

MATSEC Examinations: An Eventful Journey

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The Background

- ▶ "... the assessment and testing system within any given society can only be understood in relation to the history and culture of its educational and social systems."

(Paul Black)

The Background

- ▶ Up to around 30 years ago, secondary education in Malta relied heavily on the British GCE Ordinary Level for the certification of students at the end of compulsory education and on the GCE Advanced Level for admission to the University.
- ▶ The Matriculation Board of the University also offered a few Ordinary Level subjects designed specifically for the Maltese context, with only a minor influence on the secondary school curriculum.

The Need of Change

- ▶ In 1988, the British education authorities decided to replace the GCE Ordinary Level system by the GCSE.
- ▶ This change created a crisis in secondary education in Malta because teachers and educators were not prepared for the extensive dependence of the GCSE on school-based assessment.
- ▶ As a reaction, there was a political decision to replace both the GCE Ordinary Level and the GCE Advanced level systems by local examinations of a comparable standard.

The Proposals

- The Minister of Education asked the University of Malta, through its Matriculation Board, to:
 - extend its list of Matriculation Ordinary level examinations to cover all subjects taught in the secondary schools and, more importantly, the examinations were to cater for 80% of the 16-year-old cohort at the end of compulsory education;
 - replace the GCE Advanced levels by a system of examinations modelled on the International Baccalaureate Diploma to satisfy admission requirements to the University.

Planning the Secondary Education Certificate (SEC) system of examinations

- A sub-committee of the Matriculation Board identified the needed structure as:
 - A **policy making board** accountable to the Senate of the University.
 - An **executive board** with an administrative and an academic section to execute the policies of the main board.
- Separate **subject panels**, with different eligibility criteria, for:
 - Drawing up syllabi
 - Setting examination papers
 - Marking

Main concerns of the Matriculation Board

- The **lack of professional expertise** in the field of assessment.
- This could be compensated for by:
 - Establishing linkages with a professionally oriented board, *as a matter of urgency*;
 - Adopting or adapting models developed in other countries, for example, the GCSE.
- The **sustainability** of the system because:
 - it will be costly and the limited candidature makes it difficult to cover the costs;
 - financial difficulties will affect the recruitment of examiners who all offer their services voluntarily.

Discussions within the informal MSLEB

- ▶ The informal MSLEB discussed how the examinations could cover the achievements of 80% of the cohort.
- ▶ Two main needs were identified:
 - ▶ The need to extend the range of the existing grading system from Grade 1 – 5 to Grade 1 – 7;
 - ▶ The need to restructure the syllabi and the examination papers.
- ▶ Meetings with chairpersons of the existing Matriculation 'O' Level subjects were held to explain the needed changes in the syllabi and the grading system.
- ▶ Practically all chairpersons disagreed with the proposed changes as they feared a general lowering of standards which, they thought, were already low.

Establishment of the MATSEC Board and the MATSEC Support Unit

- ▶ The MATSEC Board was set up in 1991 with representatives of the University Senate, the State schools and the Private Schools Association under the chairmanship of the Rector.
- ▶ The Board was accountable to the University Senate.
- ▶ Education officials expressed concerns about this set up because of:
 - ▶ lack of personnel with expertise in educational assessment;
 - ▶ the 'small island mentality' which could lead to corruption;
 - ▶ the suspicion that the Senate will control the curriculum.
- ▶ The MATSEC Support Unit was set up with three academic and five administrative members of staff – a gross underestimation of the work ahead.

The staff complement of the MATSEC Support Unit in 1991

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Issues in the Design of the SEC system of examinations

- ▶ Syllabus Panels – representation of the University and all school sectors.
- ▶ Introduction of school-based assessment in a number of subjects; and oral and aural examinations in the languages.
- ▶ Equity
- ▶ Fees and accessibility of the examinations
- ▶ The language of the examinations.

Syllabi and Syllabus Panels

- ▶ The membership of the syllabus panels ensured equal representation of the University and the three school sectors working under the guidance of the two Principal Subject Area Officers.
- ▶ The chairmanship of the panels was divided equally between the University and the schools to allay fears of control by the University.
- ▶ Work proceeded fairly smoothly except for one or two panels where there were serious clashes of ideas and personalities.
- ▶ By the end of 1992, syllabi in 29 subjects were published and the first SEC examinations could take place in 1994.

School-based Assessment

- ▶ The National Minimum Curriculum (1990) specified the need “to play down the negative effects of examinations” and introduce cumulative assessments, orals in languages, and action and work-oriented skills in other subjects.
- ▶ All language syllabi included components to assess speaking and listening comprehension skills to be examined externally.
- ▶ Ten subjects included school-based coursework – project work, fieldwork, practical work – assessed by the teachers.
- ▶ General agreement by educators but objections by the Malta Union of Teachers, which could have jeopardized the introduction of school-based assessment.

Equity and Written Examinations

- ▶ The decision on whether to have **graded papers** or **differentiated papers** depended on the principle that examinations are “opportunities for students to demonstrate what they know, understand and can do”.
- ▶ Differentiated papers were adopted:
 - ▶ Paper 1 - a **common** paper for all candidates;
 - ▶ Paper 2 – an **option** of either Paper 2A or Paper 2B
- ▶ Paper 1 & Paper 2A qualify candidates for Grades 1 – 4;
- ▶ Paper 1 & Paper 2B qualify candidates for Grades 4 – 7.

Differentiated Papers: Two Issues

- ▶ **Issue 1:** Ensuring the equivalence of the common Grade 4 in the two options (Paper 1 & 2A and Paper 1 & 2B).
- ▶ This could be achieved by grading the two optional Paper 2A & 2B separately and then calibrating the lower bound of Grade 4 by considering the marks obtained in the common Paper 1.
- ▶ **Issue 2:** How candidates decide which option to choose.
 - ▶ Parents expected teachers or the school to advise students.
 - ▶ Many teachers were reluctant to advise students.
 - ▶ Some high achievers may opt for the easier Paper 2B to 'play it safe' and obtain a Grade 4 or Grade 5, thus blocking out average candidates from achieving these grades.
- ▶ This behaviour defeated the purpose of differentiated papers, which was to ensure equity as far as possible.

Equity and the Language of the Examination

- ▶ The bilingual context of Malta:
 - ▶ Maltese is the native language used orally by the majority;
 - ▶ Maltese and English are official languages;
 - ▶ English is used by a majority for written communication.
- ▶ Except for language examinations, MATSEC examinations are set in English and candidates are expected to answer in English but language errors are not penalised in non-language exams.
- ▶ Some educators believe that candidates who are weak in English are doubly penalised in subjects such as Mathematics and Physics in which they may be knowledgeable but unable to demonstrate their true knowledge.
- ▶ Can exams set in a second language ever be equitable?

Low Fees

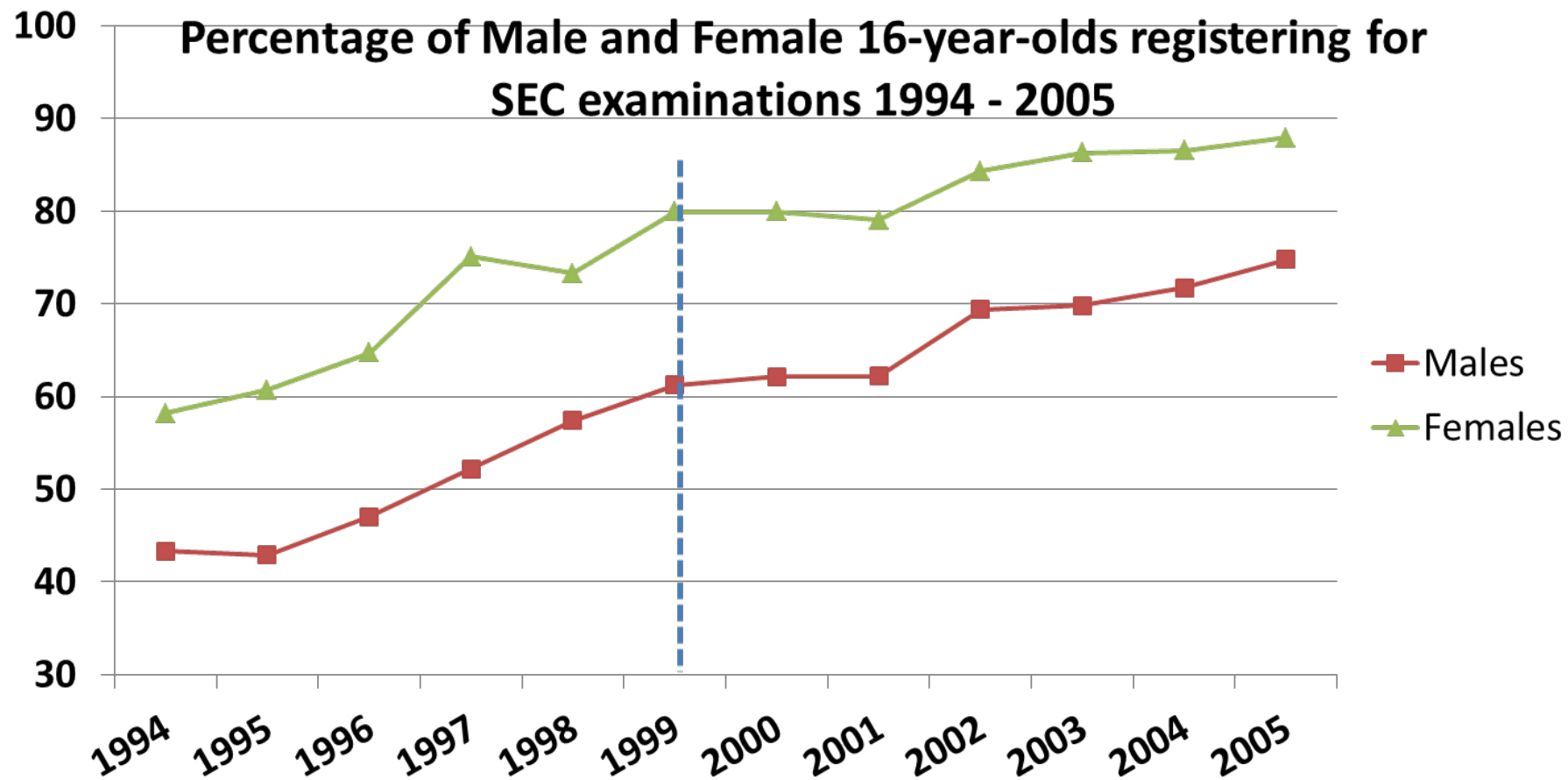
- ▶ Fees were kept as low as possible to widen access to the SEC examinations yet allowing the University to break even.
- ▶ After a few sessions of examinations, the University announced a significant shortfall between revenue and expenditure.
- ▶ The MATSEC Board raised its fees with the result of students' protests in the streets.
- ▶ The Ministry of Education agreed to share the financial burden and the fees were lowered though the students' protests continued.
- ▶ The widespread incidence of private tuition to sit for examinations a year or so earlier contributed to the perception that private tuition was necessary for passing the examinations.
- ▶ The MATSEC Board abolished this practice but private tuition remained widespread.

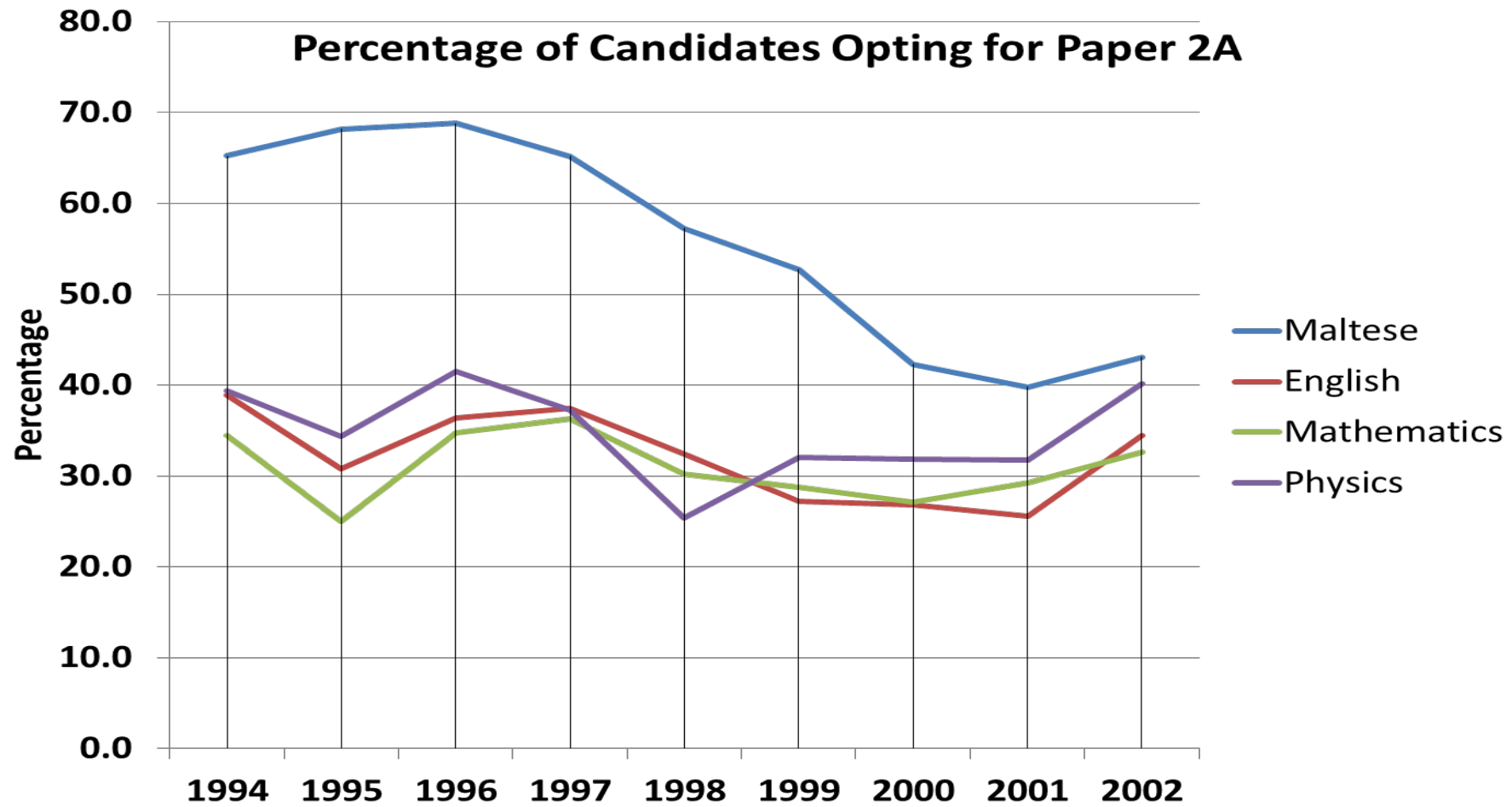
The Supplementary Session

- ▶ The MATSEC Board planned to have a supplementary session of examinations in November – December.
- ▶ The Minister of Education disagreed and strongly suggested a supplementary session in early September to allow students who succeed in the re-sits to join the post-secondary course without the gap of one year.
- ▶ The MATSEC Board reluctantly complied with the result that administratively there was no break between the first and the supplementary sessions, closely followed by the preparation for examinations in the following year.

Launching the SEC examinations

- ▶ The first SEC written examinations took place in April/May 1994; oral and aural examinations were held in March.
- ▶ This timeframe shortened the last year of the secondary school considerably as students absented themselves well before March with the consequence of a shortened time for teachers to cover the syllabi.
- ▶ Only an estimated 50.3% of the 16-year-old cohort sat for the first session. Many students preferred to sit for the GCE 'O' level exams which were still available for non-British students.
- ▶ Public confidence increased gradually and by 1999, 70% of the cohort sat for SEC examinations but there was a significant gender gap, which was only narrowed years later.





Public Scrutiny of the Examinations

- ▶ As expected, MATSEC examinations underwent public scrutiny and real or imagined mishaps were reported in the media.
- ▶ The complaints concerned both academic and administrative matters.
- ▶ A surge of complaints appeared in the newspapers in 1998, one of which implied interference by the Minister of Education. At least some of the complaints were clearly influenced by the hotly contested general election in the summer of that year.
- ▶ As a reaction to these complaints, two initiatives were taken:
 - ▶ one by the University, and
 - ▶ another by the Ministry of Education.

Cooperation agreement with Edexcel

- ▶ The University reached an cooperation agreement with EDEXCEL to help in the audit and quality assurance of MATSEC examinations.
- ▶ The cooperation resulted in a few visits by Edexcel officials and exchange visits by staff of the MATSEC Support Unit.
- ▶ Senior Edexcel examiners sent reports on the syllabi, exam papers, mark schemes, and marked scripts of four SEC exams.
- ▶ As a result of interaction with Edexcel, the MATSEC Board:
 - ▶ adopted a stricter review of examination papers before printing;
 - ▶ introduced formal grade awarding meetings using a statistical approach and professional judgement.

MATSEC Analyses Facilitating Board

- ▶ The Minister of Education set up a board of three persons with the aim of “strengthening the integrity and credibility of MATSEC examinations” and to make recommendations for the better organization of the examinations.
- ▶ After consulting various interested bodies and individuals, and members of the public who wished to give their opinions, the board published a report, with these main points:
 - ▶ “the system is working well” but it is now “bursting at the seams” and “MATSEC officers and examiners felt under siege, teachers felt ignored and frustrated, and the students experimented with.”
 - ▶ Twenty five recommendations, mainly of an administrative nature, including the transfer of some administrative tasks from the MATSEC Support Unit to the government Examinations Department.

Another inquiry requested by MATSEC

- ▶ Unfortunately, two serious allegations were made in the next session of examinations.
- ▶ The MATSEC Board itself asked the University Rector to set up a board to investigate the allegations and to recommend remedial and disciplinary action as necessary.
- ▶ The Rector, with the approval of Senate set up a high profile supervisory board of three persons, chaired by a magistrate.
- ▶ The board evaluated the procedures adopted for MATSEC examinations and it investigated eight specific cases of reported irregularities: three of an academic nature and five of an administrative nature.
- ▶ The report of this board was eventually presented to Parliament by the Minister of Education.

Report of the MATSEC Supervisory Board

- ▶ In its general statements about the functioning of MATSEC, the report noted that:
 - ▶ The board is satisfied with the integrity and academic standard of the examiners and employees at the MATSEC Office;
 - ▶ The system followed with regard to the completion of examination papers is serious, adequately controlled and trustworthy. The whole process is one that provided for security in the operations of the Office.
- ▶ It warned that:
 - ▶ The system risked collapse in the short term if responsibility were to continue piling up;
 - ▶ Those responsible for the organization of the examinations in question had to understand that to attain the desired standards there had to be a serious financial investment.

Report of the MATSEC Supervisory Board

- ▶ Among the specific comments on the particular cases brought to its attention, the board reported:
 - ▶ no evidence was presented to substantiate the claim of a leak in an examination paper;
 - ▶ the question in the Accounting exam paper were workable;
 - ▶ the MATSEC Office was not to blame for complaints of an administrative nature;
 - ▶ The structure of shared responsibilities between MATSEC and the Examinations Department led to disagreement, inefficiency and lack of discipline. The whole structure should fall under one entity.

Report of the MATSEC Supervisory Board: Follow-up

- ▶ Following the publication of this report, a newspaper editorial about MATSEC exams noted “These comments should put an end to the malicious or misinformed views expressed in the media from time to time.”
- ▶ The report of the supervisory board marked **a turning point** in the journey of MATSEC examinations.
- ▶ From its publication onwards, the number of complaints was reduced to a minimum and the reports in the media turned their attention to the results and the examiners’ reports and their interpretation.
- ▶ The MATSEC Support Unit started to publish detailed annual statistical reports including analyses of registrations and results by gender and school sector, besides other statistics.

The National Minimum Curriculum 1999 and MATSEC Examinations

- ▶ The NMC argued very strongly that “An education which recognizes diversity regards formative assessment as indispensable for carrying out a democratic agenda.”
- ▶ The NMC recommended that schools should persist in adopting a summative and formative assessment and the MATSEC Board “should continue to strengthen this assessment policy by applying it to every subject.”
- ▶ It continued “without SEC and Matriculation examinations that adopt its assessment policies, the NMC will be ineffective.”

The National Minimum Curriculum 1999 and MATSEC Examinations

- ▶ The NMC doubted whether the MATSEC Board could adopt these policies.
- ▶ It added that “since the MATSEC Board decisions needed to be endorsed by the University Senate, this relationship may create a tension between satisfying Senate and satisfying the National Minimum Curriculum requirements where the Board’s examination policies are concerned.”
- ▶ The Strategic Plan of the NMC then considered the possibility that SEC examinations should pass under the **joint jurisdiction of the National Curriculum Council and the University Senate.**
- ▶ The Strategic Plan recommended a study of these different problems by a board set up for this purpose by the Minister.

The MATSEC Review (2005)

- ▶ In March 2004, the Minister of Education followed the recommendation of the NMC Strategic Plan and appointed a committee of four persons to review the current SEC and Matriculation examinations over a period of 18 months.
- ▶ The committee organized its study into four reviews:
 - ▶ *an objectives review;*
 - ▶ *an operations review;*
 - ▶ *an impact review, and*
 - ▶ *a quality review*
- ▶ Over the next year and a half, the committee heard and recorded the opinions and suggestions of numerous focus groups and other interest groups.

A Focus on the Quality Review

- ▶ The committee could not identify generally agreed criteria by which to evaluate a system of examinations. This was a deficiency identified by the AEA-E conference in 2004.
- ▶ The committee came across and implemented the World Bank document on Public Examination Systems which recognized five key criteria of quality examinations:
 - ▶ Fitness for purpose
 - ▶ Equity
 - ▶ Integrity and Public Confidence
 - ▶ Efficiency and Cost-effectiveness
 - ▶ Beneficial Effect on Classroom Practice
- ▶ From this analysis, MATSEC examinations fared quite well but weaknesses were identified.

The Cambridge Quality Share exercise

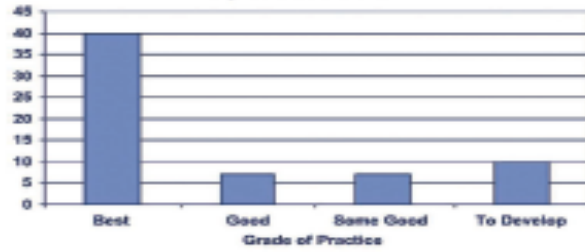
- ▶ During the on-going quality review, Cambridge International Examinations (CIE) invited the MATSEC Board to pilot a self-audit a quality assurance instrument they were developing for use by international examination boards. MATSEC accepted gladly and this pilot study became part of the MATSEC Review.
- ▶ The CIE instrument consisted of the following eight sections and corresponding detailed criteria:

Syllabus production	Question paper & Mark schemes
Marking	Coursework
Grading	Post-result services
Security of examinations	Special requirements

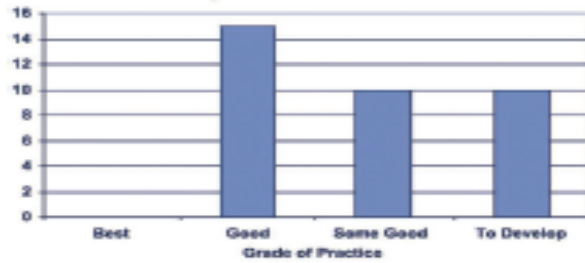
The Cambridge Quality Share exercise

- ▶ This Quality Share exercise took place over two days and involved 50 stakeholders working in small groups on the eight sections each with detailed criteria.
- ▶ The groups had to assess whether the practices adopted by the MATSEC system of examinations represented Best Practice, Good Practice, Some Good Practice, or Practice to be Developed.
- ▶ The experience of using these quality assurance instruments showed that MATSEC examinations had the basic features for developing quality examinations but there were areas which required further development.

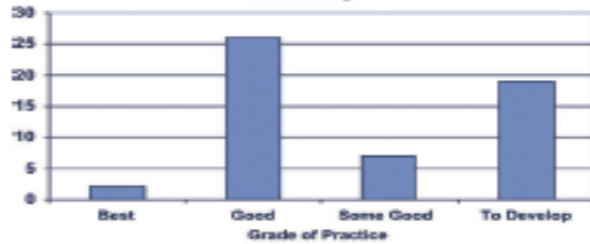
1. Syllabus Production



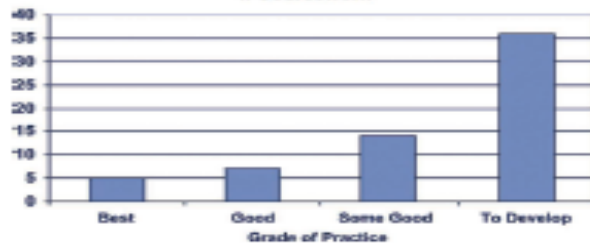
2. Question Paper and Mark Scheme Production



3. Marking

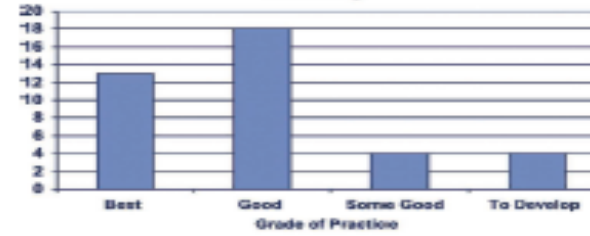


4. Coursework

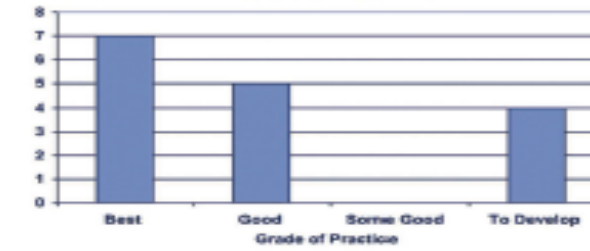


QUALITY

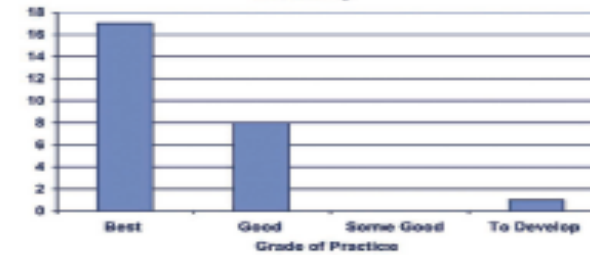
5. Grading



6. Post-Results Services



7. Security



8. Special Requirements



QUALITY

The National Curriculum Framework (2012) and SEC Examinations

- ▶ The future of SEC examination is determined by the NCF (2012) and the decisions of the NCF Implementation Review Board, where the MATSEC Board is represented.
- ▶ The NCF established that all learning to be achieved by students is to be built through the identification of **learning outcomes**.
- ▶ The task of identification of outcomes was entrusted to a Learning Outcomes Framework Board.
- ▶ The NCF also emphasised:
 - ▶ the need to incorporate **coursework** in assessment at all levels;
 - ▶ certification at the end of compulsory education was to respond to the first three levels of the **Malta Qualifications Framework for Lifelong Learning**.

Discussions on the new format SEC examinations

- ▶ While the LOF was being developed the MATSEC Board entered into discussions on:
 - ▶ a significant component of coursework in all subjects and the challenges arising from its introduction and moderation;
 - ▶ the structure of the examination papers and how to replace the current differentiated papers, if differentiation is still needed;
 - ▶ how SEC results can be linked to the MQF for Lifelong Learning.
- ▶ Some of the issues arising from the discussions needed the intervention of the Minister of Education for their resolution.

Developing syllabi for the new SEC examinations

- ▶ Once the LOF was established, syllabus panels started their work under the guidance of the Principal Subject Area Officers.
- ▶ They first had to rework the learning outcomes to differentiate between learning outcomes and assessment criteria.
- ▶ Then each assessment criterion was differentiated to reflect achievement at Levels 1, 2 and 3 of the MQF.
- ▶ Since school-based assessment was new in many of the 39 subjects on offer, the panels produced exemplars of possible coursework and their mark schemes.
- ▶ Specimen 2-hour written examination papers were also prepared: one for candidates who aimed at achieving a pass at MQF Levels 3 and 2, and another for candidates who aimed at passes at Levels 2 and 1.

A last-minute objection

- ▶ The teachers' union objected strongly to any form of moderation of coursework whether internal or external.
- ▶ They argued that teachers are professionals and it was unprofessional to submit their assessment to moderation.
- ▶ After lengthy discussions, it was agreed that school-based assessment will:
 - ▶ have a weighting of 30% of the global mark;
 - ▶ not be moderated;
 - ▶ be graded separately and its grade will appear separately from the grade of the written examination in the certificate.

Conclusion

- ▶ Looking back, what has been achieved and what has been learnt?
- ▶ Has MATSEC met the initial challenges successfully?
- ▶ What role did students, parents, teachers, educators, the teachers' union, and politicians play?
- ▶ I augur that the new SEC examinations help in the achievement of the aim of the LOF "to free schools and learners from centrally-imposed knowledge-centric syllabi and to give them the freedom to develop programmes that fulfil the framework of knowledge, attitudes and skills-based outcomes that are considered national education entitlement of all students in Malta."