



A Project Approach to Delivery: The Digital Resource Centre

The Academy is a local school for 11-19 year learners. The current IT infrastructure of the school has been acquired as a 5-year lease from an external provider and expires in 12 months. During the 4 years, there have been many developments in technology to include the emergence of streaming technology and other Internet applications. These developments would really help the staff and learners at The Academy, but the aging hardware and software are not capable of hosting these new technologies. The school have, therefore, just completed a 4 month consultation with all stakeholders as to what provision is necessary for a new IT infrastructure.

There are approximately 1200 learners and 200 staff in The Academy all of whom require user access to the school network. The current system allows each user an allocation of 100 MB of storage for their own data and it has been proposed that this is increased to 1GB in the new system. User data must be available to staff and learners throughout their entire time at the school.

Users may also need to have access to shared storage areas on the network through membership of various groups in order to facilitate assessment by tutors on a subject basis. For example, membership of the Year12 Maths Group would enable the member to securely download assessment material and upload work to the shared storage for this group.

Although users have unlimited access to the network whilst on the school premises, there is now a need to move to access from outside the school on a 24/7 basis to facilitate a new e-learning initiative.

Users must be able to remotely or locally:

- access their storage for upload and download
- get help with the aid of an on-line forum
- use the school virtual learning environment
- access the school library of streamed video and audio files.

The school also want to pilot the use of tablet computers for internal and external access to the network for sixth form learners.

The school administration, including finance, is also hosted on the same network and must be kept secure from access by learners and under controlled access by staff.

Experience with the existing network has been disappointing; users find it often takes a long time to log in to the system, access to files is very slow, some user accounts have been hacked resulting in loss of data and virus infections are causing a lot of down time for the network.

It is important that there is good overall security, high network speeds and good response on all devices used to access the network. Security will be especially important because it is intended to allow remote access to the network from outside the school premises.

It is essential that all aspects of the new infrastructure have a responsive IT support team including an IT Help Desk to ensure that the users' experience of the network is within limits specified in a Service Level Agreement.

The school currently experiences various problems with the maintenance and support of the existing network. This is mainly due the fact that different companies are responsible for maintenance and support and it can often be difficult get an agreement on who is responsible for a particular issue. A further complication is that neither of these companies was involved in the build of the existing system and this had led, in some cases, to very lengthy periods in resolving problems. For example, users were currently unable to use social networking with the school Virtual Learning Environment. The company responsible for the VLE have reported that the problem lies with the school web-server. The company responsible for the web-server support have carried out tests but report that no problems exist.

The Academy wants to have a single provider to:

- propose a network infrastructure that will replace the existing system
- produce a user acceptance test plan for approval by The Academy
- select all hardware and software components of the infrastructure
- implement the building of server and workstation computers
- implement the building and configuration of the network infrastructure
- plan and execute testing
- maintain the network infrastructure
- provide full IT support for all users and staff.

You, as an IT services provider have been asked to meet with senior management of The Academy to discuss requirements for the new IT infrastructure.

You will be expected to analyse a given set of user requirements, plan an IT infrastructure replacement to meet those requirements and decide how the IT replacement plan will be implemented. You will then produce a maintenance plan for the new infrastructure and detail how users will be supported by the new IT Support Help Desk.



This work can be undertaken as an individual or within a team. If working within a team learners are expected to contribute to each of the areas (and be able to evidence this contribution) in order to gain the experience and knowledge required to successfully complete the Cambridge Technicals in IT Level 3 (IT Infrastructure Technician Pathway) units.