Principal Assessor Report 2002

Assessment Panel:	**Technical Education**
Qualification area	
Subject(s) and Level(s) included in this report	**Technological Studies: Intermediate 2**

Statistical information: update

Number of entries in 2001	
Pre appeal	163
Post appeal	162

Number of entries in 2002	
Pre appeal	237
Post appeal	

General comments re entry numbers

This is the third presentation of Intermediate 2 Technological Studies and there has been an increase in entries each year. The increase in entries is encouraging.

Although there has been an increase of 74 entries in 2002, a significant number of these are from overseas centres (43), where candidates are taking Technological Studies as part of the SGA in Engineering. Another notable feature in the candidates this year was the increase in entries from Further Education institutions. This is also likely to reflect the increase in SGAs in FE in Scotland.

General comments

Feedback from markers/centres indicated that the paper adequately reflected the syllabus and examined the content at an appropriate level of difficulty.

Questions covering descriptive content had many poor responses.

In general, the marking team felt that this year's candidates were at a similar level to those of 2001 but that there were fewer candidates presented at the very top end – upper A.

Statistical Information: Performance of candidates

Grade boundaries at C, B and A for each subject area included in the report

A	71%
B	61%
C	51%

General commentary on grade boundaries

Notional percentage cut-offs for each grade

Question papers and their associated marking schemes are designed to be of the required standard and to meet the assessment specification for the subject/level concerned.
For National courses the examination paper(s) are set in order that a score of approximately 50% of the total marks for all components merits a grade C (based on the grade descriptions for that grade), and similarly a score of 70 % for a grade A. The lowest mark for a grade B is set by the computer software as half way between the C and A grade boundaries.

Comments on grade boundaries for each subject area

The pass mark for A was set at 71%, B at 61% and C at 51%. These pass marks reflected an overall slightly more straightforward paper in 2002.
All grade boundaries were in broad agreement with previous years.

Comments on candidate performance

General comments

The responses were very mixed - some were good but many candidates experienced difficulty. Almost all of the candidates were able to attempt every question. Performance in the questions where candidates were asked to explain the operation of a circuit or provide a descriptive response was again poorly done.

Areas of external assessment in which candidates performed well

Section A	Questions: 1, 5 and 8
Section B	Questions: 10

The performances in questions relating to programmable control showed an encouraging improvement from last year. Candidates did particularly well in the questions on digital electronics and in particular, Q5.

Areas of external assessment in which candidates had difficulty

Section A	Questions: 2, 6 and 7
Section B	Questions: 9

Question 6	Few candidates showed any clear understanding of conservation of energy.
Question 7	Calculations relating to moments were badly done.
7(b)	Free body diagram badly done.

Candidates performed poorly in many areas of calculations and in questions requiring written responses.

Areas of common misunderstanding

Free body diagrams and calculations relating to moments were the most common areas of misunderstanding.

Recommendations

Feedback to centres

There are several areas of weakness that centres should invest some more time and effort into. Specifically, in the areas of moments in Mechanical Systems and in preparing candidates for questions that demand written responses of description of operation of systems across units.

There is some evidence to suggest that candidates from cross-level classes (Int2 with Higher) are performing less well than those in discrete Int2 sections.