

Policy and New Products

Research Report 4



Less Is More:

Good Practice in Reducing Assessment Time

Contents

Acknowledgements	1
About this project	2
Background	2
Consultant team	2
Methodology	2
Executive summary	3
Case studies of good practice	4
Case study one: Graphic Communication	4
Case study two: Chemistry	7
Case study three: Art (part-time)	10
Case study four: Practical Cookery	13
Key messages from the case studies	16

Acknowledgements

The Project Team would like to acknowledge the support and assistance given by a wide variety of people including:

SQA staff: Qualification Managers (QMs) and Qualification Officers (QOs) and members of the Qualifications for the Future Team

School/College/HE

- ◆ Kinross High School
- ◆ Viewforth High School
- ◆ Penicuik High School
- ◆ Cardonald College
- ◆ St Andrews High School, Clydebank
- ◆ St. Ninian's HS, Bishopbriggs
- ◆ Linlithgow Academy
- ◆ Knightswood Secondary
- ◆ Bishopbriggs Academy
- ◆ Strathclyde University
- ◆ Douglas Academy, Milngavie
- ◆ Lenzie Academy
- ◆ Linlithgow Academy

Local authorities

- ◆ Highland Council Learning and Teaching Co-ordinator
- ◆ East Dunbartonshire Council
- ◆ North Lanarkshire Council
- ◆ Glasgow City Council
- ◆ West Dunbartonshire Council
- ◆ East Dunbartonshire Council

About this project

Background

The aim of this project was to identify and report on examples of good practice in reducing time spent on assessment.

A recurrent issue in discussions about qualification systems is the amount of time spent on assessment — exams or Unit assessments, or preparation for them.

SQA is keen to highlight examples of how good practice can reduce assessment time in the current system. It is also interested in identifying any clear pointers for how changes to the current system might lead to further improvements.

This report includes case studies showing how centres have taken steps to reduce assessment burden on students and staff. These examples can come from particular subjects with their specific assessment arrangements, and/or from centres or departments organising assessment more efficiently.

The project covered a number of subject areas but has used examples from Graphic Communication, Art, Practical Cookery, and Chemistry.

Consultant team

The Consultant team for this project was Brian Keegan (Lead Consultant), Bob Bissell and Norman Williamson.

Methodology

Information was gathered using an appropriate mix of desk and web-based research and individual interviews — both telephone and face-to-face.

Executive summary

The report that follows draws together some examples of good practice. The approaches shown here may be repeated in these subjects in many other centres, and probably across other subjects.

The key approaches to reducing assessment which feature in the case studies include:

- ◆ Using portfolios of evidence in the assessment of practical work in particular — this approach features in Graphic Communication and Art.
- ◆ Using more formative assessment as part of the learning and teaching process, which leads to less summative assessment by preparing candidates for these assessment events. This is reported in this report for Chemistry and Practical Cookery.
- ◆ Being able to use one piece of evidence for more than one topic within a course, and/or using one piece of evidence across several Units/subjects. This is a feature of Graphic Communication, Art and Practical Cookery.

Case studies of good practice

Case study one: Graphic Communication

This case study shows an example of how to reduce the amount of assessment evidence. In this approach students are encouraged to provide fewer pieces of assessment evidence than usual, but of a much higher standard, with some graphics being used to provide evidence for several topics

The centre

Kinross High School offers courses leading to National Qualifications in Graphic Communication at Standard Grade, Higher and Advanced Higher. Intermediate 1 and 2 are not offered.

There are approximately 930 pupils. Generally, in Graphic Communication there are around three sections of Standard Grade (SG) in S3 with about 60 candidates in total; four sections of SG in S4 with about 65 candidates in total; two sections preparing for Higher with about 34 candidates, and 17 candidates preparing for Advanced Higher.

Standard Grade Graphic Communication (1330 01)

The Course aims to foster an awareness of the importance of Graphic Communication as an international language. Its three elements are:

- ◆ Knowledge and Interpretation
- ◆ Drawing Abilities
- ◆ Illustration and Presentation

The arrangements require that evidence for the element 'Illustration and Presentation' is assessed internally, on the basis of a candidate portfolio.

What was done?

The Standard Grade portfolio covers 10 topics, or sub-elements for the element 'Illustration and Presentation'. Each of these topics is graded individually on the basis of examples of work. The arrangements list a total of 14 separate examples (see the list below), but at the same time point out that one example may count as evidence to more than one topic. Accordingly, it sets a maximum of 10 sides of A3-sized paper for the portfolio.

Portfolio Checklist			
Topic	No of Examples	Topic	No of Examples
2D and 3D Graphs and Charts	2	Modelling	1
Use of colour (selections and applications)	3	Computer-aided Draughting	2
Use of shading, toning and rendering	3*	Use of CAD Library	1
Layout and lettering	3	CAG for Display	1
Display	1	Draughtsmanship across the Portfolio	**

* Not separate from other topics

** Not separate from other topics: all pieces of work will be assessed for draughtsmanship, ie neatness and accuracy in drawing, sketching, cutting and pasting

In Graphic Communication, much of the assessment is visual (at least for coursework) and marking can be done more quickly than other types of assessment. In itself having a portfolio as part of the overall assessment reduces the total time required for assessment when compared with other subject areas.

Kinross High School reduces the burden of assessment in two distinct ways:

- ◆ By ensuring that candidates produce only enough items to be sure of attaining the best grade they are capable of. If the suggested portfolio evidence is three items of work, these may be reduced to two quality pieces without compromising the experience the candidate gets. Indeed, the experience can be enhanced by allowing more time to achieve better quality. It is important to note that in each topic the grade awarded will be the candidate's best grade; if there are two pieces of work for one topic graded 3 and 1 respectively, the topic is graded at a grade 1.
- ◆ By recommending that candidates cover the required topics with as few graphics as possible. It is the school's view that, on the basis of carefully planned assignments, one graphic can be used as evidence for several topics.

For instance, a well-planned bar graph with imaginative use of colours and lettering could be used as assessment evidence for seven of the 10 topics in the portfolio:

- ◆ 2D and 3D graphs and charts
- ◆ Use of colour (colour selection only if the graph is computer generated)
- ◆ Layout and lettering
- ◆ Display
- ◆ Computer-aided Draughting
- ◆ CAG for Display
- ◆ Draughtsmanship

This could lead to significantly fewer than 14 pieces being required. The school argues that it should be possible to produce between five and seven pieces and cover the assessment criteria. This would be similar to the number of pieces required for the portfolio of Intermediate 1 and Intermediate 2.

Why it was done?

This approach involves more foresight and planning, but reaps benefits.

In the main, it was done to tackle the tendency to put too many pieces of evidence in the portfolio — including those that would not even be counted towards an overall grade. It was also done to improve the quality of the evidence.

Most importantly, it frees up more time for learning and teaching.

Did it work?

- 1 The portfolio pieces are more appropriate and of a higher standard.
- 2 Staff report that there is more teaching time and less emphasis on assessment using this approach.
- 3 It leads to increased motivation on the part of pupils.
- 4 This approach is now common across all the levels in Graphic Communication in the school where portfolios are used for both internal and external assessment.

What does the case study highlight?

- ◆ Guidelines are for guidance — they do not always have to be followed to the letter. Many teaching staff believe SQA ‘rules’ are sacrosanct when often they are only recommendations. It is important for centres to distinguish between rules, guidance, and recommendations, and for SQA to provide examples both of good practice that departs from guidance as well as practice following the guidance.
- ◆ To some teachers it is too much of a risk to use one example to cover a number of topics, so they would rather increase the burden of assessment to feel safe and comfortable. This is often not in their candidates’ best interest. Teachers’ confidence needs to be improved in terms of how to work with their pupils to gather evidence for their portfolios.
- ◆ Foresight and planning can provide benefits.

Case study two: Chemistry

This case study focuses on a reduction in the load of assessment in SG Chemistry by switching from a traditional end-of-topic assessment regime to using peer and self-assessment.

The centre

Penicuik High School offers Chemistry Intermediate 1, Intermediate 2, Higher, and Advanced Higher. The focus for the change in approach is within Standard Grade, for which it has 46 to 74 candidates yearly.

What was done?

Over the last five years, the school has attempted to reduce the amount of summative assessment in S3 and S4 Standard Grade classes to free up time for more formative assessment.

Standard Grade Chemistry has 15 topics and, as in many Chemistry departments around Scotland, the school had end-of-topic tests for each of these. In addition, they would use a third year exam and at least one S4 prelim. The school has gradually reduced this self-imposed burden to a more manageable — and hopefully meaningful — level.

Third year pupils have three summative assessments in the year, starting in June. These inform parents and pupils about progress, and allow pupils to identify strengths and weaknesses and so set specific targets for improvements.

For S4 pupils, the school will commonly have two prelims and one other summative assessment.

The Chemistry department now spends a greater proportion of class time on learning and less on formalised assessment — more clearly aligning assessment with learning and teaching. More use has been made of formative assessment, particularly using more peer and self-assessment as an integral part of classroom practice. This approach was intended to involve the pupils more in their own learning.

Peer and self-assessment was also introduced to take the fear out of the word ‘assessment’, because this was viewed negatively by many pupils. To some extent staff shared this negative view. They saw Unit assessment in particular as an administrative burden at best — a view which is no longer held.

Many of the questions traditionally incorporated into end-of-topic tests have been turned into active formative assessment tools, which are used by groups or pairs of students. These tools probe their understanding and encourage dialogue about Chemistry issues.

Pupils are encouraged to track their progress and signal any lack of understanding (using ‘traffic lighting’) from active learning assessments such as peer and self-assessments and from feedback from their homework.

The teachers introduced structured self and peer activities into Standard Grade Chemistry to begin with, but this approach has become the norm in all levels of Chemistry. In some respects, more assessment is taking place, but it is perceived as part of the learning and teaching experience rather than as something separate.

Why it has been done?

This new emphasis on aligning assessment with learning and teaching more closely was started to reduce the number of assessments taking place for Standard Grade in S3 and S4. The principal teacher (PT) had realised that this was a self-imposed burden in that there was no necessity to carry out end-of-topic tests — it had simply become the norm, as in many other schools.

The introduction of more formative assessment, making use of peer and self-assessment, was also seen as a way of getting the pupils to engage more with their subject and with each other.

Did it work?

- ◆ The situation very quickly moved from 15 end-of-topic tests to more self and peer assessment activities and only three formal pieces of assessment.
- ◆ Classroom teaching became more enjoyable, according to the staff. The PT admitted it gave her the motivation to spend a lot of her own time at home making up activities.
- ◆ More pupils seemed to enjoy Chemistry. Making use of the ‘traffic light’ system meant that pupils started to admit when they did not understand something — partly because others were able to do so — by marking curriculum areas they were not sure of in red or amber. The stigma of admitting that they were unsure or did not understand something started to lessen. Engagement between pupils improved.
- ◆ There is certainly evidence of more pupils passing Unit summative assessment first time, less re-assessment, and an improvement in the grades achieved in the examination diet. This may very well be down to the fact that the pupils understand much better what is expected of them in summative assessments and the fact that the formative exercises prepare them more.
- ◆ The approach was extended to Intermediate 1 and 2 and Higher/Advanced Higher groups.

What does the case study highlight?

- ◆ An assessment burden can be self-imposed and unnecessary.
- ◆ It is possible to change an approach to learning, teaching and assessment which has been used for many years and considered 'the norm'.
- ◆ Approaches suggested by Paul Black and Dylan Wiliam not only align learning and teaching much more closely with assessment, but also make assessment less of a burden.
- ◆ A change of focus from summative to formative assessment can increase the motivation of pupils, and have them engage more seriously with their subject and other pupils.
- ◆ A change of focus from summative to formative assessment led to improvements overall in attainment — with better grades, fewer re-assessments, more first time passes in NABs and examinations due to the pupils having a better understanding of the assessment requirements.

Case study three: Art (part-time)

This case study focuses on the integration of Units within a course, which leads to more meaningful projects, improved skills development, and a reduction in the time spent on internal assessment.

The centre

At **Cardonald College**, there are approximately 30 students in the part-time programme, and there may be as many as 80 students on the full-time programme. They are split into various class specialisms.

What was done?

Portfolio Building P/T is a part-time course for those who consider applying for NQ, HND, or degree level courses, and need help and guidance in building a portfolio of artwork. This studio-based course sees a high percentage of students moving onto their chosen areas on successful completion of the course (or on to HNC/D programmes at Cardonald or Metropolitan Colleges, or other colleges).

This course is the starting level for students, some of whom have not studied Art and Design, and some are returning to the subject after a break in studies. It gives a broad introduction to basic techniques, with a specialist element in 2D and 3D design.

Throughout the year-long course, each student will work on their individual portfolio. Tutor support is provided on a one-to-one basis throughout this process. In each project, students will work on source drawing, design development and creative solutions. There is strong tutor support throughout the course; students are encouraged to visit open days and exhibitions, and are given help with the UCAS process and interview techniques, as well as their portfolios.

The full-time NQ Portfolio Preparation normally recruits students who already have university entrance qualifications but need to build an art school entry portfolio. The course covers a variety of subjects including fine art, 3D design (for architecture, interior, product, fashion, or jewellery design) or general classes. The general class combines fine art and design, and is for anyone who is unsure of which area best suits their skills.

This coverage allows a great deal of flexibility — and some integration of Units and reduction of assessment by using assignments covering the assessment criteria for more than one Unit. Integration is possible because many assessments are assignments or projects, and these are carried out over a period of time.

There are two blocks of study of around 18 weeks each in a 36-week teaching year. In each block, there is scope to integrate the Units that are being studied. By careful

planning, it is possible to run two Units together for a block and assess them by one combined project/assignment.

Example 1

In the current year, during Block 1 of the part-time Portfolio Building Course the two Higher Units *Graphic Design: Label and Packaging* (E8GK 12) and *Painting Techniques: Water Based* (E7P0 12) were run concurrently. The painting becomes part of design development for most students, and assignments link the painting with the graphic design theme. Students who are more interested in painting can concentrate more on drawing and painting and the graphics project can become more conceptual. One carefully thought-out assignment brief was used to cover all the assessment requirements of these two Units.

The Outcomes 1–6 in the *Graphic Design* Unit were assessed by a practical assignment linked closely to the brief for the *Painting Techniques* Unit.

Example 2

During Block 2 the two Units *Illustrative Sculpture* (EE2B 11) and *Jewellery Design: Non-Precious Material* (D0L0) were run concurrently and assessed using one assignment brief.

Why it has been done?

The main purpose of integrating was to suit the needs of the Course, ie to build portfolios of work showing a variety of skills for whatever area the student intends to apply for when he/she leaves the course. In this way, assessment could cover a broad area of subjects (Units).

Partly, this was a timetabling solution. The Course aims to help students build up a body of work suitable for application to a variety of other courses. This solution avoids stopping and starting every 2–4 hours for different projects/Units. By running one project throughout the whole day, students could attend for 2, 4 or 6 hours and infill more easily.

Did it work?

Advantages

- ◆ The most important difference is increased motivation on the part of the students; the project work becomes more relevant — for instance, someone who has an interest in painting completes the painting Unit as part of an overall project (eg part of design development). Because of the increased motivation, more students are now achieving Units they might otherwise have lost interest in. They build up a broader body of work for a folio for one integrated project than in individual projects with less work in each. Students can explore a theme and develop ideas thoroughly.

- ◆ Integrating Unit assessment projects achieves better outcomes for students and makes projects more relevant to individuals, as well as producing more quality work by students.
- ◆ It has given students more scope to build up a good body of work at a higher standard.
- ◆ Students attending full days get the most out of a project because they do not have to move from one class to another to do different Units.
- ◆ It affords staff more freedom in planning the learning and teaching of projects.
- ◆ It gives staff more freedom to plan a lively programme of work to suit the broader needs of students.
- ◆ There is more time for learning, increased motivation due to full day working on a project and integration of Units.

Disadvantages

- ◆ Students need to be reminded of what Units they are following and what the Outcomes are.
- ◆ The process is more complex for teachers — concentrating on individual Unit work would make teaching a variety of students, who attend at a variety of times, simpler for the teachers.
- ◆ If the evidence is insufficient, the candidate will fail both Units.

Conclusion

The gains in terms of integrating and improving skills and time saved on assessment events are well worth it.

What does the case study highlight?

Staff believe that breaking Units into individual projects limits the time available for each of these, whereas integrating Units to form a single project gives students more time, and gives teachers more scope to work towards a more involved, thorough way of working.

Case study four: Practical Cookery

This case study focuses on the reduction in summative assessment brought about by integrating assessment opportunities across several Units, as well as using peer and self-assessment during the learning and teaching process.

The centre

St Andrew's High School Clydebank offers Practical Cookery at Intermediate 1 and 2, both in S4 and S5. Typical numbers of candidates are 20 at Intermediate 1 and 40 at Intermediate 2.

What has been done?

Intermediate 1

The Units of this Course are designed so that assessment across the Units can be integrated, further reducing the overall total internal assessment time for the course. This allows the *Food Preparation Techniques: an Introduction* and *Cookery Processes: an Introduction* Units to be run together.

When assessing practical aspects of *Food Preparation Techniques* and *Cookery Processes*, a mixture of teacher assessment and peer assessment is used. To help with the students' understanding of the Outcomes and products required for these Units, staff have introduced some peer assessment. Peer assessment is introduced over time to speed up assessment and to help pupils learn from each other. This form of assessment can assess several areas at one time and ensure that pupils are watched at all times — if not by the teaching staff then by their peers.

To ensure that the correct standards are applied during peer assessment, learning intentions are shared at the start of every lesson from the start of the Course. Pupils are told what is expected of them during each lesson, and at the end (as often as time permits) they are questioned on their success. Before teacher or peer assessment is carried out, there is whole-class discussion in which pupils identify what is being looked for in each of the areas to be assessed.

For example, when assessing the process of baking — weighing and measuring, using safe practices, preparation without undue waste — appropriate tests for readiness and attractive end result can be assessed at the same time. Pupils will have identified the correct equipment to be used, what the bowl should look like when the mixture has been put into a cake tin, safe practices when using an electric whisk and putting food into and taking it out of the oven, the various ways to test the readiness of a baked item, and what makes the item attractive. A peer assessment sheet is produced to be used when appropriate. The class teacher pairs pupils up and has half the class cooking one day, half assessing. The next time the pupils are in the department they reverse roles. During peer assessment, the teacher monitors what is being accepted

and not accepted by peers by discussing the progress of the pupil being assessed in line with the agreed criteria.

The assessment of food preparation techniques and cookery processes takes place at appropriate points in the syllabus when pupils have built up a 'bank' of skills. This makes it easier to assess several skills at once.

The time involved in internal assessment is reduced by integrating practical assignments and by using formative peer assessment as part of the natural learning and teaching process. This has led to a better rate of students passing their summative assessment at the first attempt.

Intermediate 2

Assessment of *Practical Cookery Skills for the Hospitality Industry* is integrated with that of the two Units *Food Preparation for Healthy Eating* and *Foods of the World*. This is partly done by peer assessment tasks.

By using this approach, several items can be assessed at once, reducing time spent on assessment. Peer assessment is used in the same way as for Intermediate 1. Time is cut by integrating the two Units. Time is also cut in *Foods of the World* because some of the dishes cooked in the other two Units can be used to achieve the Outcomes.

Peer assessment and the integration of learning Outcomes in Units are used throughout the subject area.

Why it has been done?

There are several reasons why the assessment has been organised in this way: to make assessment more manageable in a very practical and very busy set of classes; and to reduce the burden of assessment. Peer assessment has become a very important factor here in improving the processes and saving time; staff believe it would be very difficult to do it any other way now.

Did it work?

- ◆ Integration of assessment has made the classroom processes more manageable and clearer for the pupils.
- ◆ Peer assessment has improved pupils' confidence and ability to be more analytical and evaluative.
- ◆ Peer assessment has been a key factor in improving pupils' motivation and achievement by involving them more. This is the essential element in making the project successful.
- ◆ Peer assessment works particularly effectively for those who stay on beyond 16 in terms of motivation and achievement.

What does the case study highlight?

- ◆ Being able to use one piece of evidence for more than one topic within a course, and/or using one piece of evidence across several Units/subjects is another important way of reducing the assessment burden.
- ◆ Using peer assessment has provided very important benefits — apart from a reduction in assessment time for teachers. Staff recognise that the success of this approach has been enhanced by the approaches in Curriculum for Excellence and Assessment is for Learning.

Key messages from the case studies

- ◆ Constructing a Course or programme which allows for integration of learning and teaching and assessment of Units using perhaps one piece of evidence, one assignment, or one project for several Outcomes and Performance Criteria within or across Units reduces the assessment burden.
- ◆ Using self and peer assessment increases motivation and attainment, as well as reducing the number of summative assessments needed by candidates.