

PRACTICAL APPLICATIONS OF MODERATION IN A REGIONAL QUALIFICATION

1. Introduction

Internal Assessment has been an integral part of national qualifications in varying degrees over the past twenty years. In more recent years there has been a growing trend for qualifications to include an even greater level of internal assessment to report on student achievement.

The reasons for the introduction of internal assessment vary but in many cases the main reason has been to report on student achievement for skills that cannot be assessed appropriately by an external examination. This has given the opportunity to report on a much wider range of abilities of the student. In many cases this has had a very positive effect on the motivation of the student where the student may have achieved in areas that had previously not been reported. Also this gives stakeholders more information to review the abilities of the student whether it be for further studies or employment.

It is widely accepted that it is essential that a rigorous moderation process be in place so the final grades are reliable. The question we need to ask is – “Are we over rigorous?” Many teachers over the years have questioned the need for statistical moderation of internal assessment and have regarded it as an affront to their professional judgements. Statistical moderation is seen by many as a comparison of apples and oranges and in a number of cases apples and elephants!

This call for such a rigorous moderation begs the questions. “Is it that we don’t trust teachers or believe that they are not competent to make their own judgements on their own students?” “Is it that teachers don’t trust the teachers in the school down the road?” Why do we have much more faith in the professional judgements of our doctor, lawyer or accountant? How about the used car salesman or the politician?

In more recent years, methods of moderation have been developed to bring the moderation process closer to the timing of the assessment and make it more related to the teacher’s judgement eg. Direct Moderation. However, whatever system is in place, the system must take into account the all important requirements:

Assessment must be fair, valid and consistent.

Before we consider moderation, we need to look at what it is that we are moderating ie. Internal Assessment.

2. Why Internal Assessment?

There are a large number of definitions and interpretations of internal assessment. The focus for this paper is internal assessment as a component of a national (or in our case a regional) qualification. However, this does not mean that this assessment is not part of the wider picture of **Assessment for Learning**.

For many, internal assessment has been seen solely as assessment of those skills that the external examination does not cover. It is now being accepted more and more that internal assessment allows for the opportunity for assessment to take place at the time of learning or more importantly to be integrated with the learning. This has led to internal assessment components for qualifications to include an even wider range of learning outcomes traditionally assessed by an external examination. There is no reason why this shouldn't be the case. Why do we wait until an exam in November to assess a skill that has been learnt/taught in February? I'd be surprised if memory is one of the required outcomes!

The separate assessing of the various outcomes for any subject allows for a greater range of methods of reporting and this is being done in more and more cases for national qualifications. The reporting of separate outcomes of national assessment gives students and other interested parties a greater range of information on student capabilities eg. in New Zealand with The National Certificate for Educational Assessment (NCEA).

These developments in assessment and reporting have led to:

- improved motivation of the student **and** teacher
- assessment being integrated into the learning process
- less focus on assessment and more on the learning process
- improved teaching/learning programmes
- students are given a far better opportunity to reach their potential.
- more detailed information on student achievement and abilities.

With this positive move towards more internal assessment, and the unfortunate perception that if it is not external assessed it is not credible, it is essential that the teacher based results are accepted as being reliable.

With this in mind, we must now consider:

How can we be sure that the results from the Internal Assessment components reflect fair and valid assessment and assessor judgments have been made consistently and at the required standard? How effective are the different moderation processes in ensuring this?

3. What is the South Pacific Board for Educational Assessment (SPBEA) doing?

SPBEA runs two regional qualifications for seven of its member countries, one at Form Six (Year 12) Pacific Senior Secondary Certificate (PSSC) and starting from 2004 one at Form Seven (Year 13) South Pacific Form Seven Certificate (SPFSC). In all but a few subjects Internal Assessment is used to assess appropriate outcomes.

Over the past few years SPBEA has increased the level of internal assessment and is working towards introducing the recording and reporting of separate outcomes within subjects. This will allow an even greater level of reportable information on student achievement available to students and other interested parties.

To ensure the reliability of the results, SPBEA has in place quality assurance processes which have been modified over the years as the qualifications have changed to suit the needs of the region.

See *Appendix I* for subjects and internal assessment components.

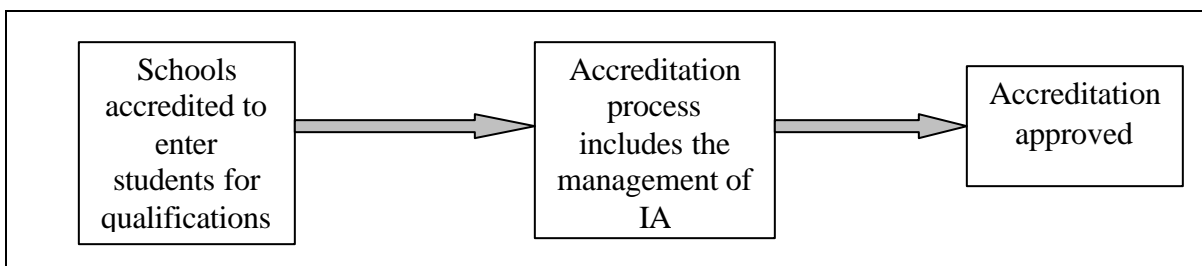
3.1 Quality Assurance and Moderation

3.1.1 Quality Assurance

The Quality Assurance process used by SPBEA is four tier:

- A. Accreditation of schools to enter qualifications
- B. Approval of subject assessment plans
- C. School IA verification visit
- D. Moderation of assessor judgements
 - Sample moderation by External Moderator
 - Common Assessment Tasks
 - Statistical Moderation.

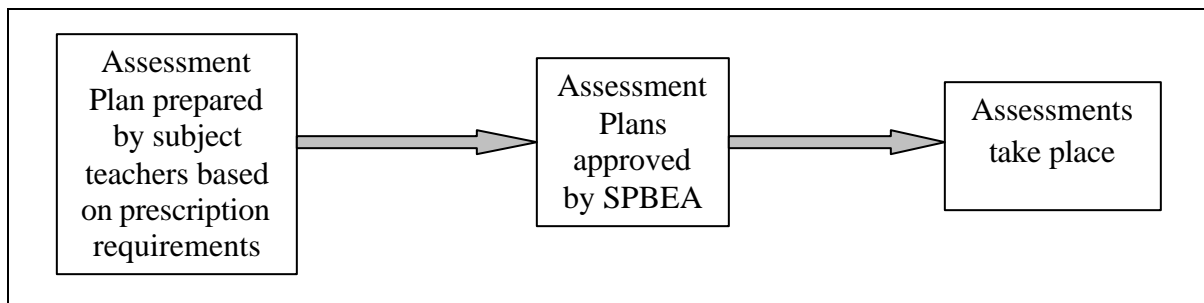
A. Accreditation of schools to enter qualifications



- Accreditation involves an evaluation of the capacity of a school to enter students for the Board's qualifications.

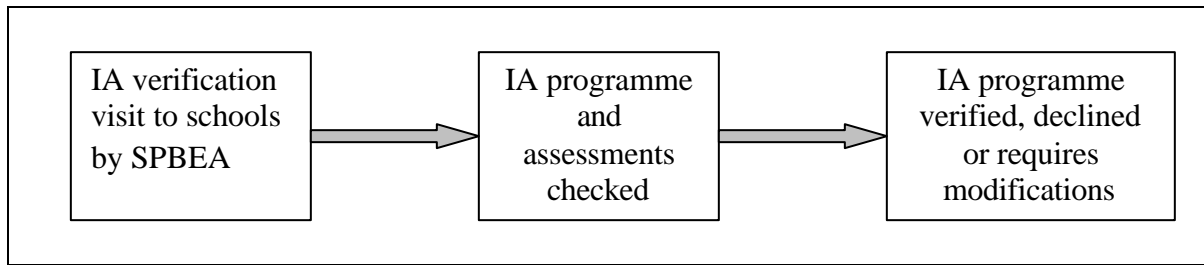
- The accreditation process is an opportunity for schools to improve their management and learning/teaching/assessment processes and SPBEA works closely with schools in achieving this aim. The accreditation process is not only regarded as a review of processes but as a way the school and SPBEA can work together to achieve efficient outcomes.
- Schools wishing to present candidates for the Board's qualification must satisfy their national education authority and SPBEA that they have the resources necessary to successfully provide the courses to be offered within the school.
- Schools will be required to maintain quality assurance systems to continue to carry out the Board's qualifications. These systems are checked by SPBEA from time to time as well as by an annual verification of the individual subjects internal assessment processes and assessor judgements.
- Schools are required to have a Quality Assurance Manual (QAM) which sets out school policies and procedures related to assessment.

B. Approval of subject assessment plans



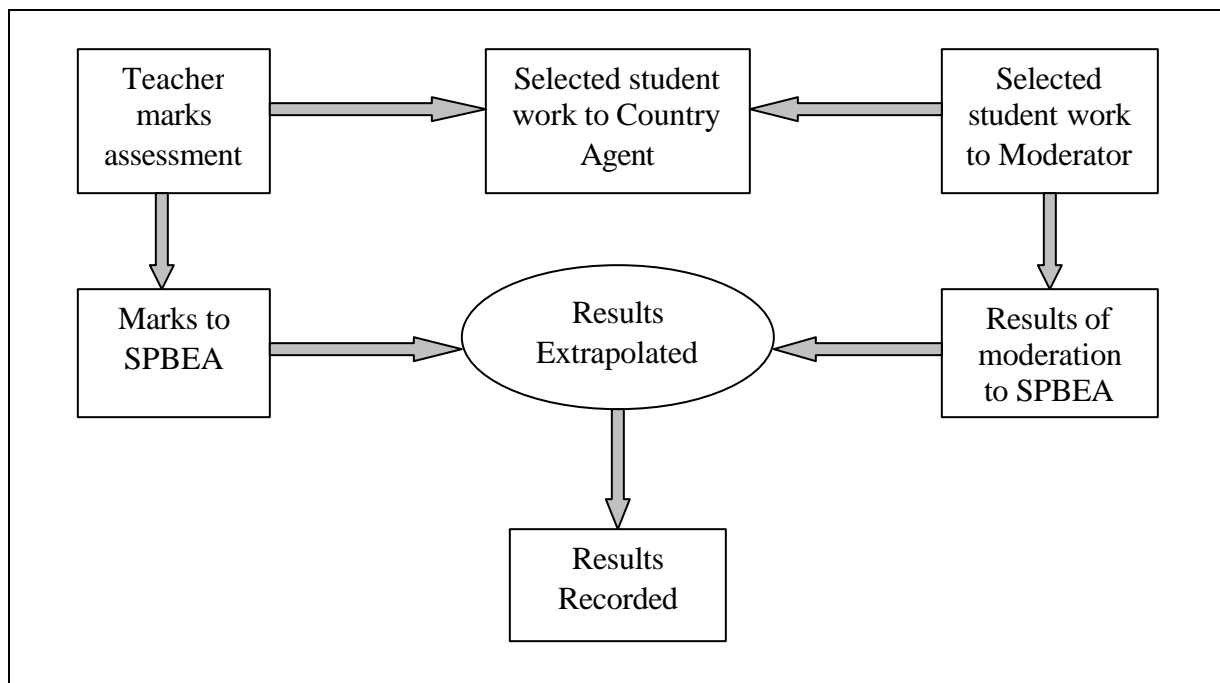
- Schools are required to submit assessment plans to SPBEA early in the year. These include the assessment programme and timelines, and assessment tasks and schedules.
- Teachers (especially new teachers) are assisted in this process with training sessions held for teachers in each country in early each year.

C. School IA verification visit



- SPBEA visits a selection of schools each year to verify that IA programmes are being followed and to assist teachers in the delivery of the learning programmes. This visit is also used to review the school's accreditation processes.
- If issues arise from the visit recommendations will be made for specific subjects and these issues will be followed up before Internal Assessment results will be verified.

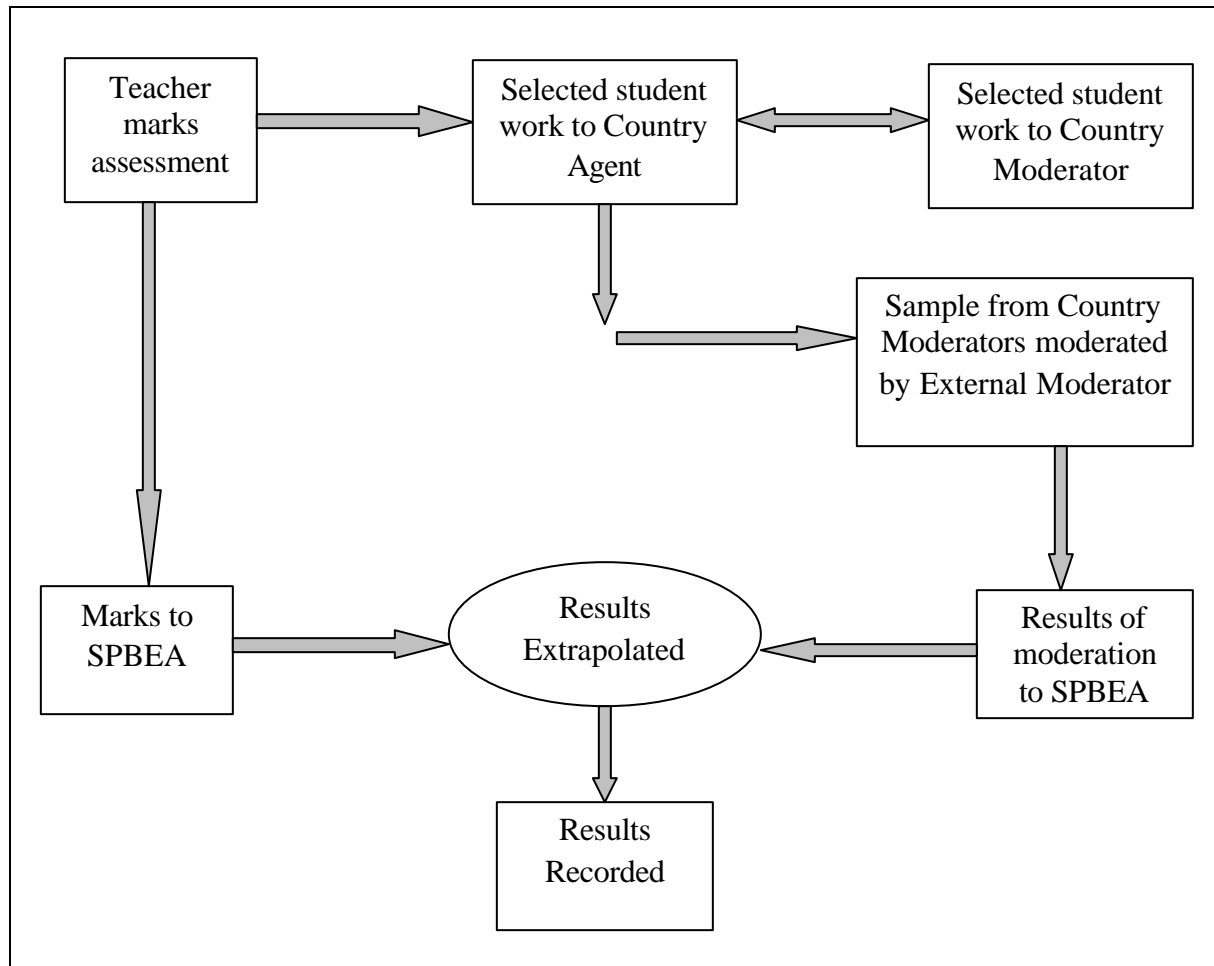
D. Moderation of assessor judgements - Sample moderation by External Moderator



- Samples of student work are sent from all schools in all subjects to an external moderator who is a subject expert. The mark sheets are sent to SPBEA independently by the schools and the marks are adjusted based on the results of the external moderation where necessary.

- The moderator's report and results of the moderation are sent to schools and these are seen as essential in the improvement of standards of not only assessment but also of the learning/teaching process.

In the past a *Country Moderator* has been used as an intermediary step in the moderation process. This has been the case in Accounting and Economic in 2003.



How necessary has this extra step in the process been? The benefit has been the spreading of experience of moderation to teachers across the region. The experience gained by teachers in being involved in the moderation process has always had a profound and positive effect on the teacher's classroom teaching and assessment. Results of moderation, however, have proven this step to be unnecessary and an additional unnecessary cost.

3.1.2 Moderation

SPBEA uses a variety of moderation processes including the use of Common Assessment Tasks (CATs), Direct Moderation, and Statistical Moderation and is moving towards a greater reliance on Direct Moderation. Statistical Moderation will be used for the introduction of SPFSC and other methods considered once the qualification is established.

The basic principles of moderation are followed:

Moderation must ensure that the assessment across schools and countries is fair, valid and reliable, and assessor judgements are made consistently and at the appropriate standard.

SPBEA also sees moderation as the opportunity to assist schools and teachers to improve assessment procedures which in turn will help in improving the learning/teaching process. The emphasis on assessment as part of the learning/teaching process is encouraged. Also, teachers in the region receive very limited in-service training opportunities and SPBEA see it as part of their role to give assistance and training where possible.

The main areas of this assistance is in the:

- approval of the Internal Assessment Programme
- Internal Assessment Verification visit to the schools
- analysis of the raw and moderated results for individual schools
- Moderator Reports and details of the results of moderation
- Monthly Updates and other information to schools.

4. The Moderation Results* - How Reliable is the Process?

What has been the effect of direct moderation on the reliability of the results of a regional senior secondary school qualification?

For this paper I have taken examples from the moderation of PSSC subjects for 2003 and included schools that I have visited during the year.

The subjects reviewed are:

Subject	Assessment	%	Moderation method
Accounting	Major Task	20	Direct moderation – Country Moderator
	Minor Tasks x 3	20	Statistically moderated against examination

Economics	Major Task	20	Direct moderation – Country Moderator
	Minor Tasks x 4	20	Statistically moderated against examination
Geography	Field Work Report	20	Direct moderation
	Other Tasks x 2	20	Statistically moderated against examination

* See Appendix for moderation results

Accounting

Country/External Moderation by Country (Appendix II)

This has generally indicated a close correlation between the Teacher Marks, Country Moderator Marks and External Moderation marks.

Notes:

- Country #5 (no Country Moderation due to size) which showed the teacher had generally been too severe in the higher mark range
- Countries #3 and 6 the Country Moderator had been too severe in some of the range with the External Moderator bringing the marks more into line with the regional standard.

Moderation by School (Appendix III)

This shows how the standards set by the schools relate to the regional standard. While some schools show a very close correlation it is perhaps not surprising to see that where there are discrepancies in the relationship teachers have been too lenient in their marking.

The results shown on the graphs for a number of these schools were borne out by a visit to the school. In the case of schools #A, C, E and F the schools had experienced teachers with good classroom programmes. In the case of school #D the class was taught by a very inexperienced teacher who had been brought into teaching from industry to “fill a gap”. In the case of school #B, the class was being taught by an unreliable teacher and the results very much reflected this.

This information, therefore allows SPBEA to assist schools and teachers identify where there are problem areas and to suggest strategies for improvement.

Economics

Country/External Moderation by Country (Appendix IV)

These results showed up a number of discrepancies between the teacher marked work and the moderated marks. Compared to the Accounting results, this could be due to the higher level of the subjective nature of the assessment tasks.

The results of the external moderation were successful in ensuring the regional standard was incorporated into the country's results.

Notes:

Interesting in the case of Country #5 (no Country moderation due to size) which showed the teacher had been too lenient – this was the same teacher who had been too severe in the marking of the Accounting students.

Moderation by School (Appendix V)

This shows how the standards set by the schools relate to the regional standard. Again it is not surprising to see that where there are discrepancies in the relationship, teachers have been too lenient in their marking.

Again the results of a number of these schools shown on the graphs were borne out by a visit to the school. Schools #A, B, F and G had experienced teachers with good classroom programmes. In the case of school #D - the class was taught by a very inexperienced teacher who needed considerable help. In the case of school #C, the class was being taught by a very over-confident young man – the results of the moderation will assist in bringing him into line!

Again, this information allows SPBEA to assist schools and teachers identify where there are problem areas and suggest strategies for improvement.

Geography

The moderation process for Geography only has the one step with material from all schools going to the external moderator.

Moderation by School (Appendix VI)

This shows clearly how the standards set by the schools relate to the regional standard. The close correlation indicated by the data may well

reflect the depth of experience of the teachers of the subject. In contrast to Geography teachers, many Accounting and Economic teachers are new to teaching and in a number of cases have no experience in teaching and no teacher training at all. The shortage of teachers in these areas is a concern for many countries in the region as the skills they have are seen as more marketable outside the teaching profession.

Where discrepancies in the marking have been identified assistance can be given to assist the teacher judgements made in future years.

Moderation of Schools across Subjects (Appendix VII)

By comparing moderation results for all subjects in a school it is possible to gain an indication of the level of efficiency and effectiveness of the school's quality assurance and management of assessment systems.

SPBEA's new Quality Assurance requirements, as part of the Accreditation processes, is for schools to develop and maintain policies and processes to manage assessment for the SPBEA's qualifications. It would be encouraged that these policies and processes extend over all assessment in the school.

One of the main issues SPBEA has had in the past is that some schools continue to see the regional qualifications as sitting outside the school's processes and therefore they have tended to place little importance on the internal assessment component of the qualifications. In fact there have been cases of schools not even bothering to send the results to SPBEA. Sadly in far too many cases this has had a major effect on student results.

What more schools need to recognise is that by using the data from the moderation process it is possible to identify sound practice and problem areas which will assist schools in developing more effective and efficient procedures in managing internal assessment.

Many schools in our region are calling out for help to assist them in the development of sound assessment procedures. To assist schools it is essential to ensure that moderated results (along with moderation reports) are sent back to schools in a non-threatening manner which means teachers are able to use the information to make improvements to teaching and assessing.

The outcome of these changes and improvement will have a major effect on classroom/teaching/learning/assessment procedures and therefore on the quality of education students receive.

Which is surely what it is all about!!

5. What does the Statistical Moderation tell us? (Appendix VIII)

The statistical moderation of the “other tasks” for Accounting, Economics, Geography and English shows a decrease in all the teacher marked results for all schools. How realistic is this?

I'd like to suggest that statistical moderation tells us nothing that we don't already know – in general statistical moderation results bear little resemblance to the internal assessment results except in those case where the skills being assessed are similar.

In English the correlation between the teacher marked work and the scaled mark is much closer because of the similar nature of the assessment tasks – in this case writing skills. This is apples and oranges stuff, for the other subjects the comparison is much more towards the apples and elephants variety!

This, however, is not to say that teachers have not been assessing to the required standard and that it is not necessary that marks need to be brought into line to make the system rigorous. However, in terms of the regional standard for the subjects I would recommend that a more realistic base for the statistical moderation would be to use the externally moderated project marks.

This is the direction SPBEA is heading.

6. The Future?

In conclusion, what do our moderated results show? Can we have confidence in our moderated results?

We believe so.

Can we get to the stage where moderation is not necessary and the results of internal assessment can be regarded as totally reliable?

Probably not, but it is a concept which we should not give up on.

The problems with the reliability of assessment results include the fact that teachers (and Assessment Officers!) do not necessarily trust teachers and there continues to be a perception that teachers will favour their own students. Also, for a number of people, the attitude remains that unless the external examination features strongly, the assessment is unreliable and biased.

It is pleasing to note that people's attitudes are changing and that there is an ever-increasing acceptance of internal assessment and the reporting of a wider range of outcomes that focus on student learning.

Stakeholders including teachers and parents are now much more accepting of the broader aspects of assessment even though ranking and external examination results continue to remain firmly entrenched. "It was like that in my day" attitude!

With a greater focus on internal assessment and on a wider range of learning outcomes, we want to move confidently towards more reliance on the teachers' professional judgements. This will in turn allow an increasing level of assessment to be integrated into the learning process. It is accepted that teachers do know best what their students can and cannot do, but it is essential that the standards of judgements made are consistent across all students in all schools and in our case across all countries of the region.

With this in mind, our quality assurance and moderation processes will continue to be reviewed and modified. It is essential we allow teachers to make judgements on their students achievements and that the processes in place will ensure reliability of the results without having an over-bearing effect on the learning/teaching process.

We will continue to use the quality assurance and moderation processes to identify problem areas and the results from the moderation will be used to assist schools and teachers to improve the education of their students in the region.

Appendix I

The tables below indicates the Internal Assessment programme and method of moderation for the PSSC and SPFSC subjects:

PSSC Subjects

Subject	Internal Assessment	% of Final Grade	Moderation System
Accounting	Major Task	20	Direct (Country and External)
	TDT	20	Statistical
Agriculture	Investigations and research	30	Direct
	TDT	20	Statistical
Biology	Practical Report	20	Statistical
	Investigation	10	Direct
	TDT	10	Statistical
Chemistry	CAT	8	Statistical
	Investigation	16	Direct
	TDT	16	Statistical
Computer Studies	CATs	30	Direct
	TDT	40	Statistical
Design Technology	Directed	20	Statistical
	Independent Project	30	Visit
	Evaluative	20	Statistical
Development Studies	Research	20	Direct
	TDT	20	Statistical
Economics	Major Task	20	Direct (Country and External)
	Major Task	20	Statistical
English	CAT	10	Direct
	TDT	40	Statistical
Fine Arts	Portfolio	100	Externally assessed
French	Speaking Tasks	30	Statistical
	Listening Tasks	10	Statistical
	Research Project	10	Statistical
Gagana Samoan	Research Project	20	Direct
	TDT	20	Statistical
Geography	Fieldwork	20	Direct
	Research	14	Statistical
	TDT	6	Statistical
History	Major Task	20	Direct
	TDT	20	Statistical

Japanese	Speaking Tasks	30	Statistical
	Listening Tasks	10	Statistical
	Research Project	10	Statistical
Mathematics	CAT	20	Direct
	Project	20	Direct
Physics	TDT	20	Statistical
Tala 'O Tonga	Research Project	20	Direct
	TDT	20	Statistical

- CAT = Common Assessment Task (Teacher marked)
- TDT = Teacher Designed Tasks = Other internal assessment tasks

SPFSC Subjects (All statistically moderated 2004)

Subject	Internal Assessment	% of Final Grade
Accounting	N/A	
Biology	Plant or Animal Investigation	15
	Contemporary Biological Study	5
Chemistry	Extended Practical Investigation	15
	Practical Skills	10
Economics	Investigation	10
	Issue's Study	10
English	Oral presentation	8
	Research Report	12
French	Speaking Skills	25
	Research Project	24
Geography	Analysis of a Global Study	6
	Field Work Research Activity	10
	Major Research Study	20
History	Minor Research Studies x 2	20
	N/A	
Mathematics with Calculus	N/A	
Mathematics with Statistics	Investigation	20
Physics	Practical Investigation	15
	Research Project	5