

Time for Internal Assessment as Part of Your Course Programme?

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Today John got 12/20 for his report on the 'Convection of heat' experiment.

Last Wednesday he got 8/10 for his essay on 'Wooden saucepan handles and iron saucepans'.

What does this tell us about John and his science?

Is he a 60% student, an 80% student or perhaps a 70% student?

The truth is that John never has and never will perform to a single consistent assessment value. There are so many variables: how does John feel today, did John miss a lesson when his uncle flew to New Zealand, did John's teacher explain these points clearly, what did that new word 'latent' mean?, and so on.

I well remember—it was 1961—an important senior level examination in Biology. In those days the examination was three hours long and there were just six questions to complete, all essay type items. One question was on cell division in living organisms - 'somatic' cell division. Now 'meiosis', I had heard of that. And 'mitosis' that was OK. But 'somatic'. New to me.

Well, I thought, (under the sweating tension of the examination hall) it must be one or the other—so I went for meiosis. And yes, I got it wrong. Seventeen marks gone on one word.

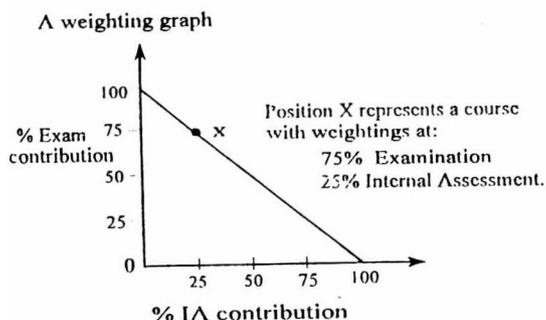
The construction of examination papers has changed radically over the past thirty years. Today's construction recognises far more satisfactorily that the examination instrument is simply "sampling" the grasp that a student has of the subject. As with any sampling exercise, the validity of results from the sample is improved as the sample size is increased. The move into the use of multiple choice items and structured response items has resulted in a dramatic increase in the size of the course probe—this being the range of course topic material which is actually included in the examination papers.

Nevertheless, the "examination paper" type instrument still remains a discrete adjudication: that being a single examination period, on a single day, in a single year, for each single student.

While the examination has been and continues to be a faithful assessment servant, the potential shortcomings of the examination as the sole assessment tool are being acknowledged by an ever growing number of interested people. Widespread consideration has been given to dividing the assessment of students into a number of tasks, each contributing to an overall expression of attainment. Traditionally, written examinations have been managed by organisations or divisions outside the schools. The logistics of maintaining "complete external" control on large numbers of internally administered assessment tasks is so difficult as to make the attempt unrealistic.

This has resulted in a development whereby schools have been encouraged to formulate Internal Assessment programmes (IA) written within a set of framework guidelines prescribed by the associated assessment authority. The contribution that such an internal assessment programme might make towards an assessment of student attainment would be predetermined, and in accordance with the current climate of educational opinion. This will vary from country to country, authority to authority, subject to subject and tuition level to tuition level.

The possibilities may be represented by a graph, with the y-axis indicating the written examination contribution and the x-axis the internal assessment contribution.



At one extreme, 100% of the assessment is made through an examination paper; at the other extreme there is no formal external examination at all, but an assessment evaluation resulting from the cumulative contributions of a range of IA tasks.

Although there are representative advocates for both extremes, those who first enter the realm of IA do so in much the same way as one who takes the first spoonful of hot soup - "sippingly".

Examples may be found in the Pacific Region where IA components vary in their percentage contribution from 20% to 50%. There simply is no "best" value which can be generally advised. What can be said however is that as the percentage value of an IA component diminishes, the influence that it has on the attainment grade awarded to the student also diminishes. An IA component of less than 30% is unlikely to influence the grade produced by the written examination.

Before embarking on the development of a teaching programme which includes an Internal Assessment element, there needs to be a clear rationale for the inclusion. The most common arguments for an IA component are:

- that it allows assessment of skills that cannot easily be tested by a written examination

- that tasks can be designed to reflect real life problems
- that it gives fairer opportunities to students who don't respond well to concentrated assessment through a written examination paper
- that it rewards students who consistently strive to produce good work during the course.

Traditionally it has been those subjects which have a strong practical emphasis in their make-up which have been the first to cry out for assessment recognition of areas not satisfactorily tested by examination, the science and technical subjects being front runners. However, once the IA ball is rolling, it seems that most, if not all, subjects are able to construct sound arguments for the inclusion of an IA component.

It is one thing to recognise the advantages of IA inclusion, it is quite another thing to design and manage the implementation of such a programme.

The level at which a decision is taken to include IA will depend upon the course and whether it is administered within a school, nationally or regionally. Irrespective of the course catchment, it is in the end the classroom teacher who will be required to deliver and collect information relating to IA.

There is one major assumption that relates to the implementation of Internal Assessment - that the classroom teacher has the organisational ability, and resources needed to deliver the programme completely.

When designing the programme, due consideration needs to be given to the demands that the implementation places on both teacher and students. This is not to be confused with the demands inherent in designing the programme which may in themselves be considerable.

The IA designer needs to formulate the programme in such a way that a set of relevant questions will have been considered and answered during the process of formulation.

The questions would include the following:

- What skills and competencies are indicated by the course description through its general objectives and through its objectives in terms of student outcomes?
- Which of these skills and competencies are appropriately placed for assessment in an IA programme?
- How many tasks (pieces of work) will students be expected to do within the context of the IA programme?
- Which tasks will be formative and serve to strengthen students' understanding and competency?
- Which tasks will be summative and count towards an IA mark for each student?
- What weighting is appropriate for each of the tasks that is summative?
- How will each task (both formative and summative types) be marked?
- Are the marking schedules for each task constructed in such a way as to be objective, and to link marks to competency in a variety of appropriate skill areas?
- Are the skills assessed by the tasks compatible with and representative of those indicated in the course description?
- Is the time involved in the completion of the IA programme compatible with the IA weighting in the whole course?

The next move would be to embark on the framework design of the actual IA programme. A sequence of steps, that will facilitate design construction, can be summarised as follows.

DESIGN STEPS

1. *Identify the categories of task that are to be included.*
2. *Express the skills that are to be assessed by each category of task.*
3. *Determine the weighting of each task category.*
4. *Determine the number of individual tasks within each category.*
5. *Construct skill related mark schedules for each category.*

It will have become evident by this stage that a successful programme of assessment requires much preparation in advance of implementation. This involves planning on the part of teachers. This planning, and the inherent design considerations, require teachers to give thought to their course content, objectives and resource facilities. The mental involvement that this demands, frequently enhances teacher commitment, with a consequent rise in the quality of the work in the classroom.

There is always a danger that over enthusiastic teachers may take to the concept of a school based assessment component so eagerly, that their students are subjected to over-assessment.

Students need to learn, and making mistakes is a normal part of learning. We don't want our students to be penalised while they are learning. It is therefore essential that enough time is available for teachers to assist their students through formative and diagnostic assessment. Neither of these should ever count against the student, and the summative assessment programme should not interfere with the function of formative and diagnostic tasks. By limiting the number of summative tasks built into an internal assessment programme, time remains available for the all important opportunities for the student to learn.

Programmes such as those described can provide a fuller assessment picture of John, and he had a terrible headache when he got 37 per cent in his science examination.

Definition of Terms

task - a discrete piece of work given to a student

weighting - the value of a task or group of tasks, expressed as a percentage of the whole

formative assessment - feedback to students which allows them to gauge their understanding without penalty

summative assessment - a judgment of attainment which is recorded for each student

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