
manipulate images from a digital source		sort files in different orders		write html to add images to a web page	
4. Programming control systems ***(extension candidates only)***		navigate round a folder structure		write html to add hyperlinks	
identify data input		create, rename and delete folders		choose font sizes, typefaces and colours	
identify data output		view folder properties		position objects on a page	
sequence events		move, copy and paste files and folders		ensure personal identity security on web pages	
make control choices		compress (zip) folders		ensure web pages use appropriate language	
repeat events		manage My Documents		**6. (c) Email**	
store data in a logical way		search for files using a simple criterion		read emails	
program with structure		**6. (a) Internet search**		forward emails	
5. Basic computer use		perform a simple search on the Internet		send emails to more than one person	
log on to a network		search for a string on the Internet		reply to emails	
change a password		find, copy and save an image off the Internet		send attachments	
navigate round the desktop		navigate to a given URL		manage emails	

Name of examiner …… Date ……
(in block capitals)

APPENDIX II

EXTERNAL TESTS

- The external tests are to be conducted in a proctored environment.
- Candidates are permitted to refer to notes, previously completed exercises, on-line tutorials, the Internet and any application help files they may find useful.
- Candidates are not permitted to use email during the assessment or to discuss questions or answers with teachers, supervisors or other candidates.
- Candidates are required to take and pass one test for each of three modules. These are: modules 1(a), 2 and 6(b).
- Candidates are required to gain a score of 80% in each test in order to pass.
- Candidates are required to gain a pass in each of the three tests.
- There is no distinction awarded for the external tests; candidates either pass or fail.

APPENDIX III

HTML TAGS

1. `<title> </title>`
2. `<body`

   `bgcolor = … > </body>`
3. `<strong> </strong>`
4. `<em> </em>`
5. `<center> </center>`
6. `<u> </u>`
7. `<img`
   `width = …`
   `height = …`
   `alt = …`
   `align = … />`
8. `<a`
   `href = … > </a>`
9. `<font`
   `size = …`
   `color = …`
   `align = …`
   `face = … > </font>`
10. `<p> </p>`

APPENDIX IV

COURSEWORK

Portfolio content

- **five** word-processed documents demonstrating at least eight distinct skills from module 1(a); files should be in .doc or .pdf format
- **one** presentation demonstrating all the skills from module 1(b); the file should be in .ppt or.pps format
- **three** spreadsheets demonstrating at least five distinct skills from module 2; files should be in .xls format
- **three** graphics files demonstrating at least four of the six skills from module 3; files should be in .jpg, .tif or .jif format
- **one** website consisting of at least two linked pages demonstrating all four non-externally examined skills from module 6(b); files should be in .htm or .html format
- ***for extension candidates only***
  one piece of work demonstrating four of the skills from module 4

Coursework submission and moderation

Schools are asked to submit the portfolios of three candidates for moderation: the work of a candidate in the top 20% of the school's cohort; a candidate in the middle 60% of the cohort; a candidate in the lower 20% of the cohort. Schools should have moderated the coursework internally if more than one teacher has been involved in delivering the course. ISEB will moderate the coursework submitted and may ask for further samples in the different ranges. Schools will be asked to verify (on the appropriate forms) that each candidate has produced coursework of the correct standard before certification.

Quality of coursework

Schools will be asked to nominate candidates who they believe have satisfied the criteria for distinction, as laid out below:

- using ICT skills as outlined in the syllabus correctly and in the correct context
- using ICT in an innovative way
- producing solutions which enhance the presentation of information and communication of data to the intended audience

Please refer to the ICT Guide for Teachers in the Certificate of Achievement section of the ISEB website for further guidance on the submission of coursework.

APPENDIX V

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COURSEWORK

This form should be submitted with the candidate's coursework portfolio. The candidate may complete Part 1 but the teacher must complete Part 2. An extendable Word version of this document is available on the ISEB website.

Module 4, marked with an asterisk (*), is for extension candidates only.

Part 1	
Candidate number	
School	
Module 1(a) file names and skills	
Module 1(b) file name	
Module 2 file names and skills	
Module 3 file names and skills	
*Module 4 file name and skills	
Module 6(b) file name	
Name of examiner *(in block capitals)*	
Date	

Part 2 (for distinction only)	
Teacher's rationale for distinction	
Module 1	
Module 2	
Module 3	
Module 4*	
Module 6	
Name of examiner (in block capitals)	
Date	

APPENDIX VI

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COURSEWORK RESULTS

Please rank candidates in order of merit, starting with any distinction candidates. It is important to put them in the correct order since it could affect their final result. All coursework must be submitted by 15 March.

School	

Candidate No.	**Distinction (D) Pass (P) Fail (F)**		**Candidate No.**	**Distinction (D) Pass (P) Fail (F)**

Name of examiner *(in block capitals)*	
Date	