Discussion about course works related to computer organisation and networking

Background

- Discussion based on the sample questions in the curriculum consultation paper, drafted by the HKEAA, and sample scripts done by students
- The scripts will be made available on the web with specific comments.
- Here we report some general ideas generated from the discussion

The two questions

- Computer Upgrade:
  - Candidate should produce a report on investigating the possibility of upgrading their personal computers.
  - Candidates should focus on the major components of their computers.
- Local Area Networking System
  - Candidates should produce a report of setting up a local area networking system in a medium-sized trading company.
  - The report should describe in detail the information technology employed in running the business

Different interpretations of the questions

- Terms, focus

Context

- The project can only be done meaningfully if it is seen in relation to a specific context
- Students can do more in-depth thinking, purposeful information research.
- They can also visit some related real examples

Parent-child questions

- Teachers generally agree that the idea of parent-child questions is useful
  - The HKEAA gives a broad question, and
  - The schoolteachers put it into more specific context(s) and make the question more concrete, relevant and interesting for the student.

Nature of the project

- The nature of these 2 projects is different
  - mainly the searching and understanding of information,
  - and the use of such information to make informed suggestions
- not possible to use the same marking scheme
  - No implementation,
  - No testing & evaluation

Practical Elements

- Searching and understanding of information can be a valuable experience,
- but it should not be the only emphasis.
- Teachers generally think it is better to require some practical hands-on work, or reports on visit of real sites / examples.
- The idea of port folio was also suggested which can comprise information gathering as well as practical work.

Demand of writing

- The report includes information presentation, analysis, argument …
- The writing skill seems very demanding to those students who like to learn through practical work.
- 2-cycle suggestion.
  - Students hand in their first version earlier,
  - the teacher probes on certain areas,
  - so that students can go further on certain questions emerging from their first works.

Differences in Ability

- We have to take into account the ability levels of students at the CE level.
- So instead of comparing design options for the whole network, taking into account the many aspects as the professionals do,
- Students should be allowed to focus on considering variations of certain parts of the network, and relate the information they found to concepts they learn in the module.
- Project questions should provide room to cater for individual differences.