

# National Qualifications Review

## Computing and Information Systems

### Investigation Report Executive summary

This report is the outcome of an investigation into how to implement the agreed actions which were detailed in the Computing and Information Systems Subject Review Reports, published in 2001.

The main concerns identified in the Review of Computing and Information Systems to be addressed through this investigation were about the revision of the content, structure and assessment of Courses, addressing the following issues:

- ◆ Produce a new assessment rationale that directs, justifies and clarifies the relationship between internal and external assessment.
- ◆ All internal assessment of Intermediate 1, Intermediate 2, Higher and Advanced Higher Computing and Information Systems Courses will consist of only one test exercise and one practical activity. The volume of internal assessment at all levels will be reduced to within agreed parameters.
- ◆ Develop a viable model and practicable arrangements for assessing Intermediate 2, Higher and Advanced Higher Computing and Information Systems coursework. This model must clearly distinguish between the evidence requirements of internal and external assessment and must also rationalise the relationship between coursework and the examination.
- ◆ The relative weighting of coursework in the external assessment and the examination will be investigated in the light of changes to the internal assessment and the new model of coursework assessment.
- ◆ Rationalise coursework marking schemes and remove the need for scaling.

The consultation process, carried out between January and September 2002, involved consultation with stakeholders at various points and included:

- ◆ a questionnaire sent to all presenting centres
- ◆ consultation through interviews and other methods with representatives from schools and further and higher education and from bodies such as HMIE, British Computer Society, the e-skills National Training Organisation, the Assessment Panel, Advisory Group, teachers' groups and an HE Computing forum. Principal Assessors, Examiners, Setters, Markers and Moderators were consulted as part of this process
- ◆ monitoring of the online smartgroup
- ◆ reference to related reports and papers
- ◆ regional seminars attended by over 300 teachers and lecturers

The consultation feedback indicated that there was strong support for:

- ◆ updating of Course and Unit content
- ◆ retaining the existing framework of Courses in Computing and Information Systems, and of mandatory Units and a choice of optional Units to reflect the breadth of the field of study
- ◆ Units comprising two Outcomes – one covering knowledge and understanding, the other practical skills
- ◆ improvements to links between levels to facilitate progression, particularly between Intermediate 2 and Higher
- ◆ internal assessment - one written and one practical assessment per Unit to reduce the amount of Unit assessment
- ◆ external assessment

- ♦ the retention of the assessment of practical coursework (internally assessed and externally moderated)
- ♦ retaining the balance between coursework and the examination
- ♦ regulating the length, marks and format of the examinations

The following recommendations have been made:

**1. The Course structure should be revised and the following structure adopted:**

- ♦ at Intermediate 1, one Course (Computing Studies), consisting of 2 mandatory 40-hour Units and two optional 40-hour Units
- ♦ at Intermediate 2 and Higher, Courses in Computing and Information Studies, each consisting of two mandatory 40-hour Units and three optional 40-hour Units
- ♦ at Advanced Higher, Courses in Computing and Information Studies, each consisting of two mandatory 40-hour Units and three and two optional 40-hour Units respectively

- ♦ **Each Unit should have two Outcomes, one detailing the knowledge and understanding and the other the practical skills.**

- ♦ **Internal Unit assessment should consist of:**

- ♦ one test of knowledge and understanding, lasting no more than 45 minutes
- ♦ a Practical skills folio and observation checklist, with evidence generated from practical teaching and learning activities within the Unit

**2. External assessment:**

- ♦ This should consist of two components – an integrative practical task and a written examination at Intermediate 1 to Higher, and, at Advanced Higher, a report based on the project undertaken in the Project Unit and a written examination.
- ♦ The weighting of the components at each level should be revised at each level to reflect the balance between practical content and knowledge and understanding, with the duration of the question paper to be appropriate to each level. The marks allocation should be revised to remove the need for scaling.

**3. The proposals for assessment will ensure that Unit and Course assessment are distinct with the Course assessment focusing on the ‘added value’.**

**4. The relevant Course documentation should be revised to reflect the above proposals, ensuring that the assessment rationale directs, justifies and clarifies the relationship between internal and external assessment.**

**The full version of the investigation report is available on the appropriate NQ subject page of the Scottish Qualifications Authority website - [www.sqa.org.uk](http://www.sqa.org.uk)**

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