Policy and New Products

Research Report 1



The Assessment Systems of Finland and Queensland

Contents

Executive summary11Methodology2				
	2.1	Scope of the investigation	3	
	2.2	Current situation in Queensland	3	
	2.3	Arrangements for achieving the QCE	4	
	2.4	Internal assessment and external moderation: overview	4	
	2.5	The external moderation process	5	
	2.6	External assessment	10	
	2.7	Summary	11	
3	The	assessment system of Finland	13	
	3.1	Scope of the investigation	13	
		Current situation in Finland	13	
	3.3		14	
		Quality assurance	15	
	3.5	External assessment	17	
	3.6	Arrangements for achieving certification	18	
4	Issues for consideration		20	
	4.1	Workload	20	
		Offering both internal and external assessments	21	
	4.3	Demand/use	21	
	4.4	Credibility with FE, HE and employers	22	
	4.5	Offering internal and external assessment systems in Scotland	22	
A		lix 1: References	24	
	-	ensland	24	
	Finla		24	
		lix 2: Main outcomes of ETRF	25	
		lix 3: Subjects offered by the QSA — Years 11 and 12	26	
A		lix 4: Extract from What About the QCS Test?	27	
		t preparation is useful?	27	
A		lix 5: Finnish curriculum	28 28	
Comprehensive schools (to Year 9)				
		er Secondary schools (Years 10–12)	28	
A		lix 6: The Finnish Matriculation Examination	29	
		levels of the tests	29	
	Desc	riptions of the tests	29	

Executive summary

This report is the outcome of a project to review the assessment systems of Queensland and Finland with a view to identifying issues arising out of operating a flexible internal assessment system. This report was produced by Anne Galloway in April 2008. The project involved:

- reviewing the website and publications of the Queensland Studies Authority
- reviewing the websites and publications of the Finnish National Board of Education, the Finnish Matriculation Examination Board, and the Finnish Education Evaluation Council

The project covers the processes that support flexible assessment systems and the need for a degree of externality in the process.

The main findings and conclusions are:

Assessment

- A significant benefit of internal assessment is that it makes it possible for learning and teaching to be aligned with assessment.
- Teachers who work within an internal assessment system feel a sense of ownership for the system.

Processes

- Internal assessment processes need to be rigorous to ensure that assessments maintain credibility.
- Operating these processes can be costly in terms of time, personnel and other resources.
- Some systems appear flexible, but the need to implement rigorous processes to support them can end up reducing that flexibility considerably.

Quality assurance

- Despite all efforts to ensure rigour, internal assessment can reduce the credibility of qualifications so people emerging from a system of internal assessment in school still need to undertake an external assessment on exit.
- This external assessment is needed to demonstrate to all users (students, employers and tertiary education) that the students have met the same standards as other students who have been through a system of external assessment.
- The arrangements for the external exit assessment are likely to be costly.
- Other systems of review or evaluation might be needed to demonstrate the rigour of an internal assessment system.

1 Methodology

A consultant was appointed to carry out and report on the investigation.

The methodology included reviews of websites of bodies in Queensland and Finland, and scrutiny of documents from the Queensland Studies Authority, the Finnish National Board of Education, the Finnish Matriculation Examination board and the Finnish Education Evaluation Council. The reference sources used are listed in Appendix 1.

2 The assessment system of Queensland, Australia

2.1 Scope of the investigation

This investigation covers:

- the arrangements for achieving the Queensland Certificate of Education (QCE)
- the internally-assessed and externally-moderated system that operates at Years 11 and 12
- the arrangements for the externally-assessed Queensland Core Skills Test (QCS Test)

Note: In addition to the QCS Test there is also a range of external assessment duties undertaken by the Queensland Studies Authority (QSA) with which this investigation is **not** concerned. These include:

- testing in school Years 3, 5 and 7, which looks at some aspects of numeracy and literacy in standard Australian English to allow reporting to parents and government
- the Senior External Examination, which is administered and developed by the QSA and is for people who are not senior students in Queensland secondary schools or for senior students who are unable to access study and assessment in particular subjects at the right level in their schools.¹

2.2 Current situation in Queensland

The system has been going through a process of change arising out of the White Paper published in 2002, *Education and Training Reforms for the Future (ETRF)*.

The effects of this initiative are now working through the system, and the cohort that will reach Year 12 and seek to gain the QCE in 2008 will be the first to experience the new process.²

The main outcomes of the changes to the system are shown in Appendix 2. While many of these have no implications for the system of internal assessment and external moderation, others might increase options and choices for students, and therefore increase flexibility. It is too soon to say whether they will have this effect, but there does appear to be a greater choice of vocational options for students in the new arrangements, and this could help to encourage young people both to remain in full time education and to seek to gain the QCE. It might be

¹ In relation to this the QSA is currently consulting on Tertiary Entrance Procedures, and the draft consultation paper is available on the QSA website.

² Those leaving Year 12 in 2007 will be the last group to receive the current certificate, the Senior Certificate.

worthwhile reviewing the situation after 2008 to identify the changes that have emerged from the new arrangements.

Where the new arrangements have implications for this assignment they are noted specifically in the report as they arise.

2.3 Arrangements for achieving the QCE

The QCE is the new qualification which will be awarded from 2008 onwards. It will replace the current Senior Certificate, and will be awarded by the QSA to those who have successfully completed the senior phase of school learning by achieving at least 20 credits for the certificate. Usually this will be at the end of Year 12.

The QCE will show the subjects undertaken in school together with the level achieved, as well as any certification arising from traineeships or apprenticeships, training programmes, university subjects and workplace learning. It will also confirm that the student meets literacy and numeracy requirements, and will record the Queensland Core Skills Test grade. From 2008, then, the QCE will record success in a wide range of learning, both vocational and academic. This increase in the range of choice in learning that contributes to the QCE is one of the changes arising out of the ETRF.

Young people must stay at school until they finish Year 10, or reach the age of 16, whichever comes first. After that, unless they have a paid job to go to, they must stay in education or training for a further two years. A common way of doing this is to undertake the programme of learning for Years 11 and 12 at school. However, they can also undertake their learning by other means and in other locations, if these are appropriate and meet the requirements of the ETRF.

2.4 Internal assessment and external moderation: overview

The QSA provides external moderation for Queensland schools. Queensland's definition of the term is much wider than SQA's, and covers what in SQA would be aspects of validation and approval and external verification. QSA's external moderation is aimed at:

- ensuring that students are assessed to the same standards across the state
- checking that the assessments match the demand and requirements of the syllabus
- demonstrating the transparency of, and accountability in, the system

Internal assessment and internal moderation

Assessment in Queensland is continuous, internal, and criterion-referenced, and is carried out by teachers. It is in assessment that most flexibility is found in the

Queensland system, as this allows schools to align their assessment with the learning and teaching and so help to ensure that assessment:

- meets the students' needs and teachers' requirements
- reflects the local context
- takes place when the students are ready
- supports the learning process

The schools also have in place an internal moderation system with nominated teachers responsible for internally moderating assessment decisions. This helps to give rigour to the internal assessment process.

Teachers in Queensland schools are also expected to put themselves forward for selection as external moderators for QSA. Taking part in QSA's external moderation activities provides a useful means of undertaking continuing professional development. This helps to strengthen the internal as well as the external moderation processes.

2.5 The external moderation process

QSA's external moderation process appears to be extremely rigorous and demanding. It involves:

- approving the work programmes and study plans of schools
- monitoring at Year 11 the schools' implementation of syllabuses in Authority subjects
- verifying at Year 12 the schools' judgments about student achievement in Authority subjects
- confirming judgments made by schools on exit levels of achievement in Authority subjects
- random sampling of students' exit folios in Authority subjects to assess comparability after exit levels of achievement have been awarded

QSA is supported in these moderation duties by District Review Panels and State Review Panels.

District Review Panels are appointed by the QSA to give advice to schools, on behalf of the QSA, in subject areas. They are the first point of contact for a school, and are made up of experienced teachers. Their role is to:

- maintain standards across the district through the moderation processes of monitoring, verification and random sampling
- check work programmes
- review folios of student work
- make recommendations to the appropriate State Review Panel

State Review Panels oversee the work of the District Review Panels to ensure consistent decision-making and the maintenance of standards by schools and District Review Panels state-wide. The membership includes practising teachers from schools and universities. The State Review Panels:

- consider work programmes recommended for approval by District Review Panels, and either approve these or give further advice to schools through District Review Panels
- oversee the work of District Review Panels, through sampling, to ensure that advice to schools from District Review Panels is consistent across Queensland
- monitor and maintain standards across Queensland to ensure high levels of comparability
- resolve issues and negotiate agreements between schools and District Review Panels

QSA trains and develops the people who undertake these functions, and provides material to support them in carrying out their duties. Amongst these, Moderation Processes for Senior Certification provides detailed information on the operation of external moderation processes over the school year.

It is not clear from the documentation how often these panels meet. However, the following sections provide more information on the activities of the panels and may help to show the cycle of work and the timescales likely to be involved.

Syllabuses for subjects at Years 11 and 12³

The QSA is responsible for developing the syllabuses for Authority subjects at all years of school education. The subjects offered at Years 11 and 12 are listed in Appendix 3. They are the 'traditional' secondary school subjects, and are recorded on the student's Senior Certificate/QCE. Results from Authority subjects can be counted in the calculation of the overall position (OP) and field position (FP). These are measures that are used for selecting students for tertiary education. Students who intend to go on to further or higher education are likely to concentrate their efforts initially on taking Authority subjects.

The means by which syllabuses are developed are not recorded in this report.

In addition to the Authority subjects there are also Authority-registered subjects for students in Years 11 and 12. Authority-registered subjects are either variations of existing subject areas or subjects that are developed by individual schools. They can contain components of vocational education or practical elements.

Although they are recorded on the Senior Certificate/QCE, results from Authority-registered subjects are not externally moderated and do not contribute to the OP or the FP. This means that the flexibility gained by taking Authority-

³ Although this section refers specifically to subjects at Years 11 and 12, QSA is responsible for development of syllabuses in all years of school education.

registered subjects at school is potentially offset by the need to ensure that students who later want to go on to further education (FE) or higher education (HE) have the right mix of credits.

The Authority subjects and Authority-registered subjects for 2006 are given in the *Catalogue of Senior Syllabuses for Authority and Authority-Registered Subjects for 2006.*

Recorded subjects can also be undertaken in Years 11 and 12. These are either: subjects offered by organisations recognised by the QSA; or vocational education and training, undertaken in schools or in a partnership arrangement with other bodies or organisations. QSA is not responsible for the external moderation of these subjects, and they do not contribute to calculations for the OP and FP. They are, however, included on the Senior Certificate/QCE.

The QSA system gives access to a wide range of learning, both academic and vocational. However, some of this learning might not provide access to FE or HE, so there is a possibility that time and effort might be given to a subject that does not assist students to progress in the way they want to. Guidance must play a large part in any such system because students need to be well aware of the effect of their subject choices on their ultimate learning destinations. Under the ETRF, all Year 10 students are required to develop Senior Education and Training Plans. Doing this helps to ensure that the students and their parents or guardians understand the effect that their choices will have.

Approval to offer subjects

When first offering an Authority subject (even when that subject has merely been revised or updated) the school has to submit a work programme to QSA for approval.

The work programme is the school's interpretation of how it intends to deliver and assess the syllabus, taking account of the special characteristics of the school and its students. This indicates that there can be a degree of flexibility between the syllabus provided by the QSA and the school's interpretation of it. Allied to internal assessment, this interpretation will help to increase flexibility in delivery, although, as the work programme has to be used in conjunction with the syllabus, any flexing of the syllabus in delivery is relatively limited. Nevertheless, this opportunity must exist, otherwise there would be no point in requiring schools to seek approval for work programmes — the QSA could simply develop a single work programme itself and impose it on schools (significantly reducing its own workload in the process).

Timescales for approval

Documentation on the QSA website indicates that there is a programme for developing new syllabuses or revising existing ones. The timescales seem relatively tight. For instance, the QSA documentation notes that QSA warns schools of upcoming changes in the shape of a new or revised syllabus 'in the year before' a new work programme approval period begins. It also refers them to the QSA website, where they can find:

- information on syllabus and work programme requirements
- memoranda drawing attention to the approval period and the syllabuses upon which new work programmes are to be based

The QSA advises schools to have their work programmes written before students start the course, and it asks that schools submit work programmes for approval no later than the end of the first term of the first Year 11 cohort intake for the subject.⁴ It is not possible for the students in this cohort to receive their certificates without the work programme for the subject having been approved, so QSA's approval programme will have to be capable of resolving all approval issues before that cohort exits at the end of Year 12, less than two years later.

The QSA offers assistance in preparing and submitting work programmes. This help can come from QSA staff as well as the review panel.

The approval process

The approval process consists of the District Review Panel checking a school's work programme against the corresponding syllabus to make sure that the requirements of the syllabus have been met. The panel considers the submission and can either accept it or ask for it to be resubmitted with amendments. The process ends when the work programme receives approval. The approval then runs for a period of seven years. Where there are vocational elements embedded in the work programme, or where a syllabus is in its trial stages, the approval span is four years.

There is no indication in the guidance material as to how long the process can take, but it is conceivable that there could be a degree of toing and froing between the panels and the school and that this could take some time. This would be one of the downsides of a system that is intended to give flexibility to the school by devolving responsibility for assessment. The need to demonstrate that assessment is still rigorous means that there are times when other forms of control have to be used, and these can make the system seem bureaucratic and ponderous to an external observer.

Monitoring internal assessment

Monitoring takes place in Year 11 when about half of a course of study has been completed. In Monitoring, review panels look at how each school has implemented a course of study in a particular subject, and at how the school is operating within the assessment procedures. For each Authority subject, the school provides a monitoring submission which includes:

⁴ The school year is a calendar year.

- five folios of student work
- a copy of the school's approved work programme
- the set of assessment instruments
- any other documentation to support interim judgments

When the review panels have completed their work, they feed back advice to the school on the standards of work and the appropriateness of the decision-making in the school.

Verifying internal assessment

Verification takes place in Year 12. In Verification, the review panels look at the quality of each school's decision-making, informed by comparing standards of students' work with the level of achievement descriptors outlined in the syllabus.

A verification submission contains:

- folios of student work
- a copy of the school's approved work programme
- the set of summative assessment instruments implemented to date
- any other documents that support the school's proposal

Review panels consider the information supplied. Their role is to decide whether the distribution of levels of achievement proposed by the school is appropriate or not. If they agree with the levels proposed, the school's proposals can be confirmed. If the panel does not confirm the school's proposals, then the school has to respond. The process of reaching agreement can be prolonged. The timescales are tight, however, and there is a degree of pressure to reach a conclusion so that certification can proceed.

Credentialling

QSA has developed a process by which it ensures that the teachers who undertake external moderation duties have the right experience, skills and aptitudes. This process is called credentialling. Credentialling benefits:

- QSA, in helping to update and develop the skills of the external moderators
- QSA, in demonstrating clearly to customers the competence of its external moderators
- individual external moderators, in recognising their skills and competence

In credentialling, those who carry out a moderation function are appointed provisionally and are only confirmed when they have undertaken sufficient training and participated in a number of particular moderation activities. At that point they cease to be provisional and are credentialled. To gain their credentials, provisional moderators need to demonstrate that they have:

- participated in review panel training
- written, or been involved in writing, an approved work programme
- provided high-quality advice to the Review Panel about work programmes
- provided high-quality advice to the Review Panel about standards
- kept to moderation timelines
- attended Review Panel meetings regularly and punctually
- respected the confidential nature of review panel discussions and decisions

It is interesting to note that the behaviours required relate to more than technical competence in a subject area. This is important, as the individuals concerned will be required to represent the organisation to its customers, and therefore need to possess interpersonal skills as well as technical expertise.

An individual's credentials remain current for the term of appointment, but they can be withdrawn if an individual is not able to maintain the conditions of the credential. The system of credentialling seems worthwhile, but will require input from individual teachers, their managers and QSA, and will therefore require resourcing and support to maintain.

2.6 External assessment

The QCS Test

The QCS Test is the common test offered state-wide to Year 12 students regardless of their study patterns. It is set, assessed and marked by the QSA, and was developed to complement Queensland's system of school-based assessment. It contributes information to the Tertiary Entrance Statement, which is compulsory for those students going on to further learning at college or university, and optional for other students. It is offered once a year over two days in early September — that is, towards the end of the third term.

The QCS Test assumes that those who take it possess basic levels of general knowledge and vocabulary and knowledge of mathematical operations at the level of Year 10. It does not examine particular knowledge of individual subjects; instead it is designed to test the 49 common elements — the Common Curriculum Elements (CCEs) — that are the 'threads of the Queensland senior curriculum'.⁵

It comprises four papers as follows:

• Writing task: this is an extended piece of writing of 600 words. It is marked by trained and registered markers using defined criteria. Each response is marked at least three times by different markers working independently. There is a process for monitoring marker consistency.

⁵ Taken from the QSA website.

- Short response paper: this comprises short responses to questions, diagrams and calculations. These are marked by trained and registered markers who are given detailed instructions and a specific marking scheme for each test item. Each response is marked at least twice by different markers working independently. If the markers disagree a referee marking is carried out. There is a process for monitoring marker consistency.
- Multiple choice papers (two): these are marked electronically.

The markers are recruited from advertisements on the website and in the press. The QSA looks for markers who can demonstrate an 'understanding of assessment based on criteria and standards'.⁶

It is assumed that schools will be keen to ensure that their staff apply for positions as markers, both in terms of staff development and in terms of achieving a wider understanding of the requirements of the test. Information on the way that the test papers are developed was looked for but not found in the course of this project.

Preparation for the test

Candidates for the QCS Test are advised to take specific steps to prepare, and there is a range of material on the QSA website designed to help them. Amongst this is *All You Need to Know about the Queensland Core Skills Test*, which provides detailed information about the test and how to prepare for it, and includes a section entitled 'Becoming Test Wise'. (Appendix 4 gives an example of the information that the QSA website supplies.) There is also a retrospective section about previous QCS Tests, which provides feedback on previous performances and marking issues.

All of these measures, along with other support material on the QSA's website, give the impression that the QCS Test requires very specific preparation. The students who take it ought to be familiar with the range of assessments it offers — extended response, short answer and multiple choice — but it is clear from the support material that the test itself, with its 49 CCEs, presents separate and different preparation requirements. The sample questions in the supporting documentation also support this inference.

2.7 Summary

Internal assessment is generally seen as insufficient for those who go through it aiming to enter FE/HE/particular employment fields. There is, therefore, a need to develop an external test with demonstrable rigour. This test is not a repetition of subject assessment from school, but a more sophisticated synthesis of aspects of learning brought together into the 49 CCEs.

⁶ Taken from the QSA website.

It might be thought that this degree of externality would be sufficient to allow young Queenslanders to demonstrate their fitness to enter, for example, HE. Anecdotal evidence, however, tends to indicate that there might be a perception in Australia in general that those emerging from the Queensland internal assessment system will always be seen as less well qualified than those who have been through an external assessment system in other states.

3 The assessment system of Finland

3.1 Scope of the investigation

This investigation covers:

- internal assessment in comprehensive and upper secondary schools
- the Matriculation examination
- certification arrangements

Much of the information was derived from Finnish websites and publications which had sections in English. These tended to be broad in approach and did not always give a great amount of information or detail.

3.2 Current situation in Finland

The Finnish internal assessment system

The National Board of Education (NBE) is responsible for:

- developing, monitoring, supporting and evaluating primary and secondary education
- developing the national core curriculum including goals and assessment criteria for use in schools

The subjects of the core curriculums are shown in Appendix 5.

The schools decide, with their local authorities, how the core curriculum will be delivered and assessed, and they develop their own curriculum, within the national framework, taking account of the local context. Teachers have considerable respect and trust as a profession in Finland, and are free to choose their own teaching methods and learning materials. There is, therefore, a wide degree of responsibility given to teachers for the learning and assessment of students, and flexibility in exercising that responsibility. While there appears to be no need for schools to get approval from the NBE for their approach to delivery and assessment, it is possible that local authorities would want to be involved in such a process.

Schools

Compulsory education in Finland lasts for nine years, usually from age 7 to 16, and takes place in comprehensive schools of which there are about 3,700. The website of the NBE notes that the smallest schools have fewer than ten students, while the largest have over 900.

In the first six years of basic education, teaching is by the class teacher who is responsible for the learning in all or most of the subjects. However, by the last

three years of comprehensive education, separate subjects are usually taught by different subject teachers. This is also the case in the upper secondary schools.

Although compulsory education stops at age 16, the majority of young people move on at 16 to upper secondary schools — the NBE reports that approximately 92% of those who completed basic education in 2003 continued directly on to upper secondary school. However, there is a split at this stage into academic and vocational routes, with young people selecting either a general upper secondary or a vocational upper secondary education.

Students have to apply for entry to upper secondary education and the application procedure is operated through a national joint application system. The selection process in upper secondary general schools is based on a student's record, while in upper secondary vocational schools there are also other selection criteria such as work experience and possibly entrance and aptitude tests.

It should be noted that completing upper secondary education is thought of as the minimum requirement for entering into mainstream working life.

3.3 Internal assessment

Internal assessment in comprehensive schools

The literature indicates that students are assessed continuously by their teachers in both comprehensive and upper secondary schools. It is not clear what this means in practice, however, as this information was not accessible during the study.

In comprehensive schools, the student's progress is reported on at the end of the school year, and on at least one occasion before that. The report covers the student's:

- ♦ conduct
- ♦ schoolwork
- knowledge and skills
- progress in the different subjects

In the first seven years, the report can be either a written description of the student's progress, or a grade. After Year 7, the report must include a grade, but this can be accompanied by written comments.

The scale of grades goes from 4 to 10, where 4 denotes a fail, 5 passable, 6 and 7 satisfactory, 8 good, 9 very good and 10 excellent knowledge and skills.

The written report includes comment from individual subject teachers on the student's progress and information from the class teacher on issues such as conduct.

All students who successfully complete comprehensive school obtain a leaving certificate.

Internal assessment in upper secondary schools

In upper secondary schools, it is a requirement that students be given information about their schoolwork and progress on a 'sufficiently frequent basis'. The curriculum defines how this is to be done. The purpose of assessment is to give the students feedback on their achievement of the objectives of the course and on their overall progress in the subject concerned.

The student's knowledge and skills in each subject or subject group are assessed by a teacher or a group of teachers, and the final assessment is decided by the head teacher working with the student's teachers.

The scale of grades goes from 4 to 10, where 4 denotes a fail, 5 a pass, 6 fair, 7 satisfactory, 8 good, 9 very good and 10 excellent knowledge and skills.

Students who fail must be given an opportunity to take a 'separate examination' to complete a course. When a student has completed the required number of courses, a leaving certificate is awarded.

The use of the word examination here is an indicator of the form of internal assessment. At this stage, schools might be preparing students for the kind of assessment that they will meet in the Matriculation Examination.

3.4 Quality assurance

There is no separate schools inspectorate in Finland, but this does not mean that there is no evaluation of learning, teaching and assessment or the activities which support these. Education providers (the local authorities, as far as schools are concerned) are required by legislation to evaluate their schools and the education provided, and to participate in external evaluation. The evaluation system is predicated on the professionalism and expertise of teachers, and aims for continuous improvement in the quality of education and training.

Educational Evaluation Council

In addition to local evaluation, there is also a national element, in the form of the Educational Evaluation Council (EEC). The EEC is responsible for evaluating the national education system with respect to primary and secondary general education (as well as vocational education, vocational adult education and independent civic education). Its aims are to:

- gather and analyse information so as to provide a basis for national education policymaking and educational development
- gather and analyse information so as to provide a basis for local efforts and decision-making on educational development
- support students' learning, educators' work and schools' development

The EEC published *New Directions in Educational Evaluation in* 2004. This provides further information on the Council's purposes and role. It stresses the fact that the increasingly decentralised and devolved system of delivery and assessment in schools in Finland needs to be supported by an evaluation system that is external.

The document uses words such as transparency and accountability in its descriptions of its activities, and it is clear that wider issues such as increasing competition, coupled with the need for demonstrable externality, have had a part to play in raising the profile of external evaluation in Finland. Simply relying on the professionalism of the teachers, respected though they are in Finland, is no longer enough in a global education market.

The EEC's evaluation programme for the years 2004–07 is also included in *New Directions in Educational Evaluation*. The programme includes:

- educational evaluation (systems, situations and themes)
- evaluation of learning outcomes (basic education, upper secondary schools and vocational education)
- support for education providers in educational evaluation
- quality awards
- evaluation methods (training and developing a network)
- ♦ international co-operation
- paid services (projects and seminars)

When it was set up, the EEC said that it would publish its findings on evaluations but made it clear that schools would be neither identified nor ranked in reports. It would be up to individual schools and education providers to decide how they would publicise the findings of evaluations on themselves.

So far, there are only two abstracts of evaluations on the website in English. These do not identify the schools concerned, but they identify issues and themes across the provision. There are other reports in Finnish, along with a good deal of other information.

The evaluation process seems to be being increased and developed to provide a degree of externality to an otherwise internal system. In 2003 the EEC said it intended to pilot some of its operations, and it might be worth reviewing this side of the activity in Finland at a later date to identify:

- whether the evaluation process has supported internal assessment in schools
- the impact of evaluation on teachers, learning and assessment
- the impact on local authorities

3.5 External assessment

The Matriculation Examination

The external assessment at the end of upper secondary school is the Matriculation Examination. This national school-leaving examination is offered twice a year, in spring and autumn, to students in Year 12. The examination is administered by the Matriculation Examination Board, which also provides guidelines on the content of and arrangements for the examination. Students who pass the examination are eligible for tertiary education. However, it should be noted that while passing the examination gives students admission to polytechnics, those who want to go to university also need to pass the entrance examination for the university of their choice.

The purposes of the Matriculation Examination are to identify whether students have achieved the necessary knowledge and skills required by the curriculum for the upper secondary school, and whether they have reached an adequate level of maturity. Before candidates can sit the examination their head teachers are required to confirm that they fulfil the requirements laid down for participating in the examination.

The examination comprises at least four tests:

- a test in the candidate's mother tongue compulsory for all candidates
- three tests from the following four categories:
 - test in the second national language
 - test in a foreign language
 - test in mathematics
 - test in one of an array of other subjects

Candidates can take opt to take more than these four tests if they want to.

An extract from the Matriculation Examination Board website, showing the structure of the tests and the levels at which they are offered, is given in Appendix 6.

Marking

The Matriculation Examination Board organises the marking for all tests. The tests are initially marked in the candidates' schools and then are sent to the Board for centralised marking. There is detailed information about many of the Board's activities on its website but, as most of it is in Finnish, with only a brief summary

in English, further information about the administration and other arrangements for the examination is limited.

However, the paper by Kaftandjieva and Takala briefly touches on the marking process for English:

'The students' answers are marked first by their own teachers using the official general guidelines and the examination-specific guidelines provided by the English Teachers' Association⁷ after consultation with the Board members. Teachers enter their mark on the test papers and on a separate list. All this material is sent to the Board which uses the services of 30–35 experienced raters to mark the English papers centrally... Multiple choice items are handled by optical reading and the score is often weighted...'

It seems likely that this model will also obtain in other subjects.

It is not entirely clear how many markers the Matriculation Examination Board requires for the two diets a year, nor how it develops the test papers. The website for the Matriculation Examination notes only that the Board employs 'about 330 associate members' to assist in the work of preparing and assessing the tests. It is assumed that these associate members are assistant examiners and markers and that, therefore, there are also likely to be 'members' who are chief examiners and chief markers.

3.6 Arrangements for achieving certification

The Certificate

The Matriculation Examination Certificate is awarded when all the compulsory tests have been passed. The Certificate shows the compulsory and the optional tests passed, their levels and their grades. The grades and corresponding points are as follows:

⁷ Note that guidelines are available at both the general and the subject-specific level.

٠	laudatur	7
٠	eximia cum laude approbatur	6
٠	magna cum laude approbatur	5
٠	cum laude approbatur	4
٠	lubenter approbatur	3
٠	approbatur	2
٠	improbatur	0

It is not clear what purpose the points serve, unless it is to assist IT operations which might not recognise or deal with Latin terms easily.

4 Issues for consideration

4.1 Workload

Queensland

There is no doubt that internal assessment allows Queensland schools to align their teaching with assessment to ensure that assessment supports the learning process. However, to demonstrate that the system is robust, the QSA has had to develop a range of controls and checks, which seem to be demanding in terms of time and, indeed, on occasion might act to reduce flexibility.

It is clear that the process of gaining approval for work programmes requires considerable work on the part of the schools, the QSA and the panels convened by the QSA to review the work programmes.

The workload issues of internal assessment within schools have also to be borne in mind. The work programme defines how the assessment is to be carried out both formatively and summatively. As there is no external assessment for the students to undertake during their school career, all the assessment workload falls on the staff in the school (as well as the students of course).

The need to offer an external test when there has been internal assessment means that there will always be two systems in operation — one supporting internal assessment with external moderation at Years 11 and 12, and the other supporting the QCS Test. This will create workload issues for the QSA as well as the schools.

Candidates need to prepare for the QCS Test and will, therefore, need to have completed all internal school assessments by the time they start their preparations. This might lead to some time pressures at the end of the school year, what with the stress laid upon the need for specific preparation for the QCS Test in all the QSA's guidance material.

Finland

The kind of workload issues that could emerge in the Finnish system would be around the continuous internal assessment that takes place through nine years of compulsory education and three years of post-compulsory education. As with Queensland, it is difficult to estimate the workload involved in internal assessment or the demand that it makes on teachers. However, the system has been in place for many years and the literature reviewed as part of this project does not note internal assessment as causing workload or time problems. It appears that internal assessment and reporting annually on each student's progress are part of a Finnish teacher's job, and that the arrangements which are in place to make sure that they happen work effectively.

If the Matriculation Examination Board employs only 330 associate markers at each examination period, it would seem that releasing staff to fulfil these functions would not cause schools any great difficulties. However, time would

also have to be set aside in schools to allow teachers to undertake the first stage internal marking for the Matriculation Examination.

From the above it can be seen that both Queensland and Finland have found ways of dealing with any workload problems associated with internal assessment, and have developed systems that work for them.

4.2 Offering both internal and external assessments

Many of the issues associated with workload are implicit here as well.

What the study of the two systems has shown is that internal assessment on its own is not seen as rigorous enough by users. Even in Finland, where the school system is widely respected, and where it is held up to the rest of the world as an example of excellence, it is seen as necessary to set up a process of evaluation and to develop an external test at the end of schooling — and then even that test is not sufficient for entry to universities in Finland.

This means that flexibility in assessment is much more likely to be a matter of degree. The study revealed that even systems which are thought of as flexible are much less so when examined closely. This is particularly the case in Queensland, where there appears to be a considerable amount of intervention and control required to permit an internal assessment system to operate.

In running internal assessment with an external end assessment, care would need to be taken not to over-assess the students or overburden them with the external assessment process. It is difficult at this stage to identify which of the two approaches discussed above is less likely to result in overburdening.

- The Queensland system allows students to undertake a different kind of assessment, which means that their preparation might seem to be something different from the mainstream internal assessment in school. This could be seen as an advantage. However, that very difference might also be a cause of some stress to students because of the need to prepare for the examination in a very particular way.
- The Finnish system simply allows students to build on their learning at school, and this means that they can see a clear link between their learning and assessment at school and their external examination.

4.3 Demand/use

The QSA website records the following for 2005:

Number of students achieving a Senior Certificate in Year 12	39,712
Number of candidates for the QCS Test	31,951

Statistics Finland records the following for 2005:

Leaving certificates from comprehensive school	63,755
Students in upper secondary school education	118,111
Matriculation Examination	34,0588

4.4 Credibility with FE, HE and employers

As noted above, the school system in Finland has considerable credibility because of its success in developing young people. It is, however, interesting to note that the Matriculation Examination does not appear to provide enough information to assist universities to differentiate sufficiently between those who have achieved it, so aspiring undergraduates, having passed the Matriculation Examination in May, have to take a university entrance examination in July. This would appear to indicate that the examination lacks credibility in the eyes of Finnish universities at least.

There might also be other indicators that demonstrate concerns about the rigour of the internal system — the raised profile of the evaluation system being one of these. The enhanced external evaluation system would appear to indicate that there is a feeling that, even where there is internal confidence in the system, there is also a need to demonstrate, by some kind of external review, the rigour of the system to others.

4.5 Offering internal and external assessment systems in Scotland

Both Queensland and Finland agree that a system composed entirely of internal assessment needs to have some external form of exit assessment. This appears to be necessary to confirm that the internal assessment was not an easy option for the students. It would be essential in Scotland to ensure that any such external exit assessment was immediately credible with its end-users, without the need for any further assessment such as the university entrance examination required in Finland. Candidates having undergone an internally-assessed system must not be disadvantaged by a perception that it is less rigorous than other systems that are externally assessed.

If Scotland were to embark on internal assessment with a confirmatory external examination, the Finnish approach would certainly have the benefit of familiarity.

However, developing control systems for internal assessment (eg the Finnish evaluation, the QSA's programme approval) takes up resources. This would need to be factored in to any proposals to operate an internal assessment system in Scotland.

⁸ It is assumed that this figure denotes the numbers sitting rather than those gaining the qualification. However, this is not stated.

A detailed review of the resources required could only be undertaken by comparing like with like and comparing unit costs. This kind of detail is not available on public websites. It would be essential to undertake a detailed costing exercise, however, if National Courses were to be internally assessed.

Appendix 1: References

Queensland

Catalogue of Senior Syllabuses for Authority and Authority-Registered Subjects for 2006, Queensland Studies Authority, 2006

Moderation of Achievements in School-Based Assessment, Queensland Studies Authority

Moderation Processes for Senior Certification, Queensland Studies Authority, 2005

What about the QCS Test?, Queensland Studies Authority

Queensland Certificate of Education: Expect Success, Queensland Studies Authority, 2005

Queensland Certificate of Education: Policies and Procedures, Queensland Studies Authority, 2006

Finland

Description of the Education System: Finland

Education and Science in Finland, Finnish Ministry of Education, 2006 Finnish National Board of Education

Hautamäki, J, Arinen, P, Eronen, S, Hautamäki, A, Kupiainen, S, Lindblom, B, Niemivirta, M, Pakaslahti, L, Rantanen, P, Scheinin, P, Assessing Learning-to-Learn A Framework, Helsinki University and the National Board of Education in Finland, 2002

Kaftandjieva, F. and Takala, S, Relating the Finnish Matriculation Examination English Test Results to the CEF Scales, Helsinki Seminar, 2002

Kyrö, M. Vocational education and training in Finland: Short description, Cedefop Panorama series; 130, Luxembourg: Office for Official Publications of the European Communities, 2006

National Summary Sheets on Education Systems in Europe and Ongoing Reforms: Finland, European Commission, 2006

New Directions in Educational Evaluation: Evaluation Programme 2004–2007, Finnish Education Evaluation Council, 2004/05

Structures of Education, Initial Training, and Adult Education, Systems in Europe: Finland 1999, Eurydice European Unit, 1999

Välijärvi, J Concepts and Objectives of Education, Education standards and Educational Practice in Finland after the Educational Reform, EHSA, 2005

Appendix 2: Main outcomes of ETRF

- Better preparation for learning through consideration of a full-time preparatory year and a new approach to teaching and learning in the middle years of school.
- An increased range of choices for 15, 16 and 17 year olds to achieve a Senior Certificate or vocational qualifications.
- Individual plans, called Senior Education and Training Plans, will be developed in Year 10 to support transitions to senior school, training or work.
- Young people required to stay at school until they finish Year 10, or have turned 16, whichever comes first.
- Young people required to participate in education or training for a further two years, or until they have gained a Senior Certificate or a Certificate III vocational qualification, or until they have turned 17.
- Young people who have either completed Year 10 or turned 16 exempted from further learning if in full-time work.
- Better access to career and personal support for young people to assist them through the Senior Phase of Learning, including an additional 100 youth support workers across the state.
- Stronger Community Commitment to young people

Appendix 3: Subjects offered by the QSA — Years 11 and 12

Australian Aboriginal & Torres Strait	Home Economics
Islander Studies	Home Economics
Aboriginal & Torres Strait Islander	Hospitality Studies
Studies	
Agriculture	Industrial Technology
Agriculture	Aerospace Studies (2005 trial syllabus)
Agricultural Science	Engineering Technology Graphics
	Manufacturing Practices and Studies
	Technology Studies
The Arts	Mathematics
Dance	Philosophy & Reason
Drama	Mathematics A
Film, Television and New Media	Mathematics B
Music Music	Mathematics C
Music Extension Visual Art	Articulation: Years 1 to 10 Mathematics syllabus and Years 11 and 12 Mathematics
V Isual Alt	B and C syllabuses
Business Education	Languages (Other than English)
Accounting	Chinese
Business Communication & Technologies	French
Business Organisation & Management	French Extension
Legal Studies	German
Manufacturing Practices and Studies	German Extension
Tourism (2005 syllabus trial)	Indonesian
	Indonesian Extension
	Italian
	Japanese
	Korean
	Latin Madare Carala
	Modern Greek Polish
	Russian
	Spanish
	Vietnamese
Computer Studies	Religious and Ethical Studies
Information Technology Systems	Study of Religion
Information Processing & Technology	
English	Science
English	Biology
English Extension (Literature)	Chemistry
	Earth Science
	Marine Studies Multi-Strand Science
	Physics
	Science 21 trial syllabus
Health and Physical Education	Social Sciences
Health Education	Ancient History
Physical Education	Economics
-	Futures
	Geography
	Modern History
	Political Studies
	Study of Society

Appendix 4: Extract from What About the QCS Test?

What preparation is useful?

The common curriculum elements are generic skills that you work with across your subjects; therefore your preparation for the test goes on all the time and in every subject. However, you can also prepare for the test by becoming familiar with the common curriculum elements, how to recognise them, and how they might be assessed in the test. You could work on strategies that will help you to do your best in the curriculum elements you have difficulty with.

Refresh your knowledge of mathematical common curriculum elements by reviewing concepts such as percentage, ratio, angle, power of ten notation, and elementary algebraic procedures.

Read widely in the subjects you are studying and beyond.

Develop your skills of writing clearly, simply and economically, whatever your purpose.

Practise writing responses to past WT papers. Experiment with various forms or styles of writing to see which is your strongest.

Make sure you find out the meanings of the key terms used in the SR paper. The key terms help you understand what type of response to provide.

Learn to manage your time on tasks.

Appendix 5: Finnish curriculum

Comprehensive schools (to Year 9)

- mother tongue and literature
- the other national language
- foreign languages
- mathematics
- environmental studies
- biology and geography
- physics and chemistry
- health education
- religion/ethics
- history and social studies
- ♦ music
- visual arts
- ♦ craft
- physical education
- home economics
- optional subjects decided locally by schools

In addition the student must be provided with guidance counselling

Upper Secondary schools (Years 10–12)

- mother tongue and literature
- the other national language
- foreign languages
- studies in mathematics and natural sciences,
- studies in the humanities and social sciences,
- religion or ethics
- physical and health education
- arts and practical subjects

In addition, the syllabus includes specialisation and applied courses, the provisions of which are decided by schools. The students must also be provided with guidance counselling.

Appendix 6: The Finnish Matriculation Examination

The levels of the tests

The tests in mathematics, the second national language and the foreign languages are offered at two different levels of difficulty:

- in mathematics and in foreign languages the levels are the *advanced course* and the *basic course*
- in the second national language the levels are the *advanced course* and the *intermediate course*

The candidates choose which level of each of the above-mentioned subjects they want to take, regardless of their studies at the upper secondary school. Candidates must pass a test based on the advanced course in at least one compulsory test. They may take only one test in the same subject at the examination.

Descriptions of the tests

The mother tongue test is offered in Finnish, Swedish and Saami.

The Finnish and Swedish tests have two parts: a textual skills section and an essay.

In the textual skills test the candidate's analytical skills and linguistic expression are measured. The essay focuses on the candidate's general level of education, development of thinking, linguistic expression and coherency. The weighted sum of points determines the candidate's grade on the mother tongue test.

In the Saami language only an essay test is arranged.

A candidate whose mother tongue is not Finnish, Swedish or Saami can replace the mother tongue test with the Finnish or Swedish second national language test. These two tests include reading comprehension and written production sections.

The second national language tests and the foreign language tests include sections for listening and reading comprehension and sections demonstrating the candidate's skill in written production in the language in question.

The candidate may also take the mother tongue test in place of the second national language test for one of those two languages.

In the mathematics test the candidate must complete ten questions. The candidate is allowed to use calculators and books of tables that have been approved by the Board as aids. The general studies battery includes tests in Evangelical Lutheran religion, Orthodox religion, ethics, philosophy, psychology, history, social studies, physics, chemistry, biology, geography and health education. Furthermore, the tests incorporate questions which cross the boundaries of these disciplines. Depending on the test in question, the candidate answers six or eight test items.

Extract from the website of the Finnish Matriculation Examination.