# Assessing School-based Material and Non-written Work 

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## 1. Introduction

This paper aims to discuss the assessment of non-written and school-based examination components within the Maltese MATSEC system of examinations. The types of nonwritten work discussed will include oral examinations, practical examinations, projects or school-based work.

## 2. Background

In Malta, education is compulsory from age five to age sixteen. At the end of compulsory education, pupils sit for the Secondary Education Certificate (SEC) examinations offered by the Matriculation and Secondary Education Certificate Examinations Board (MATSEC) of the University of Malta.

In the SEC examinations, candidates sit for two papers of two hours' duration. Paper I is the core paper. There are two versions of Paper II: Paper IIA, which consists of questions that are more demanding than those of the core paper; and Paper IIB which is less demanding than Paper I. Candidates must indicate their choice of Paper II when they register for the examination (MATSEC, 2003). Candidates opting for Papers I and IIA may be awarded Grades 1, 2, 3, 4 or 5 or remain unclassified (Grade U). Candidates sitting for Papers I and IIB may be awarded Grades $4,5,6,7$ or U. Grade 1 is the highest grade, while Grade 5 is the lowest grade that is accepted for access into post-secondary courses leading to university. Grades 6 and 7 indicate a lower level of attainment and are accepted by certain institutions and employers.

Entry to post-secondary institutions is based on a minimum of six passes at SEC level including mathematics, English language, Maltese and a science subject. Sixth-form colleges offer a two-year course leading to the Matriculation Certificate examinations. This certificate is an entrance requirement to university. Students have to choose two subjects at Advanced level and three subjects at Intermediate level and the compulsory Systems of Knowledge, also at Intermediate level. A subject at Intermediate level is considered to be equivalent to one third of a subject at Advanced level. At the end of the two-year course, students sit for the Matriculation Certificate examinations offered by the MATSEC Board. At Advanced and Intermediate levels, candidates may be awarded grades A to F with grade F denoting a failure.

## 3. The Current Provision

Currently, the MATSEC Board offers 32 subjects at SEC level. Twelve of these subjects include a coursework component. Table 1 gives the list of SEC subjects with a coursework component, and the percentage mark assigned to the coursework out of the total mark for the examination together with a brief description of the work expected. Eight other subjects at SEC level include an oral/aural component. Table 2 gives a list of the subjects with an oral/aural component, and the percentage mark carried by this component together with a brief description of the component. Physical Education is the only subject at SEC level which involves a practical examination.

Table 1: The coursework requirements in SEC subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Art | $15 \%$ | Wide range of practices, interests and use of <br> different media. Includes final project. |
| Biology | $15 \%$ | Laboratory reports; mark based on the average <br> mark of the best 15 experiments including <br> problem-solving investigations. |
| Business Studies | $15 \%$ | Project (1000-2000 words) relating business <br> studies to the real world of business and the <br> community. |
| Chemistry | $15 \%$ | Laboratory reports; mark based on the average <br> mark of the best 15 experiments. |
| Computer Studies | $15 \%$ | Exercises: spreadsheets, programming <br> exercises, system analysis, databases. |
| European Studies | $15 \%$ | Project related to one of the five main areas of <br> study in the syllabus (around 1500 words). |
| Environmental Studies | $15 \%$ | Project on any aspect of syllabus. Report of <br> 1500-2000 words. <br> Fieldwork Report (1500-2000 words). <br> Geography $10 \%$ |
| Home Economics | $40 \%$ | Portfolio; investigation and two practical <br> assignments carried out under time-controlled <br> conditions. |
| Physical Education | $15 \%$ | Portfolio showing three tasks: skills analysis <br> and improvement, scouting report, and <br> interview. |
| Physics | $15 \%$ | Laboratory reports; mark based on the average <br> mark of the best 15 experiments. |
| Textiles and Design | $40 \%$ | Prepared Practical Work; investigation and <br> portfolio (collection of samples and one <br> practical assignment carried out under time- <br> controlled conditions). |

Table 2: The oral/aural components in SEC subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Arabic | $25 \%$ | Listening Comprehension (10\%) <br> Reading and Conversation (15\%) |
| English | $25 \%$ | Listening Comprehension (15\%) <br> Picture Interpretation (5\%) <br> Conversation (5\%) |
| French | $15 \%$ | Reading (5\%) <br> Conversation (10\%) |
| German | $15 \%$ | Listening Comprehension (10\%) <br> Reading/Reading Comprehension (5\%) <br> Conversation (10\%) |
| Italian | $7.5 \%$ | Listening Comprehension (7.5\%) <br> Oral Examination (7.5\%) |
| Maltese | $15 \%$ | Oral/Reading/Conversation/Culture <br> Reading/Reading Comprehension (10\%) <br> Conversation (5\%) |
| Russian | $20 \%$ | Listening Comprehension (10\%) <br> Conversation (10\%) |
| Spanish |  |  |

The MATSEC Board offers 30 subjects at Advanced Matriculation (AM) level. Seven of these subjects include a coursework component. Table 3 gives a list of the subjects with a coursework component, and the percentage mark assigned to the coursework out of the total mark for the examination together with a brief description of the work expected. Seven AM level subjects involve an oral/aural component. Table 4 gives a list of subjects with an oral/aural component together with a brief description of the component. Five AM level subjects include a practical paper as part of the examination. Table 5 gives a list of subjects with a practical examination, the percentage mark carried by the paper and a brief description.

Table 3: The coursework requirements in AM subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Art | $28 \%$ | Project: composition from a theme developed <br> in three weeks (18\%) <br> Coursework: portfolio of work (10\%) |
| Biology | $3 \%$ | Practical workbook (not assessed by school) |
| Computing | $33 \%$ | Project: to demonstrate a range of practical <br> and programming skills |
| Geography | $28 \%$ | Short-term field reports (6\%) <br> Individual field-work report (22\%) |
| Home Economics | $40 \%$ | Portfolio (12\%) <br> Investigation (28\%) |
| Information <br> Technology | $20 \%$ | Four exercises: one spreadsheet, one database <br> and two programming assignments. |
| Music | $12 \%$ | Composition |

Table 4: The oral/aural components in AM subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Arabic | $20 \%$ | Listening comprehension with oral questions; <br> A three-minute talk in Arabic by candidate. |
| French | $20 \%$ | Dictation (7.5\%); <br> Oral examination: reading and dialogue <br> (12.5\%). |
| German | $10 \%$ | Conversation |
| Italian | $15 \%$ | Listening Comprehension; <br> Topic presentation; <br> Interactive conversation. |
| Music | $32 \%$ | Aural 20\%; <br> Oral questions to show knowledge related to <br> different periods etc. 12\%. |
| Russian | $12.5 \%$ | Picture interpretation; <br> Role-play. |
| Spanish | $10 \%$ | Conversation |

Table 5: The AM level subjects that include a practical paper

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Art | $18 \%$ | Work from observation. Duration: six hours. |
| Biology | $14 \%$ | Practical examination. Duration: 1.5 hours. |
| Chemistry | $20 \%$ | Practical examination. Duration three hours. |
| Music | $12 \%$ | Performance. Duration: 25 minutes. |
| Physics | $20 \%$ | Practical examination. Duration two hours. |

The MATSEC Board offers 31 subjects at Intermediate Matriculation (IM) level. Five of these subjects include a coursework component.

Table 6: The coursework component in IM level subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Art | $50 \%$ | Portfolio (25\%); <br> Project developed in three weeks (25\%). |
| Computing | $20 \%$ | Set assignments: Computer applications assignment <br> (10\%); Programming assignment (10\%). |
| Information Technology | $25 \%$ | Human Communications assignment; <br> Business Organisation assignment; <br> Spreadsheet assignment; <br> Database assignment. |
| Music | $8 \%$ | Composition |
| Systems of Knowledge <br> (compulsory subject, <br> intended to introduce <br> students to appreciation of <br> different forms of art, <br> literature and technology) | $50 \%$ | Aesthetic project (25\%); <br> Technological project (25\%). |

Table 6 gives a list of the subjects with a coursework component, and the percentage mark assigned to the coursework out of the marks for the examination together with a brief description of the work expected. Seven IM level subjects involve an oral/aural component. Table 7 gives a list of subjects with an oral/aural component together with a brief description of the component. Two IM level subjects include a practical paper as part of the examination. Table 8 gives a list of subjects with a practical examination, the percentage mark carried by the paper and a brief description.

Table 7: The oral/aural components in IM subjects

| Subject | Marks | Description |
| :--- | :--- | :--- |
| English | $10 \%$ | Reading; <br> discussion. |
| French | $20 \%$ | Reading; <br> dialogue. |
| German | $15 \%$ | Dialogue |
| Italian | $30 \%$ | Listening Comprehension; <br> Topic presentation; <br> Interactive conversation. |
| Maltese | $20 \%$ | Discussion about a topic. |
| Music | $20 \%$ | Oral/aural |
| Spanish | $10 \%$ | Conversation |

Table 8: The IM level subjects involving practical work

| Subject | Marks | Description |
| :--- | :--- | :--- |
| Art | $25 \%$ | Work from observation. Duration two hours. |
| Music | $8 \%$ | Performance. Duration 15 minutes. |

The summaries presented in Tables 1 to 8 show that at each level, and for each type of non-written assessment, there is a range of marks allotted for the components and there are also differences in skills and different time allocations to the various components.

## 4. School-based Assessment

School-based assessment was introduced to ensure that candidates are assessed on a wider range of skills than they would be by a written examination. This innovation encouraged schools to make sure that students are exposed to activities that include practical work to give due consideration to experiences from everyday life. These activities enable students to develop new skills and abilities such as problem-solving, data-gathering, data-analysis and application of knowledge rather than just simple recall. Furthermore, since the coursework component is spread over a long period of time, it can serve as an element of continuous assessment in the overall assessment of students.

## 5. Moderation

All forms of assessment, whether internal or external, are subject to human judgement which can vary from person to person and thus require some form of moderation.

Moderation of the coursework presented by the candidates was introduced to:
$\square$ optimise the reliability of the school-based assessment, and thus ensure fairness for individual candidates and schools;
$\square$ ensure that the work that is being presented by candidates is of the expected level;
$\square$ gather information which is useful for making recommendations for improved practice;
$\checkmark$ provide comparability within and among schools;
$\square$ maintain the quality of school-based assessment from year to year; and
$\square$ maintain the credibility, validity and acceptability of certificates issued.
It is desired that moderation ensures comparability of level of competence reached. Students from different schools who attain the same standard should obtain the same scores. This is not to suggest that two students who receive the same score have had the same learning experiences but that, on balance, they have reached the same level.

The purposes of moderation can be achieved when there are agreed criteria about the expected content and format of the coursework and when moderators gain experience of the expected standard by visiting several schools. Meetings with examiners, teachers and syllabus panels have suggested that further clarification is necessary.

Current practice attempts to monitor the quality of assessment, to ensure that it is fair and that procedures are adhered to, and to check on interpretations. Moderation is currently carried out only on one instance at the end of the course of study. It is limited to a very short period of time. There is no time to discuss with teachers the assessment procedures. There is no contact between moderators and teachers. Ideally the process should involve more collaboration between the moderators and the teachers and involve meetings in which they agree on criteria to be applied.

Currently, MATSEC uses moderation by inspection. This involves the inspection of a sample of the workbooks or projects presented by candidates in order to check that the tasks have been set and marked as required by the syllabus and that works of comparable standard have been awarded similar marks. The appointed markers act as moderators of the school-based assessment.

Chairpersons of the subjects that have a coursework component follow this procedure:
$\square$ The MATSEC Support Unit establishes the period during which moderation is to take place.
$\checkmark$ Schools are informed about this period, during which workbooks and projects are made available for moderation in the schools.
$\checkmark$ The mark sheets are collected from the MATSEC Co-ordinator.
$\checkmark$ The moderators meet together with the chairperson to review and agree on the criteria that will be used for moderation. These criteria may cover content, format, expected standard, and evidence that the work has been carried out by the candidates. During the meeting, coursework presented by private candidates may be marked to check that the criteria are interpreted uniformly by all the moderators.
$\square$ The schools to be visited are distributed among the moderators. Individual moderators usually visit the schools. Not more than two moderators visit the same school together. Schools may be visited every year or in alternate years.
$\square$ A sample of about $20 \%$ of the workbooks or projects are moderated. If a school is found to be awarding consistently high or low marks, the marks of the whole school are adjusted accordingly.
■ Candidates may be asked to attend an interview about their work, especially if there is serious doubt about the authenticity of the work.
$\square$ The Chairperson collects the marking sheets from the moderators and returns them to the MATSEC Co-ordinator by an agreed date.

Coursework presented by private candidates, i.e. candidates who are not engaged in fulltime education, is assessed by the MATSEC Examiners' Panel for the subject.

Once the moderation exercise is carried out, the process proceeds with other steps, including the moderators' report and feedback to the Schools:
$\square$ Moderators keep a record of their work, including details of the schools visited, marks changed and any general comments about the work presented and/or the marks awarded by the schools.
$\square$ The Chairperson collects the records kept by the moderators in order to compile a brief report which is eventually included with the full examiners' report of the examination session.
$\square$ Feedback to the schools is the responsibility of the MATSEC Support Unit. Any comments chairpersons and moderators wish to make about the type and quality of projects presented, the distribution of marks, the assessment procedure adopted by the schools, the methods of keeping projects, and comparisons among schools should be passed on to the Principal Subject Area Officer of the subject concerned for further action.

## 6. Improving the choice of coursework and assessment

The following practices are recommended in coursework:
$\square$ A variety of skills should be demonstrated. In Science subjects a variety of experiments should be presented. In Art a variety of skills in the use of different media should be demonstrated.
$\square$ The skills should not be limited to those that one may easily assess in a written paper.
$\square$ The level of work should not be trivial and should be suitable for the particular level.
$\square$ The work presented must be closely related to the subject and syllabus concerned. For example, a project submitted in Environmental Studies should be linked to an environmental issue.
$\square$ The work should be authentic, that is the students' own work.
$\square$ Students should be encouraged to make their own comments and reach their own conclusions.
$\square$ The coursework should be presented in good English (or Maltese where applicable).
$\square$ The coursework presented should be read and corrected carefully before being graded.
$\square$ Each component of the coursework submitted should include the date when the relevant work was done. For example, each of the 15 laboratory reports presented in Science subjects should contain the date showing when the experiment was done.

## 7. The School-based Assessment Raw Mark

In many subjects at SEC level, there is a school-based assessment (SBA) component that is incorporated within the final examination mark. The task set for SBA is different for different subjects, as indicated previously. Moreover, criteria for the presentation of work and correction by the school teacher vary from subject syllabus to subject syllabus.

In the case of the three science subjects (Chemistry, Biology and Physics), students are to present the best 15 practical reports from their last three years of Secondary School. The criteria present in the respective syllabi are very open and not so detailed.

For each of the aforementioned three subjects, considering the candidates opting for the A paper and the B paper separately, the population N , the mean (or average), the median, i.e. the central value of the distribution, the mode, i.e. the most common mark, the minimum and the maximum mark (thus indicating the range of marks), and the standard deviation (s. d.), that gives a measure of the spread of marks, are exposed in Table 9.

Table 9: Data for SEC Chemistry, Biology and Physics

| SBA Raw Mark |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Subject | Option | N | Mean | Median | Mode | Min | Max | S. d. |  |
| Chemistry | A | 554 | 13.63 | 14 | 14 | 0 | 15 | 1.53 |  |
|  | B | 347 | 12.21 | 13 | 14 | 0 | 15 | 3.18 |  |
|  | A | 696 | 13.25 | 14 | 14 | 0 | 15 | 2.44 |  |
|  | B | 550 | 11.01 | 12 | 14 | 0 | 15 | 3.97 |  |
| Physics | A | 1641 | 13.31 | 14 | 14 | 0 | 15 | 1.55 |  |
|  | B | 2449 | 12.45 | 13 | 13 | 0 | 15 | 2.19 |  |

It should be noted that when working out the mean, the median, the mode, the minimum and maximum marks, and the standard deviation, the values were computed after excluding all absentees, i.e. all those who did not present their SBA and did not attend the written papers.

The same set of data, presented for the A paper and the B paper candidates separately, is presented for a number of other subjects at SEC level in Tables 10 to 12 below.

SEC Home Economics and Computer Studies are being considered separately as the exercise assigned is somewhat different but the most important difference with respect to Chemistry, Biology and Physics is that the criteria for SBA are substantially more detailed. Although the mark assigned for the Home Economics SBA component is higher than 15 , for comparative reasons, the marks were proportionally reduced to a total of 15 .

Table 10: Data for SEC Home Economics and Computer Studies

| SBA Raw Mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject | Option | N | Mean | Median | Mode | Min | Max | S. d. |
| Home Economics | A | 247 | 10.35 | 11.5 | 12 | 0 | 15 | 3.71 |
|  | B | 308 | 8.52 | 9.5 | 13 | 0 | 15 | 4.54 |
|  | A | 925 | 11.99 | 12.5 | 13.5 | 0 | 15 | 2.63 |
|  | B | 872 | 9.48 | 10.5 | 13 | 0 | 15 | 4.17 |

Business Studies, European Studies and Environmental Studies are being considered as a separate group as the exercise assigned for SBA is very similar in these three cases, namely, a project of around 2000 words.

Table 11: Data for SEC Business Studies, European Studies and Environmental Studies

| SBA Raw Mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject | Option | N | Mean | Median | Mode | Min | Max | S. d. |
| Business Studies | A | 321 | 11.71 | 12 | 13 | 0 | 15 | 2.72 |
|  | B | 486 | 10.23 | 11 | 13 | 0 | 15 | 3.80 |
|  | A | 81 | 11.09 | 11 | 12 | 6 | 15 | 1.99 |
|  | B | 49 | 9.79 | 10.5 | 12 | 3 | 14 | 2.49 |
| Environmental | A | 785 | 11.78 | 12 | 14 | 0 | 15 | 2.91 |
|  | B | 1399 | 9.89 | 11 | 12 | 0 | 15 | 3.88 |

The SBA exercise for Art is different as the candidates have to present a portfolio of works that is marked by their class teacher.

Table 12: Data for SEC Art
SBA Raw Mark

| Subject | Option | $\mathbf{N}$ | Mean | Median | Mode | Min | Max | S. d. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Art | A | 361 | 11.38 | 12 | 12 | 0 | 15 | 2.71 |
|  | B | 390 | 9.93 | 10 | 11 | 0 | 15 | 2.73 |

As in all other SEC subjects, Physical Education has Paper I and Paper II (A or B). The common paper (Paper I) is actually a practical performance test where candidates are asked to choose three activities out of the possible four. There is also a choice within each of the four categories. Moreover, it is to be noted that candidates need to score at least $45 \%$ in each paper to get grades 1 to 5 .

Table 13: Data for SEC Physical Education

|  | Games | Athletics | Swimming | Gymnastics |
| :--- | :--- | :--- | :--- | :--- |
| Out of $\mathbf{6 0}$ | 262 | 125 | 163 |  |
| $\mathbf{N}$ | 296 | 262 | 29 | 46 |
| Absentees | 78 | 52 | 59.5 | 54 |
| Highest mark | 60 | 55 | 5 | 0 |
| Lowest mark (excl. abs.) | 3 | 6 | 32.3 | 25.9 |
| Mean (excl. abs.) | 32.3 | 29.4 | 29 | 22 |
| Mode (excl. abs.) | 37 | 25 |  |  |

## 8. The 'Real' Weight of the SEC SBA Mark

For each of the SEC subjects considered above, the 'real' weight of the SBA mark (namely, the SBA mark as a percentage of the total examination mark) with respect to the total final mark obtained by each candidate is considered. This 'real' weight was computed as follows:

$$
\text { 'real' weight }=\frac{\text { mark obtained for SBA }}{\text { total mark for whole examination }} \times 100 \%
$$

For each set of 'real' weights (for each subject considered, and considering candidates for option A and option B separately), the mean, the median, the minimum mark (min), the maximum mark ( $\max 1$ and max 2), and the standard deviation are being presented. The maximum mark indicated by max 1 is the maximum percentage if the whole population is considered. The value indicated by max 2 is more 'useful' and 'indicative' as it presents the maximum percentage if the candidates that obtained a pass are only considered, i.e. up to grade 5 in the case of option A candidates, and up to grade 7 for option B candidates.

The mode is not being presented in these cases. As values up to 2 decimal places were considered, in most cases the mode resulted to be 0.00 and therefore is not indicative of a central tendency.

Table 14: SBA as percentage of total mark for SEC Chemistry, Biology and Physics

| SBA as \% of total mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject |  | N | Mean | Median | Min | Max 1 | Max 2 | S. d. |
| Chemistry | A | 554 | 24.84 | 22.95 | 0.00 | 77.78 | 37.50 | 7.73 |
|  | B | 347 | 35.48 | 34.21 | 0.00 | 82.35 | 58.33 | 14.76 |
|  | A | 696 | 21.17 | 20.62 | 0.00 | 60.24 | 30.03 | 5.21 |
|  | B | 550 | 27.43 | 26.27 | 0.00 | 89.04 | 37.41 | 13.26 |
| Physics | A | 1641 | 20.62 | 19.50 | 0.00 | 70.18 | 31.15 | 5.13 |
|  | B | 2449 | 27.20 | 24.50 | 0.00 | 86.61 | 44.55 | 10.76 |

Values for the SBA mark as a percentage of the total mark were computed after exclusion of absentees and all $100 \%$ values (presentation of SBA work only).

Similar sets of results are presented for the other SEC subjects considered. They are being presented in the same order as they were grouped previously.

Table 15: SBA as percentage of total mark for SEC Home Economics and Computer Studies

| SBA as \% of total mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject |  | N | Mean | Median | Min | Max 1 | Max 2 | S. d. |
| Home Economics | A | 247 | 14.20 | 15.45 | 0.00 | 28.85 | 28.85 | 4.76 |
|  | B | 308 | 13.86 | 15.21 | 0.00 | 61.90 | 28.95 | 7.64 |
|  | A | 925 | 20.07 | 19.01 | 0.00 | 61.11 | 34.15 | 6.10 |
|  | B | 872 | 21.32 | 20.80 | 0.00 | 75.00 | 54.55 | 11.80 |

Table 16: SBA as percentage of total mark for SEC Business Studies, European Studies and Environmental Studies

| SBA as \% of total mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject |  | N | Mean | Median | Min | Max 1 | Max 2 | S. d. |
| Business Studies | A | 321 | 17.76 | 18.07 | 0.00 | 33.49 | 33.49 | 4.49 |
|  | B | 486 | 23.69 | 23.33 | 0.00 | 75.95 | 57.14 | 11.24 |
|  | A | 81 | 17.61 | 17.98 | 0.00 | 29.27 | 24.30 | 5.24 |
|  | B | 49 | 18.56 | 20.45 | 0.00 | 36.62 | 36.62 | 9.25 |
| Environmental Studies | A | 785 | 21.31 | 20.75 | 0.00 | 48.15 | 31.25 | 6.16 |
|  | B | 1399 | 22.72 | 22.64 | 0.00 | 72.73 | 45.90 | 10.49 |

Table 17: SBA as percentage of total mark for SEC Art

| SBA as \% of total mark |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Subject |  | N | Mean | Median | Min | Max 1 | Max 2 | S. d. |
| Art | A | 361 | 22.01 | 22.51 | 0.00 | 38.36 | 29.17 | 5.61 |
|  | B | 390 | 19.48 | 20.66 | 0.00 | 41.12 | 41.12 | 7.86 |

## 9. The SEC Subjects: The Plots

For each of the SEC subjects considered above, two sets of plots are being presented on the same set of axes. The grade ( 1 to 7 ) is plotted on the x -axis. The y -axis is the axis representing the mean raw SBA score and the mean SBA score as a percentage of the total examination mark respectively. As the option A and option B data are considered separately, in each set of plots we get two separate curves.


Figure 1: The SEC Chemistry plots

## SEC Biology



Figure 2: The SEC Biology plots


Figure 3: The SEC Physics plots

## SEC Home Economics



Figure 4: The SEC Home Economics plots


Figure 5: The SEC Computer Studies plots

SEC Business Studies


Figure 6: The SEC Business Studies plots


Figure 7: The SEC European Studies plots


Figure 8: The SEC Environmental Studies plots


Figure 9: The SEC Art plots
As the situation for SEC Physical Education is completely different and not easily comparable, the data in this case are presented differently. For each activity, the maximum, the minimum and the mean raw mark are being plotted.

## SEC Physical Education - Paper I (Practical)



Figure 10: The SEC Physical Education plots

## 10. IM: The Systems of Knowledge Examination

For the IM Systems of Knowledge examination candidates are to present two projects: an Aesthetic Project and a Technological Project. Each project has a weighting of 25 marks, resulting in a total of 50 marks for both projects. Apart from the two projects, a written paper is allotted another 50 marks. Candidates have to pass the written paper in order to get an overall pass.

In this case, the following data is presented in Table 18: the population ( N ), the maximum mark for the assigned school-based work (max mark), the mean, median and mode, the minimum and maximum marks ( $\min$ and max) to indicate the range, and the standard deviation (s. d.). Moreover, the 'real' weight is also considered in Table 19, which includes: N and max mark again as in the previous Table, the assigned weight in the examination expressed as a percentage, the minimum and maximum percentage 'real' weights (min and max), and the mean 'real' weight. In this latter Table, first the whole population of candidates is considered and, subsequently, only the 1894 candidates that obtained a pass mark, i.e. grades A to E, are taken into consideration.

Table 18: Data for IM Systems of Knowledge

| Subject | N | Max mark | Mean | Median | Mode | Min | Max | S. d. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| S of K | 2469 | 50 | 35.8 | 36 | 36 | 0 | 50 | 5.35 |

Table 19: SBA as a percentage of total mark for IM Systems of Knowledge

| Subject | N | Max mark | Assigned weight in exam | Min | Max | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| S of K | 2469 | 50 | $50 \%$ | $0.0 \%$ | $86.0 \%$ | $35.8 \%$ |
| S of K | 1894 | 50 | $50 \%$ | $33.7 \%$ | $67.1 \%$ | $56.4 \%$ |

Moderation for the Systems of Knowledge examination is carried out by two groups of moderators, one for each project. In each case, a sample of candidates from each is selected and interviewed individually by a board of moderators in the presence of the candidates' teachers. The interview is generally based on a set of established criteria and the same procedures as in other moderation exercises are applied to keep the desired standards.

## 11. AM: School-based Assessment and Practical Papers

In AM Chemistry, Biology and Physics a Practical Test is part of the actual examination. The maximum raw mark assigned and the assigned weight in the examination, in each case, are indicated in the Tables that follow. The same set of data as in the case of IM Systems of Knowledge is being presented below.

Table 20: Data for AM Chemistry, Biology and Physics

| Subject | $\mathbf{N}$ | Max mark | Mean | Median | Mode | Min | Max | S. d. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Chemistry | 371 | 100 | 52.04 | 53.30 | 56.50 | 9.5 | 90 | 16.90 |
| Biology | 504 | 50 | 31.10 | 32.00 | 34.00 | 8.5 | 45 | 20.80 |
| Physics | 477 | 20 | 16.60 | 17.00 | 15.00 | 1 | 20 | 2.93 |

In AM Computing, candidates are to present a project that is carried out and corrected by the school teacher.

Table 21: Data for AM Computing

| Subject | $\mathbf{N}$ | Max mark | Mean | Median | Mode | Min | Max | S. d. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Computing | 239 | 100 | 68.70 | 70.00 | 70.00 | 16 | 81 | 14.04 |

Tables 22 and 23 present the data relevant to the 'real' weight for the four AM subjects being considered.

Table 22: Practical exam as percentage of total mark for AM Chemistry, Biology and Physics

| Subject | $\mathbf{N}$ | Max mark | Assigned weight in exam | Min | Max | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Chemistry | 370 | 100 | $20 \%$ | $11.9 \%$ | $64.9 \%$ | $20.75 \%$ |
| Biology | 503 | 50 | $17 \%$ | $12.0 \%$ | $33.5 \%$ | $19.00 \%$ |
| Physics | 476 | 20 | $20 \%$ | $8.8 \%$ | $89.9 \%$ | $34.10 \%$ |

In the case of AM Biology, the assigned weight of $17 \%$ includes the actual practical exam and the assessment of the practical notebook that is prepared during the practicals of the two-year course at school (assigned a weight of 3\%).

Table 23: SBA as percentage of total mark for AM Computing

| Subject | $\mathbf{N}$ | Max mark | Assigned weight in exam | Min | Max | Mean |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Computing | 239 | 100 | $33.33 \%$ | $24.9 \%$ | $88.6 \%$ | $41.80 \%$ |

## 12. Some Conclusions regarding SBA and Practical Examinations

On considering the data exposed above, one can reach some conclusions:
$\square$ The marks of the SBA component are definitely on the high side. But it was noticed that the inclusion of coursework ensured that given skills are taught and practical experiences are actually included in the school programme.
$\square$ As the situation stands, SBA marks do not differentiate between candidates of different abilities, and selection/grading is solely on the merits of the written papers.
$\square$ It might be that marks are assigned for effort. A typical example might be the case of SEC Home Economics where the option B candidates actually 'fare' better in their SBA than their colleagues that opted for the A Paper.
$\square$ When comparing the SBA data for Computer Studies and Home Economics (which have detailed guidelines in their syllabi) with those for the three science subjects, the differences in average raw SBA mark are evident. Thus the utility of detailed guidelines. It may also help to improve the guidelines by specifying a range of types of experiments/areas/skills to be covered (as in Biology). This also procures improvement in quality.
Ø It is recommended that the practice of including examination questions based on practical experience is retained. Candidates will not be able to answer correctly unless they have actually had practical experience.
$\square$ When the 'real' weight of the SBA mark towards the actual final mark is considered, there were commonly cases where option A candidates obtaining a grade 5 had a 'real' contribution to the final mark from the SBA of up to $25 \%$. Taking SEC Chemistry as an extreme example, the average 'real' contribution for a grade 5 for option A candidates is $30.38 \%$, practically almost one-third, and $45.23 \%$ for a grade 7 with option B candidates, and therefore, in this case, almost half the total final mark.
$\square$ It can be seen that this is not the case at all with actual practical tests, as in SEC Physical Education.
$\checkmark$ Even if the IM and AM SBA or practical components are considered, it can be noted that the tendency is always for such components to enhance the final mark.

## 13. Assessing Oral Language Ability

The oral/aural component of the language examinations in Malta contains two constituent elements: (a) testing which occurs in a group (e.g. Listening Comprehension and Dictation) and (b) testing which occurs individually (e.g. Delivering a Short Speech and Role-play).

## 14. General Objectives in an Oral Test

The general objectives in an oral test at SEC level are:
$\square$ Candidates must show at least an ability to be independent listeners and speakers in the language examined - this applies to foreign language testing especially at SEC level (i.e. 16+).
$\square$ Candidates must show an ability to be proficient listeners and speakers in the language examined - this generally applies to Maltese and English at SEC level and all the languages at $I M$ and $A M$ levels.

An independent user of language is expected to be self-sufficient and autonomous in his/her use of language. A proficient user of language is expected to be polished and practised in addition to being self-sufficient and autonomous.

Table 24: The Status of Languages at MATSEC

| Language | Status |
| :--- | :--- |
| Maltese | Mother language - official language |
| English | Second language - official language |
| Italian | Foreign language - language of traditional culture |
| French | Foreign language |
| German | Foreign language |
| Spanish | Foreign language |
| Arabic | Foreign language |
| Russian | Foreign language |
| Latin | Classical language - not examined orally |
| Greek | Classical language - not examined orally |

## 15. Forms of Oral Testing

The different forms of oral examinations in the different languages include the following tasks:
$\square$ Candidate reads selected passage and talks with examiner about it.
$\square$ Candidate makes a short speech on a topic and answers impromptu questions.
■ Candidate talks to examiner about a picture.
$\square$ Candidate listens to a passage and answers questions on it.
$\square$ Candidate takes a role in a situation and enters a conversation with examiner.
These forms aim at producing interaction processes that assess:
$\square$ reception skills (which generally involve comprehension); and
$\boxtimes$ expression skills (which generally involve conveying meaning).

## 16. Quality Assurance

Setting an oral test is determined by a formal syllabus. A reviser inspects the material after the setters. Oral examiners are selected on the bases of their qualifications and experience in the language chosen.

As part of the quality assurance process, selected oral examiners have to attend and participate in standardisation meetings prior to the examining session. (As from this year they will be made to attend a training session together with the standardisation meetings.) There is however no moderation/monitoring during the oral test.

## 17. Comments and Problems

$\square$ Bilingualism: Despite Malta's official bilingual environment, the MATSEC system does not assess bilingualism. Bilingual features are generally considered deviant or viewed as deficiencies in all language examinations - this is a general unstated policy.
$\downarrow$ Accents/dialects: normally candidates are encouraged to use a standard variety of language; accents are not usually penalised unless they interfere with communication.
$\square$ Profile of oral skills: the present system gives one global grade that includes oral and written skills; there is however a proposal to separate the skills in the result and give a separate mark for each skill.
$\square$ A pertinent query regards the extent to which the oral test contributes to the final grade. This is addressed in the following sections.

## 18. The Contribution of the Oral Test to the Final Grade

Although no one questions the importance of the oral component of language examinations, the MATSEC Board felt that it should analyse the contribution of this component to the final grade in language examinations. Working on the results of May 2005 for the four largest SEC language examinations, statistics confirmed the impression that the oral component was on the whole enhancing the quality of the final grades. We need to begin by examining the data available and work out the resultant products after eliminating the oral components of the four major languages.

The columns marked "Paper I+IIA" show the number of candidates obtaining the respective grade: "with oral mark" is the actual result; "less oral mark" shows what the result would have been if the oral component had to be eliminated. The column titled "Difference $\%$ " reports the difference between the two percentages to calculate the effect of the oral mark.

Table 25: SEC Maltese option A candidates

| Grade | Paper I+IIA <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIA <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 63 | 2.54 | 39 | 1.57 | 0.97 |
| $\mathbf{2}$ | 349 | 14.05 | 287 | 11.55 | 2.50 |
| $\mathbf{3}$ | 398 | 16.02 | 317 | 12.76 | 3.26 |
| $\mathbf{4}$ | 917 | 36.92 | 902 | 36.31 | 0.60 |
| $\mathbf{5}$ | 506 | 20.37 | 625 | 25.16 | -4.79 |
| $\mathbf{U}$ | 230 | 9.26 | 281 | 11.31 | -2.05 |
| Absent | 21 | 0.85 | 33 | 1.33 | -0.48 |
| Total | 2484 | 100.00 | 2484 | 100.00 | 0.00 |

On interpreting Table 25, it can be deduced that without the oral component:
i. There would have been more absentees (i.e. $0.48 \%$ more absentees). It should be noted that a candidate who sits for the oral examination but absents him/herself from
the written part would still receive a Grade U and will not be categorised as absent. But when we eliminate the oral component (i.e. we consider only the written part of the examination), $\mathrm{s} /$ he will be classified as absent.
ii. There would have been more failures (i.e. $2.05 \%$ more Unclassified).
iii. More candidates (i.e. $4.79 \%$ more) would have obtained Grade 5.
iv. Less candidates (i.e. $0.60 \%$ less) would have obtained Grade 4.
v. Less candidates (i.e. $3.26 \%$ less) would have obtained Grade 3.
vi. Less candidates (i.e. $2.50 \%$ less) would have obtained Grade 2.
vii. Less candidates (i.e. $0.97 \%$ less) would have obtained Grade 1.

So the comparison shows that without the oral component there would have been:
$\boxtimes$ more failures (i.e. Unclassified);
$\square$ a situation in which Grades 1-4 categories would register less passes; and
$\square$ a situation in which Grade 5 category would register more passes.
The losses from Grades 1 to 4 appear to have been the gains of Grade 5 and U.
To put all this in a different way, the oral component in Maltese Paper I and IIA has contributed to $2.05 \%$ more passes and to more passes in Grades 1 to 4. Less candidates have obtained Grade 5 (the lowest grade in this paper) because of the oral test. The oral component boosts the grades. In Maltese (Paper I + IIA), the oral component was instrumental in producing more and better passes because without the oral component there would have been more failures and almost $5 \%$ more candidates who would have obtained Grade 5 which is the minimum grade obtainable in this paper.

Table 26: SEC Maltese option B candidates

| Grade | Paper I+IIB <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIB <br> (less oral mark) | \% | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4}$ | 88 | 3.29 | 68 | 2.54 | 0.75 |
| $\mathbf{5}$ | 267 | 9.99 | 202 | 7.56 | 2.43 |
| $\mathbf{6}$ | 376 | 14.07 | 317 | 11.86 | 2.21 |
| $\mathbf{7}$ | 357 | 13.36 | 323 | 12.08 | 1.27 |
| $\mathbf{U}$ | 1437 | 53.76 | 1556 | 58.21 | -4.45 |
| Absent | 148 | 5.54 | 207 | 7.74 | -2.21 |
| Total | 2673 | 100.00 | 2673 | 100.00 | 0.00 |

On considering the data in Table 26, it can be deduced that without the oral component:
i. There would have been more absentees (i.e. $2.21 \%$ more absentees).
ii. There would have been more failures (i.e. $4.45 \%$ more Unclassified).
iii. Less candidates (i.e. $1.27 \%$ less) would have obtained Grade 7.
iv. Less candidates (i.e. $2.21 \%$ less) would have obtained Grade 6.
v. Less candidates (i.e. $2.43 \%$ less) would have obtained Grade 5.
vi. Less candidates (i.e. $0.75 \%$ less) would have obtained Grade 4.

So the comparison shows that without the oral component there would have been:
$\square$ more failures (i.e. Unclassified); and
$\boxtimes$ a situation where Grade 4 to 7 categories all register less passes.

Most of the losses from Grades 4 to 7 appear to have been the gains of the $U$ category. The oral component in Maltese Paper I and IIB has contributed to $4.45 \%$ more passes and to more passes in Grades 4 to 7. The oral component boosts the grades. In Maltese (Paper I + IIB) the oral component was instrumental in producing more passes because without the oral component there would have been more failures and less candidates would have obtained a grade between Grade 4 and Grade 7.

Table 27: SEC English option A candidates

| Grade | Paper I+IIA <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIA <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 133 | 4.85 | 144 | 5.25 | -0.40 |
| $\mathbf{2}$ | 539 | 19.66 | 487 | 17.76 | 1.90 |
| $\mathbf{3}$ | 526 | 19.18 | 488 | 17.80 | 1.39 |
| $\mathbf{4}$ | 598 | 21.81 | 603 | 21.99 | -0.18 |
| $\mathbf{5}$ | 610 | 22.25 | 626 | 22.83 | -0.58 |
| $\mathbf{U}$ | 315 | 11.49 | 373 | 13.60 | -2.12 |
| Absent | 21 | 0.77 | 21 | 0.77 | 0.00 |
| Total | 2742 | 100.00 | 2742 | 100.00 | 0.00 |

On interpreting Table 27, it can be concluded that without the oral component:
i. There would be no difference in the number of absentees.
ii. There would have been more failures (i.e. $2.12 \%$ more Unclassified).
iii. More candidates (i.e. $0.58 \%$ more) would have obtained Grade 5 .
iv. More candidates (i.e. $0.18 \%$ more) would have obtained Grade 4.
v. Less candidates (i.e. $1.39 \%$ less) would have obtained Grade 3.
vi. Less candidates (i.e. $1.90 \%$ less) would have obtained Grade 2.
vii. More candidates (i.e. $0.40 \%$ more) would have obtained Grade 1.

So the comparison shows that without the oral component there would have been:
$\boxtimes$ more failures (i.e. Unclassified);
$\square$ an improvement of Grade 1 category;
$\square$ a situation in which Grade 2 and 3 categories would register less passes; and
$\square$ a situation in which Grade 4 and 5 categories would register slightly more passes
The losses from Grades 2 and 3 appear to have been the gains of Grades 1, 4, 5 and U . The oral component in English Paper I and IIA has contributed to $2.12 \%$ more passes and to more passes in Grades 2 and 3. Less candidates have obtained Grades 1, 4 and 5 because of the oral test. In English (Paper I + IIA) the oral component was instrumental in producing more passes. Only Grades 2 and 3 categories seem to have benefitted from the oral test because without the oral component there would have been more candidates obtaining Grades 1, 4 and 5 .

Considering Table 23, it can be noticed that without the oral component:
i. There would have been no change in the number of absentees.
ii. There would have been more failures (i.e. $2.75 \%$ more Unclassified).
iii. More candidates (i.e. $0.40 \%$ more) would have obtained Grade 7.
iv. Less candidates (i.e. $0.20 \%$ less) would have obtained Grade 6.
v. Less candidates (i.e. $1.61 \%$ less) would have obtained Grade 5.
vi. Less candidates (i.e. $1.35 \%$ less) would have obtained Grade 4.

Table 28: SEC English option B candidates

| Grade | Paper I+IIB <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIB <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4}$ | 229 | 6.57 | 182 | 5.22 | 1.35 |
| $\mathbf{5}$ | 771 | 22.11 | 715 | 20.50 | 1.61 |
| $\mathbf{6}$ | 654 | 18.76 | 647 | 18.55 | 0.20 |
| $\mathbf{7}$ | 533 | 15.29 | 547 | 15.69 | -0.40 |
| $\mathbf{U}$ | 1173 | 33.64 | 1269 | 36.39 | -2.75 |
| Absent | 127 | 3.64 | 127 | 3.64 | 0.00 |
| Total | 3487 | 100.00 | 3487 | 100.00 | 0.00 |

So the comparison shows that without the oral component there would have been
$\boxtimes$ more failures (i.e. Unclassified);
$\square$ a situation where Grade 4-6 categories all register less passes; and
$\square$ a situation where Grade 7 (the lowest grade obtainable in this paper) registers a slight increase.

Most of the losses from Grades 4 to 6 appear to have been the gains of the $U$ category and a very small percentage the gains of Grade 7 category. The oral component in English Paper I and IIB has contributed to $2.75 \%$ more passes and to more passes in Grades 4 to 6. The oral component boosts the grades. In English (Paper I + IIB) the oral component was instrumental in producing more passes. The oral test influenced positively Grades 4, 5 and 6 and negatively Grade 7.

Table 29: SEC Italian option A candidates

| Grade | Paper I+IIA <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIA <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 128 | 9.91 | 112 | 8.67 | 1.24 |
| $\mathbf{2}$ | 272 | 21.05 | 258 | 19.97 | 1.08 |
| $\mathbf{3}$ | 431 | 33.36 | 411 | 31.81 | 1.55 |
| $\mathbf{4}$ | 172 | 13.31 | 191 | 14.78 | -1.47 |
| $\mathbf{5}$ | 125 | 9.67 | 120 | 9.29 | 0.39 |
| $\mathbf{U}$ | 154 | 11.92 | 190 | 14.71 | -2.79 |
| Absent | 10 | 0.77 | 10 | 0.77 | 0.00 |
| Total | 1292 | 100.00 | 1292 | 100.00 | 0.00 |

On interpreting Table 29, it can be deduced that without the oral component:
i. There would have been no difference in the number of absentees.
ii. There would have been more failures (i.e. $2.79 \%$ more Unclassified).
iii. Less candidates (i.e. $0.39 \%$ less) would have obtained Grade 5.
iv. More candidates (i.e. $1.47 \%$ more) would have obtained Grade 4.
v. Less candidates (i.e. $1.55 \%$ less) would have obtained Grade 3.
vi. Less candidates (i.e. $1.08 \%$ less) would have obtained Grade 2.
vii. Less candidates (i.e. $1.24 \%$ less) would have obtained Grade 1.

So the comparison shows that without the oral component there would have been:
$\square$ more failures (i.e. Unclassified);
$\square$ an improvement of Grade 4 category; and
$\square$ a situation in which Grade 1, 2, 3, and 5 categories would register less passes.
Some losses from Grades 1, 2, 3 and 5 appear to have gone to Grade 4 and some to U. The oral component in Italian Paper I and IIA has contributed to $2.79 \%$ more passes and to more passes in Grades 1, 2, 3 and 5. Less candidates have obtained Grade 4 because of the oral test. The oral component boosts the grades here also. In Italian (Paper I + IIA) the oral component was instrumental in producing more and better passes because the oral test influenced positively Grades $1,2,3$ and 5 , and negatively Grade 4 only.

Table 30: SEC Italian option B candidates

| Grade | Paper I+IIB <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIB <br> (less oral mark) | \% | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4}$ | 336 | 20.55 | 309 | 18.90 | 1.65 |
| $\mathbf{5}$ | 284 | 17.37 | 248 | 15.17 | 2.20 |
| $\mathbf{6}$ | 270 | 16.51 | 284 | 17.37 | -0.86 |
| $\mathbf{7}$ | 255 | 15.60 | 246 | 15.05 | 0.55 |
| $\mathbf{U}$ | 431 | 26.36 | 487 | 29.79 | -3.43 |
| Absent | 59 | 3.61 | 61 | 3.73 | -0.12 |
| Total | 1635 | 100.00 | 1635 | 100.00 | 0.00 |

On analysing the data in Table 30, it can be concluded that without the oral component:
i. There would have been more absentees (i.e. $0.12 \%$ more absentees).
ii. There would have been more failures (i.e. $3.43 \%$ more Unclassified).
iii. Less candidates (i.e. $0.55 \%$ less) would have obtained Grade 7 .
iv. More candidates (i.e. $0.86 \%$ more) would have obtained Grade 6.
v. Less candidates (i.e. $2.20 \%$ less) would have obtained Grade 5.
vi. Less candidates (i.e. $1.65 \%$ less) would have obtained Grade 4.

So the comparison shows that without the oral component there would have been:
■ more failures (i.e. Unclassified);
a situation where Grade 4, 5, 7 categories all register less passes; and
$\square$ a situation where Grade 6 category registers more passes.
The losses from Grades 4, 5, 7 appear to have been the gains of Grade 6 and U categories. The oral component in Italian Paper I and IIB has contributed to $3.43 \%$ more passes and to more passes in Grades 4, 5 and 7. Less candidates have obtained Grade 6 because of the oral test. In Italian (Paper I + IIB) the oral component was instrumental in producing more passes and contributed to having more passes in Grades 4, 5 and 7; only Grade 6 was affected negatively because of the oral test.

On interpreting Table 31, it can be deduced that without the oral component:
i. There would have been no difference in the number of absentees.
ii. There would have been more failures (i.e. $0.45 \%$ more Unclassified).
iii. More candidates (i.e. $2.08 \%$ less) would have obtained Grade 5.
iv. More candidates (i.e. $0.36 \%$ more) would have obtained Grade 4.
v. Less candidates (i.e. $3.34 \%$ less) would have obtained Grade 3.
vi. More candidates (i.e. $0.81 \%$ more) would have obtained Grade 2.
vii. Less candidates (i.e. $0.36 \%$ less) would have obtained Grade 1.

Table 31: SEC French option A candidates

| Grade | Paper I+IIA <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIA <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 139 | 12.56 | 135 | 12.20 | 0.36 |
| $\mathbf{2}$ | 328 | 29.63 | 337 | 30.44 | -0.81 |
| $\mathbf{3}$ | 344 | 31.07 | 307 | 27.73 | 3.34 |
| $\mathbf{4}$ | 133 | 12.01 | 137 | 12.38 | -0.36 |
| $\mathbf{5}$ | 119 | 10.75 | 142 | 12.83 | -2.08 |
| $\mathbf{U}$ | 42 | 3.79 | 47 | 4.25 | -0.45 |
| Absent | 2 | 0.18 | 2 | 0.18 | 0.00 |
| Total | 1107 | 100.00 | 1107 | 100.00 | 0.00 |

So the comparison shows that without the oral component there would have been:
■ more failures (i.e. Unclassified);
$\square$ an improvement of Grade 2, 4 and 5 categories; and
$\square$ a situation in which Grade 1 and 3 categories would register less passes.
Losses from Grades 1 and 3 appear to have gone to Grades 2, 4 and 5. The oral component in French Paper I and IIA has contributed to $0.45 \%$ more passes and to more passes in Grades 1 and 3. Less candidates have obtained Grades 2, 4 and 5 because of the oral test. In French (Paper I + IIA) the oral component registered a slight increase in the number of passes. Grade 1 and 3 categories benefitted from the oral test but Grade 2, 4 and 5 categories decreased their number of passes because of the oral test.

Table 32: SEC French option B candidates

| Grade | Paper I+IIB <br> (with oral mark) | $\mathbf{\%}$ | Paper I+IIB <br> (less oral mark) | $\mathbf{\%}$ | Difference \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{4}$ | 201 | 17.76 | 232 | 20.49 | -2.74 |
| $\mathbf{5}$ | 355 | 31.36 | 306 | 27.03 | 4.33 |
| $\mathbf{6}$ | 260 | 22.97 | 254 | 22.44 | 0.53 |
| $\mathbf{7}$ | 125 | 11.04 | 146 | 12.90 | -1.86 |
| $\mathbf{U}$ | 157 | 13.87 | 153 | 13.52 | 0.35 |
| Absent | 34 | 3.00 | 41 | 3.62 | -0.62 |
| Total | 1132 | 100.00 | 1132 | 100.00 | 0.00 |

On analysing the data in Table 32, it can be concluded that without the oral component: i. There would have been more absentees (i.e. $0.62 \%$ more absentees).
ii. There would have been less failures (i.e. $0.35 \%$ less Unclassified).
iii. More candidates (i.e. $1.86 \%$ more) would have obtained Grade 7.
iv. Less candidates (i.e. $0.53 \%$ less) would have obtained Grade 6.
v. Less candidates (i.e. $4.33 \%$ less) would have obtained Grade 5.
vi. More candidates (i.e. $2.74 \%$ less) would have obtained Grade 4.

So the comparison shows that without the oral component there would have been:
$\square$ less failures (i.e. Unclassified);
$\square$ a situation where Grade 4 and 7 categories would register more passes; and
$\square$ a situation where Grade 5 and 6 categories would register less passes.
The losses from Grades 5, 6 and $U$ appear to have been the gains of Grade 4 and 7 categories. The oral component in French Paper I and IIB has contributed to $0.62 \%$ less passes and to more passes in Grades 5 and 6. Less candidates have obtained Grade 4 and 7 because of the oral test. In French (Paper I + IIB) the oral component registered a slight decrease in the number of passes. But there were more passes in Grades 5 and 6 and less passes in Grades 4 and 7 because of the oral test.

## 19. Failures

We move now to analyse this data in parts and compare the four languages to derive general conclusions. It seems quite evident (see Tables 33 and 34) that the oral component is responsible for more passes. The differences in the above Tables (23-30) show the following:

Table 33: Without the oral component the number of failures per paper would be:

| Subject | Paper I + IIA | Paper I + IIB |
| :--- | :--- | :--- |
| Maltese | $0.48 \%$ more | $2.21 \%$ more |
| English | $2.12 \%$ more | $2.75 \%$ more |
| Italian | $2.79 \%$ more | $3.43 \%$ more |
| French | $0.45 \%$ more | $0.35 \%$ less |

If the total number of candidates per language is taken the figures for the Unclassified categories would show the following:

Table 34: Total number of failures with/out oral component per language

| Language + Total <br> Population <br> (PI+PIIA+PIIB) | U Candidates <br> PI+PIIA+PIIB <br> (with oral mark) | U Candidates <br> PI+PIIA+PIIB <br> (without oral mark) | Difference: without <br> oral component <br> there would be |
| :--- | :--- | :--- | :--- |
| Maltese (5157) | $1667(32.32 \%)$ | $1837(36.62 \%)$ | $4.30 \%$ more U |$|$| English (6229) | $1488(23.89 \%)$ | $1642(26.36 \%)$ | $2.47 \%$ more U |
| :--- | :--- | :--- | :--- |
| Italian (2927) | $585(19.99 \%)$ | $677(23.13 \%)$ | $3.14 \%$ more U |
| French (2239) | $199(8.89 \%)$ | $200(8.93 \%)$ | $0.04 \%$ more U |

Without the oral component all languages would register more failures. Table 34 shows that:
$\square$ in Maltese the oral component has contributed to $4.30 \%$ more passes;
$\square$ in English the oral component has contributed to $2.47 \%$ more passes;
$\square$ in Italian the oral component has contributed to $3.14 \%$ more passes; and
$\square$ in French the oral component has contributed to $0.04 \%$ more passes (although the difference is very small it still proves the point in question).

In all the languages under investigation the oral component has contributed to more passes. We turn now to the question: is the oral component contributing to better quality passes?

## 20. Grade 7

Results for the bottom-most grade, namely 7, are reported in Table 35.
Table 35: Grade 7 (\% calculated on Paper I + IIB, because only IIB assesses Grade 7)

| Language + <br> Population <br> (PI+PIIB) | Grade 7 Candidates <br> PI+PIIB <br> (with oral mark) | Grade 7 Candidates <br> PI+PIIB <br> (without oral mark) | Difference: without <br> oral component <br> there would be |
| :--- | :--- | :--- | :--- |
| Maltese (2673) | $357(13.36 \%)$ | $323(12.08 \%)$ | $1.27 \%$ less getting 7 |
| English (3487) | $533(15.29 \%)$ | $547(15.69 \%)$ | $0.40 \%$ less getting 7 |
| Italian (1635) | $255(15.60 \%)$ | $246(15.05 \%)$ | $0.55 \%$ less getting 7 |
| French (1132) | $125(11.04 \%)$ | $146(12.90 \%)$ | $1.86 \%$ less getting 7 |

It can be concluded that:
$\square$ without the oral component Maltese and Italian would register less passes at Grade 7; and $\downarrow$ without the oral component, English and French would register more passes at Grade 7.

In Maltese and Italian the oral component has contributed to more passes at the bottommost grade. Whereas in English and French the oral component has contributed to less passes at grade 7 .

## 21. Grades 6 and 7 (together)

For the lowest two grades, i.e., grades 6 band 7, results were as reported in Table 36.
Table 36: Grades 6 and 7 (\% calculated on Paper I + IIB, because only IIB assesses these grades)

| Language + <br> Population <br> (PI+PIIB) | Grades 6, 7 Candidates <br> PI+PIIB <br> (with oral mark) | Grades 6, 7 Candidates <br> PI+PIIB <br> (without oral mark) | Difference: without <br> oral component <br> there would be |
| :--- | :--- | :--- | :--- |
| Maltese (2673) | $733(27.42 \%)$ | $640(23.94 \%)$ | $3.48 \%$ less getting 6, 7 |$|$| English (3487) | $1187(34.04 \%)$ | $1194(34.24 \%)$ | $0.20 \%$ more getting 6, 7 |
| :--- | :--- | :--- | :--- |
| Italian (1635) | $525(32.11 \%)$ | $530(32.42 \%)$ | $0.31 \%$ more getting 6, 7 |
| French (1132) | $385(34.01 \%)$ | $400(35.34 \%)$ | $1.33 \%$ more getting 6, 7 |

Considering the above data, it can be noticed that:
$\square$ without the oral component English, Italian, and French would register more Grades 6 and 7; and
$\nabla \quad$ without the oral component Maltese would register less Grades 6 and 7.

In three (English, Italian, French) out of the four languages under investigation, the oral component has contributed to less passes in the bottom grades (Grades 6, 7). Whereas in Maltese the oral component has contributed to more passes in the bottom grades (Grades $6,7)$.

## 22. Grades 4 and 5 (together)

Results for grades 4 and 5, the middle grades, were as follows:
Table 37: Grade 4 and 5 (\% calculated on total of Paper I + IIA and Paper I + IIB, because both papers assess these grades)

| Language + <br> Total Population <br> (PI+PIIA+PIIB) | Grades 4,5Candidates <br> PI+PIIA+PIIB <br> (with oral mark) | Grades 4,5Candidates <br> PI+PIIA+PIIB <br> (without oral mark) | Difference: without <br> oral component <br> there would be |
| :--- | :--- | :--- | :--- |
| Maltese (5157) | $1778(34.48 \%)$ | $1797(34.85 \%)$ | $0.37 \%$ more getting 4,5 |
| English (6229) | $2208(35.48 \%)$ | $2126(34.13 \%)$ | $1.35 \%$ less getting 4,5 |
| Italian (2927) | $917(31.33 \%)$ | $868(29.65 \%)$ | $1.68 \%$ less getting 4, 5 |
| French (2239) | $808(36.09 \%)$ | $817(36.49 \%)$ | $0.40 \%$ more getting 4,5 |

Therefore, it can be deduced that:
$\nabla$ without the oral component Maltese and French would register more Grades 4 and 5; and
$\square$ without the oral component English and Italian would register less Grades 4 and 5.
In Maltese and French the oral component has contributed to less passes in the middle grades (Grades 4, 5). Whereas in English and Italian the oral component has contributed to more passes in the middle grades (Grades 4,5).

## 23. Grades 1, 2, and 3 (together)

Results for the top three grades read are reported in Table 38.
Table 38: Grades 1, 2, and 3 (\% calculated on Paper I + IIA because only IIA assesses these grades)

| Language + <br> Population <br> (PI+ PIIA) | Grades 1, 2, 3 <br> Candidates PI+IIA <br> (with oral mark) | Grades 1, 2, 3 <br> Candidates PI+IIA <br> (without oral mark) | Difference: without <br> oral component there <br> would be |
| :--- | :--- | :--- | :--- |
| Maltese (2484) | $810(32.61 \%)$ | $643(25.89 \%)$ | $6.72 \%$ less getting 1, 2, 3 |
| English (2742) | $1198(43.69 \%)$ | $1119(40.81 \%)$ | $2.88 \%$ less getting 1, 2, 3 |
| Italian (1292) | $831(64.32 \%)$ | $781(60.45 \%)$ | $3.87 \%$ less getting 1, 2, 3 |
| French (1107) | $811(73.26 \%)$ | $779(70.37 \%)$ | $2.89 \%$ less getting 1, 2, 3 |

Without the oral component all languages would register less top grades. Therefore, in all the languages under investigation the oral component has contributed to more passes at the top grades (Grades 1, 2, and 3). As a result, it could be said that the oral contributes to a better quality pass.

## 24. Grade 1

Results for the topmost grade are in Table 39 below.
Table 39: Grade 1 (\% calculated on Paper I + IIA because only IIA assesses Grade 1)

| Language + <br> Population <br> (PI+PIIA) | Grade 1 Candidates <br> PI+IIA <br> (with oral mark) | Grade 1 Candidates <br> PI+IIA <br> (without oral mark) | Difference: without <br> oral component <br> there would be |
| :--- | :--- | :--- | :--- |
| Maltese (2484) | $63(2.54 \%)$ | $39(1.57 \%)$ | $0.97 \%$ less getting 1 |
| English (2742) | $133(4.85 \%)$ | $144(5.25 \%)$ | $0.40 \%$ more getting 1 |
| Italian (1292) | $128(9.91 \%)$ | $112(8.67 \%)$ | $1.24 \%$ less getting 1 |
| French (1107) | $139(12.56 \%)$ | $135(12.20 \%)$ | $0.36 \%$ less getting 1 |

From the data in Table 39, it can be deduced that:
$\square$ without the oral component only English would register more Grade 1 passes; and $\square$ without the oral component Maltese, Italian, and French would register less Grade 1 passes.

In three (Maltese, Italian, French) out of the four languages under investigation the oral component has contributed to more passes at the topmost grade. In English the oral component has contributed to less passes at the topmost grade. In Maltese, Italian, and French the oral has contributed to a better quality pass (Grade 1), whereas in English the oral served to sift Grade 1 candidates more.

## 25. Summary of Conclusions regarding Oral Tests

For the SEC Language Examinations, the oral component has been investigated in four subjects: Maltese, English, Italian, and French.

ஏ In these four SEC Language Examinations, statistics show that the oral component:
(a) is instrumental in producing more passes; and
(b) at times boosts the grades.
$\square$ The results reported in Tables 35 to 39 can be condensed into Table 40 below.
Table 40: The effect of the oral component to Grades 1 and 7

| Subject | Grade 1 | Grade 7 |
| :--- | :--- | :--- |
|  | With the oral component there were: | With the oral component there were: |
| Maltese | More passes | More passes |
| English | Less passes | Less passes |
| Italian | More passes | More passes |
| French | More passes | Less passes |

This means that with the oral component:
(i) in Maltese and Italian there were more passes in Grades 1 and 7;
(ii) in English there were less passes in Grades 1 and 7; and
(iii) in French there were more passes in Grade 1 and less in Grade 7.

Table 41: The effect of the oral component on the upper, middle and lower grades

| Subject | Upper grades <br> (Grades 1, 2, 3) | Middle grades <br> (Grades 4, 5) | Lower grades <br> (Grades 6, 7) |
| :--- | :--- | :--- | :--- |
|  | With the oral component <br> there were: | With the oral component <br> there were: | With the oral component <br> there were: |
| Maltese | More passes | Less passes | More passes |
| English | More passes | More passes | Less passes |
| Italian | More passes | More passes | Less passes |
| French | More passes | Less passes | Less passes |

This means that with the oral component:
(i) in Maltese there were more passes in the upper and lower grades but less in the middle grades;
(ii) in English and Italian there were more passes in the upper and middle grades but less in the lower grades; and
(iii) in French there were more passes in the upper grades but less in the middle and lower grades.

च In Maltese, the oral component was instrumental in producing more and better passes because without the oral test there would have been:
(a) more failures (Tables 25, 26);
(b) more candidates who would have obtained the lowest grade in Paper I + IIA (Table 25); and
(c) less candidates who would have obtained a good grade in Paper I + IIB (Table 26).
$\square$ In English, the oral component was instrumental in producing more passes (Tables $27,28)$ and it improved the quality of the grades in Paper I + IIB (Table 28).
$\checkmark$ In Italian, the oral component was instrumental in producing more (Table 29, 30) and better passes (Table 29) because the oral test influenced positively most of the upper grades (Tables 29, 30).
$\square$ In French, the oral component contributed to increasing the passes of some of the upper grades (Table 31). In Paper I + IIB there would have been slightly more passes without the oral test (Table 32).

## 26. General Conclusion

This paper discussed some issues involved in the assessment of skills other than those assessed through the written examination papers. Examiners are faced with a number of challenges that must be continually addressed in order to maximise the validity and reliability of the assessment procedure.

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