GCE Information and Communication Technology
INFO4 Coursework: Practical Issues Involved in
the Use of ICT in the Digital World

Exemplar work: Scope
This document contains an extract from a candidate’s coursework project for INFO4.

The material is in three sections:


2. A commentary from the Principal Moderator on the candidate’s work.

3. The extract from the work.
INFO4 – EXEMPLAR WORK

Analysis and Deliverables - Scope

1. Extract from marking grid

<table>
<thead>
<tr>
<th>Row</th>
<th>1 mark</th>
<th>2 marks</th>
<th>3 marks</th>
<th>Total for row</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There is a brief statement of the scope of the project.</td>
<td>A substantial problem has been analysed. There is a statement of the scope of the project.</td>
<td>A substantial problem has been analysed with a clear statement of the scope of the project and any external or internal constraints.</td>
<td>2</td>
</tr>
</tbody>
</table>

Teacher Comments

A substantial and realistic problem has been analysed and constraints documented such as hardware, user skills and access to the system.

2. Commentary

It is clear from the content that the candidate has analysed a substantial problem and considered both internal and external constraints. What is missing is an explicit statement of the scope of the project, so only 2 of the 3 marks available were awarded.
3. Project extract

Statement and Scope

From the research analysed it shows there is an overall substantial problem with the ICT suite booking system which are made up of individual problems.

These include:

- Double booking so clashes between classes occur so classes are moved, which loses valuable lesson time and effects the teachers lesson plan
- ICT suites not being used, but potentially could be used by another staff member. This therefore results in different learning facilities not being used and an overall waste of energy as computers are left unused.
- System does not update itself and cannot accommodate the unforeseen changes throughout the school day ie. If a member of staff no longer requires the room he/she has booked.
- Members of staff do not cancel their bookings if ICT suite no longer required as they have to do so in two separate places (in the staff room and on the label on the door).
- The system will not accommodate the new building being built in 2010 as there will be new ICT suites built

Constraints

As stated in the introduction XXXX High School is an independent school, therefore there are clear cost constraints. The fees collected by the bursary are used to pay the staff members. This is done by an electric payroll where money is transferred into the staff member's bank accounts. Vital bills and necessities within the school are paid for eg. electricity, gas, central heating, water and food. If a department requires new equipment they submit a 'budget request'. They are then allocated the budget amount and can therefore order the equipment that they require. This means that new software cannot be bought unless new software is catered for in next year's budget.

There are also environmental constraints as XHS is attempting to achieve its Gold Recycling Badge. The organisation behind this award monitor and record the paper output of the school, so paper output needs to be kept to a minimum. This means the new system must take into consideration its paper output.
Constraints regarding computer access for all teachers who could potentially book the ICT suites online is not a problem as most classrooms are fitted with a computer, printer and an interactive whiteboard (see research for tally of hardware in all classrooms in XHS). Staff can therefore access a computer from anywhere in the school including the staff room. Each member of staff is also given a laptop connected to the school system that they can use throughout the academic year.

Communication via XHS's online network is of a very high standard. XXXXXX High School has an internal e-mail system which uses Microsoft Outlook Express. This can be accessed on any computer that is connected to the school network within school and via the school extranet. The extranet allows students and staff to access e-mails from home. The link that allows this is located on the school website (see print screen below).

![Print Screen](image.png)

However, even though the e-mail system is of a high standard the communication between teachers regarding the way in which the ICT suites are booked is very poor. The calendar in the staff room is very basic and some members of staff book ICT rooms on the same day and periods throughout the term (see research for the calendar used in the staff room).
The ability to implement a booking system within the school network is manageable; however the network capacity may not allow the booking system to be accessible from every computer in the school. This could be a constraint as the network may not have sufficient space to hold the entire booking system. This could overload the network and cause an adverse effect on XHS's network.

There are also constraints as to the complexity of the system as the system must accommodate all users ICT skills and abilities (see research regarding the teachers own views on their ICT skills). There would need to be a training course to teach the staff members how to use the system, this could take up their valuable time and cause anxiety of stress to those teachers who feel they are not computer literate.

Time is also a key constraint. The system needs to be made in order for it to be properly use by the end users this year. I cannot take a long period of time to design this booking system as staff need to be trained, which will also be time consuming.

In the last OFSTED inspection of XXXXX High School, the key area that was highlighted was the fact that the school did not have a good enough ICT equipment and facilities. From then on, EHS has strived to improve its ICT resources. It is clear that the government feel it is important to have a good and up to date ICT network within a school environment. Therefore the system must meet the specification of the OFSTED inspectors and to a higher degree the government.

The hardware used within school includes:-

- **RM - INTEL CELERON Server**
- **FISDE - CRT Monitor**
- **RM One machines** - 80 Gb hard drives, 1 Gb RAM, CD/DVD ROM drives, Intel Pentium processors (speeds vary).
- **Tower PCS** 80 Gb hard drives, 1 Gb RAM, CD/DVD ROM drives, **sixthform**
- **Smartboard 600i Smart Board**
- **Epson Printer - Stylus S20**
- **Hewlett Packard Printer - OfficeJet 70000**
- **Canon Printer - PIXMA 1200**
- Intel Pentium processors Hewlett
The software installed on the computers include:-

- Adobe Photoshop
- Microsoft Access
- Microsoft PowerPoint
- Microsoft Excel
- Microsoft FrontPage
- Microsoft Word
- Microsoft Outlook
- **Business Studies** - A-Level Business Studies
- **Classics** - E-Learning Resource
- **English** - Over the Nightmare Ground
- **Geography** - Changing Environments, Physical World, Sustainable Development and Weather & Climate
- **Home Economics** - Clotex
- **ICT** - ICT Interact for KS3
- **Library** - SearchStar
- **Mathematics** - Algebra Tutor, Dragonfly Interactive Quizzes, Omnigraph, GEOMAT and transform
- **MFL** - Blockbusters, AQA, Zeitgeist, Taskmagic, Revision Interactive, Dominoes and UNTERWEG
- **Music** - Sibelius, Audacity
- **Religious Studies** - Aspects of Religion, View32
- **Science** - Absorb, Crocodile Chemistry Help, Elements, Dynamic Learning, Reaction, Experimate and Structure and Bonding.

The application software is installed onto the initial operating system which is Windows XP.