

Exam Access Arrangements in Malta:

Consultation document prepared for the Ministry for Education and Employment on identified current challenges and proposed ways forward

Josanne Ghirxi

October 2013

CONTENTS

EXECUTIVE SUMMARY	iii
ABSTRACT	1
LIST OF ABBREVIATIONS.....	2
1 OVERVIEW	4
1.1 Scope of the Data Collection and Analysis	4
1.2 Data Set	4
1.3 A Brief Overview on Data Analysis.....	4
1.4 The Purpose of EAA	7
1.5 Categories of EAA	7
2 ANALYSIS OF FEEDBACK.....	9
2.1 State’s Role and Obligations	9
2.2 Current Strategies, Processes and Identified Shortcomings	9
2.2.1 Innovative use of different technologies.....	9
2.2.2 Primary schools (including benchmark examinations).....	10
2.2.3 Secondary school examinations.....	11
2.2.4 Post secondary and tertiary level	13
2.3 The Impact of the EAA Process on Schools	15
2.3.1 Primary schools	15
2.3.2 Secondary schools	16
2.3.3 Primary and secondary schools	16
2.4 Impact of EAA on SPS.....	18
2.5 Participants’ Opposing Views on EAA.....	21
2.6 Recommendations Proposed by the Participants.....	23
3 DISCUSSION	29
3.1 EAA in Primary and Secondary State Schools.....	29
3.1.1 Concept of EAA among teaching professionals	29
3.1.2 The process, logistics and human resources required for EAA	31
3.1.3 Universal design of exam papers	33
3.2 MATSEC and University Examinations	33
3.2.1 Feedback by the ADSC	34
3.2.2 Application of EAA to the ADSC	35
3.2.3 EAA granted by the ADSC.....	37
3.2.4 Concluding thoughts.....	41
REFERENCES	44

EXECUTIVE SUMMARY

Students' educational achievements are of absolute importance for future employability and academic studies. Exam Access Arrangements (EAA) have therefore been developed, in several countries, to allow eligible students to gain access to examinations (including high-stake examinations) and to complete them with success. EAA, which are provisions approved prior to the beginning of examinations, enable candidates to demonstrate their achievements without having an unfair advantage on their peers. These candidates might otherwise be unable to demonstrate their achievements, without the EAA.

The main aim of this study was to analyse the current status of EAA as perceived by the participants, and to identify areas, which may need specific focus and eventual amendments. The participants, namely the stakeholders and the general public, were given the opportunity to provide their views on the subject matter. Specific input was also provided by Dr. Susan Tresman¹. The feedback provided was encouraging, when taking into consideration the number of submitted recommendations.

Main Findings

A qualitative analysis of the data sets, which was carried out with the use of a Computer Assisted Qualitative Data Analysis Software (CAQDAS), indicated that there is a strong general acceptance of EAA as a fundamental right for eligible students. The fundamental right to EAA was also considered to be part of the students' fundamental right to gain access to education. Notwithstanding this clear recognition, the data revealed a strong finding, *i.e.* the concern on the burden which EAA have on schools *vis-à-vis* personnel, premises and the process *per se*.

The analysis has clearly revealed that the most significant burden of EAA is on personnel. This issue was identified in both the primary and secondary school settings. Moreover, the data analysis indicated that the origin of the issue is not only related to the ever increasing number of students applying for EAA. The process *per se* is also an important contributing factor to these burdens. Different schools apply different methodologies to accommodate students who require EAA. The applied methodologies are not necessarily efficient. The

¹ Dr Susan Tresman is the Vice Chairman of Guildford and Waverley Clinical Commissioning Group, NHS, England.

different tracks and a larger number of students, who require EAA in the secondary school setting, further augment the burden on personnel and availability of space.

Both school settings have their specific challenges as well, namely EAA for Benchmark examinations in the primary school setting and EAA for Secondary Education Certificate (SEC) examinations in the secondary school setting. The challenges are spilled over to the School Psychological Services (SPS) and the Specific Learning Difficulties (SpLD) specialists at the Dyslexia Unit, although the process necessitates the former to carry a heavier share of the burden. This happens once the applications from the schools are received, namely those related to the EAA for SEC examinations.

A number of respondents expressed their concern on what they perceive to be the ACCESS Disability Support Committee (ADSC)'s rigid approach on the EAA for Matriculation and Secondary Education Certificate (MATSEC) examinations. Respondents claimed that this rigid approach is also affecting the secondary school sector. For instance, they indicated that most secondary schools refrain from granting a reader to Forms 3 up to 5 students during their mid-yearly and annual language examinations. The scope is to avoid the students from becoming accustomed to a reader which however, will not be available during MATSEC examinations².

Recommendations

Further to expressing their concerns, participants contributed by submitting a number of recommendations to address the identified issues. For the scope of the study, the recommendations were grouped into six main themes:

- 1 *Human Resources (capacity building and adjustments of roles)*: participants submitted a number of recommendations to address the matter, ranging from additional training, for the teaching staff, to the hiring of additional people (including retired teachers) during examination sessions. Since several respondents expressed concerns on the veracity of assessments provided by private psychologists, it was suggested that students' assessments for EAA is delegated to the SpLD and the SPS;

² Students with dyslexia are not granted a reader by the ADSC for their SEC language examinations (even if the Committee is presented with a report by either a dyslexia specialist or an educational psychologist).

- 2 *Teaching and Learning* – it was recommended that a shift from summative (end of year) to formative assessment is carried out, in conjunction with the development of Departmental guidelines on EAA. Several respondents also recommended the adoption of tiered Benchmark examinations, whilst others suggested that annual examinations should be available, in *inter alia*, electronic format, coloured paper particular fonts, enlarged print in both Maltese and English versions (for non-language examinations). It was also recommended that the Ministry embarks on a programme with the aim of instilling a culture where teachers embrace all students, irrespective of their individual educational needs (IEN), even if this may require a revision of the Education Act;
- 3 *Additional Support to Students* – several participants underscored the importance of encouraging parental / guardian involvement to reinforce school support. Others recommended the provision of a wider range of assessment modalities in conjunction with appropriate guidance and training for eligible students on the use of various EAA;
- 4 *Premises and Logistics* – Participants recommended that school populations should be limited to manageable numbers whilst promoting sharing of resources between schools of the same college;
- 5 *EAA Workflow* – Several participants recommended the streamlining of procedures to ensure that the Examination Assessment Unit (EAU) and the ADSC work in tandem in order to achieve a smooth transition of EAA, throughout the students' scholastic years. Moreover, the streamlining should lead schools to become more autonomous, hence enabling them to cater more efficiently for the students' IEN; and
- 6 *MATSEC, SEC and University* – A number of recommendations for SEC examinations addressed the provision of examinations for oral / aural competencies, assessments for vocational courses, examination papers in Maltese and English for non-language examinations, and provision of different levels of examinations for lower ability students.

A cost-benefit analysis exercise was also recommended to enable the Ministry to accurately establish the actual level of engaged resources in the process of

submitting EAA recommendations to the ADSC. In addition to the financial burdens, the system is perceived as being bureaucratic and jeopardising support to these students from, *inter alia*, the SPS, SpLD, and teachers performing INCO duties. The adoption of EAA policy and procedures, as implemented in foreign universities, and the extension of support to students with IEN at tertiary level (including the use of specific computer software and word processors during their learning process and examinations) were also recommended.

Concluding Remarks

Although a number of these recommendations may be contradictory, it is acknowledged that they were made on the basis of the participants' experience. The recommendations should therefore serve, *inter alia*, as a detailed framework to analyse and determine short, medium, and long term strategies, including high level discussions for the drafting of a national policy on EAA and the setting up of a National Examinations Authority.

ABSTRACT

Students' educational achievements are of absolute importance for future employability and academic studies. Exam Access Arrangements have therefore been developed, in several countries, to allow eligible students to gain access to examinations (including high-stake examinations) and to complete them with success. Exam Access Arrangements, which are provisions, approved prior to the beginning of examinations, enable candidates to demonstrate their achievements without an unfair advantage on their peers. These candidates might otherwise be unable to demonstrate their achievements, without the EAA.

The main aim of this study was to analyse the current status of exam access arrangements as perceived by the participants and to identify areas, which may need specific focus and eventual amendments. The participants, namely stakeholders and the general public were given the opportunity to provide their views on the subject matter. Specific input was also provided by Dr Susan Tresman. The feedback provided was encouraging, when taking into consideration the number of submitted recommendations.

A qualitative analysis of the data sets indicated that there is a strong general acceptance of Exam Access Arrangements as a fundamental right for eligible students. The fundamental right to Exam Access Arrangement was also considered to be part of the students' fundamental right to gain access to education. Notwithstanding this clear recognition, the data revealed a strong finding, *i.e.* the concern on the burden which Exam Access Arrangements have on schools *vis-à-vis* personnel, premises and the process *per se*.

The recommendations made by the participants were grouped into six main themes. Although a number of these recommendations may be contradictory, it is acknowledged that they were made on the basis of the participants' experience. The recommendations should therefore serve, *inter alia*, as a detailed framework to analyse short, medium, and long term strategies including high level discussions for the drafting of a national policy on Exam Access Arrangements and the setting up of a National Examinations Authority.

LIST OF ABBREVIATIONS

A Level	Advanced Level
ADHD	Attention Deficit Hyperactivity Disorder
ADD	Attention Deficit Disorder
ADSC	ACCESS-Disability Support Committee
CAQDAS	Computer Assisted Qualitative Data Analysis Software
CMeLD	Curriculum Management and eLearning Department
DQSE	Directorate for Quality and Standards in Education
EAA	Exam Access Arrangements
EAU	Educational Assessment Unit
EU	European Union
FT 1-1	Full time one-to-one
GCE	General Certificate of Education
GCSE	General Certificate of Secondary Education
HU	Hermeneutic Unit
IEN	Individual Educational Needs
IEP	Individual Education Programme (alternatively called Individual Education Plan)
INCO	Inclusive Education Coordinator
IQ	Intelligence Quotient
JCQ	Joint Council for Qualifications
LD	Learning Disability
LSA	Learning Support Assistant
MATSEC	Matriculation and Secondary Education Certificate
MCAST	Malta College of Arts, Science & Technology
MP3	MPEG-2 Audio Layer-3
NARA	Neale Analysis of Reading Ability

NEA	National Examinations Authority
OTs	Occupational Therapists
SEC	Secondary Education Certificate
SMT	School Management Team
SpLD	Specific Learning Difficulties
SPS	School Psychological Services
UK	United Kingdom
UoM	University of Malta

1 OVERVIEW

1.1 Scope of the Data Collection and Analysis

The data was collected and analysed for two main reasons, *i.e.*:

- to analyse the current status of exam access arrangements (EAA) in Malta as perceived by the participants; and
- identify areas, which may need specific focus and eventual amendments.

1.2 Data Set

The data was provided by the Ministry for Education and Employment. It was collected during the month of April 2013, after a time window, for stakeholders and the public in general, had been established to provide feedback by email on the current situation of EAA. Each and every participant had the opportunity to contribute his views, concerns and submit recommendations. The nature of the collected data ranged from *quasi* academic contributions to emails.

Data was also collected during a Consultation Meeting, on the subject matter, with the general public held on the 20th of April 2013. In addition to the contributions received by the Ministry for Education and Employment, further consultations with a number of stakeholders and Dr Susan Tresman³ were also carried out during the month of June 2013.

1.3 A Brief Overview on Data Analysis

During the analysis phase of the collected data, a Computer Assisted Qualitative Data Analysis Software (CAQDAS) was utilised, which permitted “a constant comparative method” of analysis (Carcary, 2011, p. 10). CAQDAS refers to software programmes designed to facilitate a rigorous analysis approach to qualitative data (Lewins & Silver, 2009). The use of ATLAS.ti V6.2 provides great flexibility for the coding and recoding of all data which leads to the final thematic outcome (Muhr & Friese, 2004).

In order to prepare for the analysis, data was converted into a Word Document and uploaded in an ATLAS.ti hermeneutic unit (HU) as two primary documents. The data set was coded so

³ Dr Susan Tresman is Vice Chairman of Guildford and Waverley Clinical Commissioning Group, NHS, England.

that the voluminous amount of data was condensed into a more manageable quantity. The coding process required the careful reading of the text with text extracts being highlighted. ‘Open coding’, namely “the process of breaking down, examining, comparing, conceptualizing and categorizing data” (Strauss & Corbin, 1990, p. 61) was adopted. Thus, codes and code names were assigned to newly created quotations (Figure 1). ‘Open Coding’ reflected “a non-positivist or non-hypothetic-deductive framework” (Chesler, 1987, p. 7). The ‘Coding by List’ technique was also applied although new codes were created and existing codes were either elaborated or modified, where necessary.

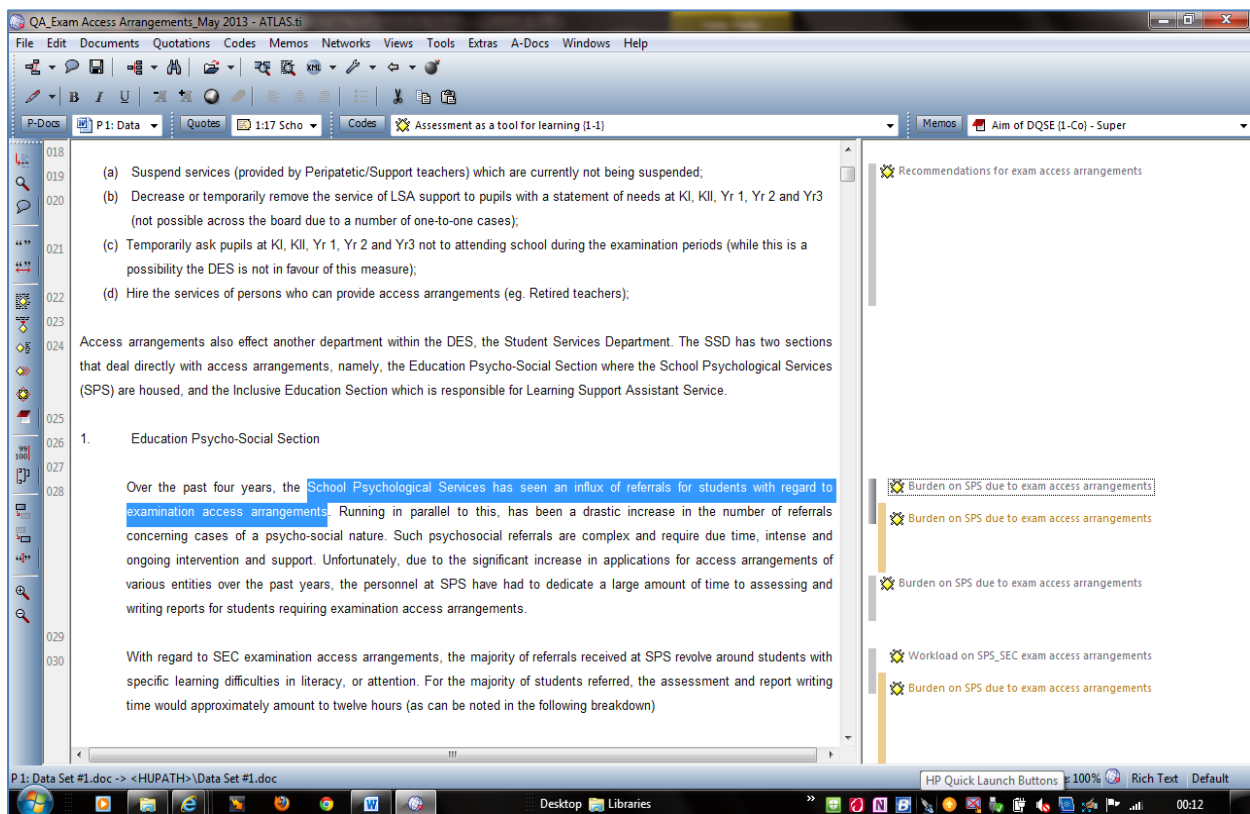


Figure 1: Coding of text

Data was also anchored to create hyperlinks between segments of text which contradicted, supported, expanded, discussed, or justified one another (Figure 2).

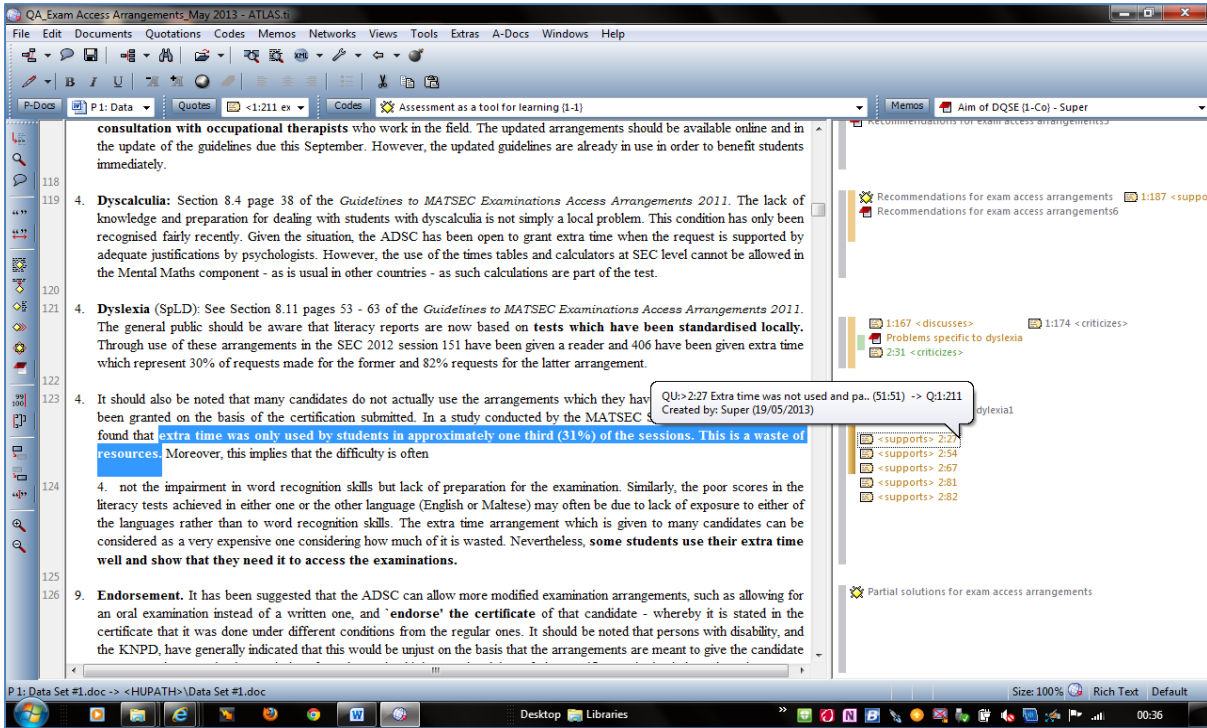


Figure 2: Data with hyperlinks

The software also allowed for memoing and axial coding *i.e.* code-code links (Figure 3). In order to establish how certain codes were used or applied, comments were added to them (*i.e.* memos), keeping an accurate record of the interactions identified within the text.

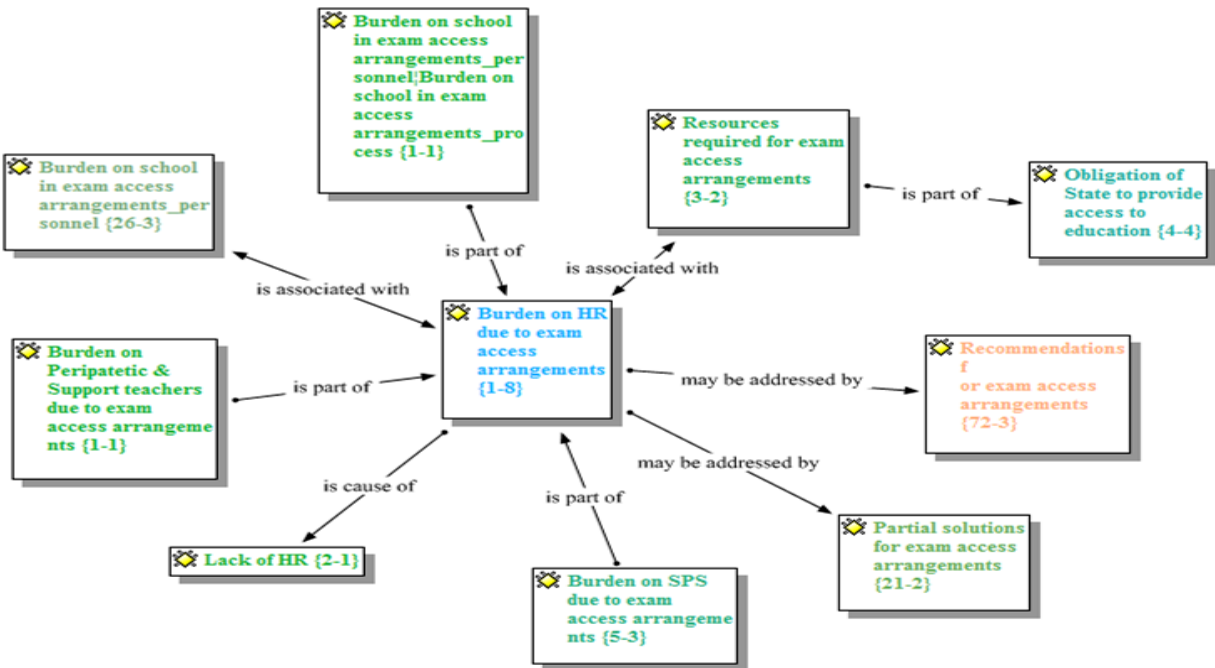


Figure 3: Network generated from data axial coding

1.4 The Purpose of EAA

Since students' educational achievements are of absolute importance for future employability and academic studies, EAA have been developed in several countries to allow eligible candidates to gain access to examinations (including high-stake examinations), and complete them with success. EAA are provisions, approved prior to the beginning of examinations to enable candidates to demonstrate their achievements since otherwise the candidates might be unable to do so. EAA provisions shall not create an unfair advantage on these students' peers.

EAA may be required for candidates with permanent or long-term disabilities, including physical impairment, sensory impairments, specific learning difficulty, and other disabilities / conditions. This includes those students with temporary injuries or indispositions at the time of the examinations. Research into this field has demonstrated that EAA "support flexibility of teaching and learning opportunities" for students with Individual Educational Needs (IEN) during their learning process, which also contributes to their enhanced confidence to succeed (Griffiths & Woods, 2010, p. 180).

Griffiths & Woods spoke of a culture change in EAA; from 'concessions' that were rarely approved towards a culture of 'entitlement'. In 2003, Woods went a step further and challenged the arbitrary entitlement 'thresholds', used to grant EAA, and to advance from a 'disability-centred' policy to that of 'equal opportunities' (Woods, 2003 as cited in Griffiths & Woods, 2010, p. 180). Nonetheless, critics of Wood's philosophy are adamant on having arbitrary entitlement 'thresholds' as cut off points (Dolman, 2003 as cited in Griffiths & Woods, 2010). To date, this issue remains a vivid debate.

1.5 Categories of EAA

There is a wide variety of EAA, which are usually categorised as follows:

- a) "*Presentation mode*" – examination questions and instructions may be presented differently;
- b) "*Response mode*" – different ways that students may respond to the examination questions and submit their answers;
- c) "*Timing, scheduling and setting*" – provision of other possibilities to where, when and with whom students can sit for their examinations; and

- d) “*Linguistically based*” – technology-based learning, providing alternative ways to design examinations and assess students who are either foreign or finding challenges in this area (Salend, 2008, p. 17).

EAA provide individual students with personalised ways of testing, based on their strengths, challenges and ways of learning. However, these accommodations should parallel teaching and learning accommodations regularly used in class by the student (Salend, 2008).

2 ANALYSIS OF FEEDBACK

2.1 State's Role and Obligations

The importance of EAA has been expressed by a number of participants in various ways. For instance, it was opined by some that there should be no distinction between access to assessments and access to the education system. Other participants expressed similar views:

Access to education is undoubtedly the right of each and every student in Malta and Gozo and thus the obligation of the [S]tate to provide. When we speak of access to education, we also understand that a child must have access to assessment as part of his/her educational process. It is therefore clearly understood...that educators need to do their utmost to ensure that students do not have any obstacles in accessing education including assessment of their achievements, abilities, and skills.

On the same lines, others submitted that “[a]ccess arrangement is a supportive tool that enables such pupils to fare better, and to depict their actual ability / potential...access arrangements are a fundamental right to those who genuinely need them.”

The main impetus to this school of thought is that EAA should not be considered as a form of advantage over other candidates but are necessary to gain fair access. This can be achieved by the removal of all the barriers; at the same time upholding the validity of the examinations, without changing the construct being tested (Joint Council for Qualifications, 2012; Salend, 2008). This philosophy will ensure that the trust in the value of the exam certificate, which is required for further examinations and / or employment, is preserved.

2.2 Current Strategies, Processes and Identified Shortcomings

2.2.1 Innovative use of different technologies

At national level, the Directorate for Quality and Standards in Education (DQSE), within the Ministry for Education and Employment, is actively exploring the innovative use of different technologies to make possible the personalisation of assessment for learning. The DQSE is also exploring the possibility of expanding the use of the Virtual Learning Environment (*e.g.* Fronter) and, if this is not possible, utilising European Union (EU) funding so that a Content Management System can be developed. It was explained that the Content Management System would allow teachers to download items to build graded assessment / examination papers and modules for specific subjects, according to the ability levels of individual students in the classroom. It is planned that initially, this would be available to the primary level but

would be extended to the secondary level.

The DQSE is also undertaking a small scale pilot project that provides test items on a compact disc for English, Maltese, and Maths at Checklist 1 Level for primary school teachers in Years 4 to 6. This provides teachers with the possibility to devise customised mid-yearly and annual examination papers for learners who are still mastering basic skills challenges.

Participants have identified a number of strategies and provided some detail on available EAA at primary, secondary, and tertiary levels. They have also highlighted several issues, which have the potential of hindering the full benefits of EAA.

2.2.2 Primary schools (including benchmark examinations)

Until recently, students would not have been granted EAA for Benchmark examinations (except for Maths rubrics) even though they would have been assessed either by a psychologist, Specific Learning Difficulties (SpLD) specialists at the Dyslexia Unit, or other professionals and found eligible to have a reader. Since the last Benchmark sessions, an electronic reader has also been provided to eligible students for both Maltese and English Comprehensions and the text were read twice. In addition, the text was projected on an interactive board / whiteboard and the words being read were highlighted. Transcription of illegible words was also provided.

It was evident that these changes were welcomed by a number of primary schools⁴. This was expressed by a number of participants; however, they still expressed concern on a number of issues as follows:

- although an electronic reader eases the demand on primary schools, transcription of illegible words is provided by the teacher in class, who also invigilates at the same time;
- students eligible for a reader and who are not used to electronic readers, may find it difficult to comprehend and follow directions, thus the need to practice with an electronic reader from Year 4;
- the electronic reader pace might not be in synchronisation with that of the candidate;

⁴ The analysis of the data sets revealed only one instance where two primary schools expressed their reservations, claiming that although EAA would be endorsed on the results, offering EAA in the Benchmark examinations would render “these examinations no longer a benchmark.”

- the accent of the reader may confuse the students;
- since the arrangements are being given for the reading comprehension, the whole point of reading with understanding might be completely lost;
- since candidates eligible for an electronic reader are given an additional 30 minutes extra time, this may cause organisational difficulties for the school, given that the Benchmark examination is held during normal school days; and
- the availability of EAA may encourage parents to seek psychological assessments for their children, since “they will believe that their marks will improve with such help.” This will lead to an extremely time consuming paperwork exercise for schools, School Psychological Services (SPS) and SpLD.

2.2.3 Secondary school examinations

The scenario in the secondary school setting is quite different. Students with a psychological report (either from SPS or private psychologist), SpLD or other professionals may be eligible for EAA, during the mid-yearly and annual examinations. Respondents have indicated that:

- the different array of levels or tracks;
- the logistics; and
- the amount of human resources required for EAA

may pose a number of problems.

The issues of concern raised by the participating local secondary schools were:

- whereas secondary schools provide readers for language examinations (usually for Forms 1 and 2), this provision is not provided by several schools for Forms 3 to 5 since the University of Malta’s ACCESS-Disability Support Committee (ADSC) does not grant a reader for language examinations during Secondary Education Certificate (SEC). In particular, reference was made to the lack of guidelines on which parts of the exam paper had to be read, during which subjects, and for which Forms;
- Form 2 students following the Core Competences Support Programme for Maths, Maltese and / or English have to sit for levels 5-6-7 annual examination papers, which is way beyond their abilities;

- the veracity of certain private psychologist reports; several schools claimed that a number of private psychologist reports were evidently written just for the student to be granted EAA. One particular school remarked that “some psychological reports are more and more resembling shopping lists in which psychologists tend to list as much arrangements as possible, as long as the paying parent is happy”;
- granting extra time to eligible candidates could logistically pose several difficulties – the candidate and the invigilator would have to refrain from taking the short break available between the first and second examination sessions. Moreover, extra time cannot be granted during the second session as this will compromise school transport;
- logistical problems emerging with the different levels / tracks for the listening comprehension for eligible candidates with EAA;
- students eligible for *reader all* are only being granted *reader on request* due to the number of different tracks / levels, making it logistically challenging to separate students into different classes, due to space constraints;
- whilst submitting that EAA may help eligible candidates to complete the examination paper and boost their self-esteem, the lack of statistical studies on the benefits (or otherwise) of giving a reader to students with dyslexia, compromises the ability to assess the actual EAA effectiveness;
- due to the different levels / tracks, students have to be assigned different classes during examination sessions. Experience shows that until the class is located, certain students may be subjected to increased tension;
- lack of guidelines on the marking of papers where *transcription of illegible words* would have been granted to the candidates;
- prompting students with Attention Deficit Hyperactivity Disorder (ADHD) may help them remain focused during examinations; however, this does not address similar situations in their adult lives;
- results achieved in examinations where EAA would have been granted may not reflect the actual ability of these students; and
- students benefitting from *full-time one-to-one* (FT 1-1) support of an Learning Support Assistant (LSA) are sometimes excused from attending school to stay at

home during the examinations period so that the LSA can support other students eligible for EAA.

2.2.4 Post secondary and tertiary level

A number of respondents were concerned on what they claimed to be the ADSC's rigid approach on the Matriculation and Secondary Education Certificate (MATSEC) EAA, claiming that it is also affecting the secondary school sector. The reason for this mainly lies on the fact that for instance, since students with dyslexia are not granted a reader by the ADSC for their SEC language examinations (University of Malta, 2011) (even if this is recommended by a dyslexia specialist or an educational psychologist), most secondary schools refrain from granting a reader for mid-yearly and annual language examinations from Form 3 onwards. The aim is to avoid the students getting used to an EAA, which will not be available during MATSEC examinations.

Enlarged papers are only granted by the ADSC for students with visual impairment. However, several secondary school students with dyslexia feel more comfortable working with enlarged handouts or examinations papers. Nonetheless, most secondary schools discourage the use of enlarged papers from Form 3 onwards given that, as indicated above, the ADSC will only grant this accommodation for students with visual impairment. The feedback received from secondary schools and parents reflected concerns and frustration on the decisions taken by the ADSC for MATSEC examinations:

Secondary school is offering help, yet then it stops (*parent*);

Professionals recommend *e.g.* reader, scribe or font. MATSEC answers that they cannot provide. It is a one size fits all situation for MATSEC (*parent*);

[The] University board is being too rigid and they need to acknowledge the need for access arrangements. It needs to be more humane and accept the difficulties these families face. There are challenges for the families that have students with dyslexia. Students are being frustrated and demotivated (*parent*);

University needs to think about access during university examinations (*academic*);

...as long as students are attending school, the school is bound to give them all the necessary help for them to improve their ability to read, speak and write the language... we can never ignore our role to prepare our students for the MATSEC examinations where certain access arrangements are not provided (*secondary school*).

Others remarked that:

- the ADSC Board allows limited modified EAA;
- certain EAA, such as a reader, are not granted for eligible candidates during language matriculation examinations since students “[should] have already acquired the skills and competencies certified at SEC level”;
- appointed personnel during examinations may go against the regulations and help candidates by reading the paper for them. In such circumstances, the students would have passed the exam on the basis of the help given, rather than on their own merits;
- one respondent believes that the ADSC “seems to still link the ability to read and write with intelligences and cannot seem to understand that there are other media to circumvent this difficulty and that such students can perform as well as other literate students. Further... ..there is still no ruling at the University of Malta that one has to know how to read and write to be at university”; and
- the ADSC does not accept SpLD and other learning disability (LD) specialists’ reports, unless the psychological report includes an Intelligence Quotient (IQ) profile. This is viewed by some as unnecessary for diagnosing dyslexia, and a financial burden on the State. Moreover, this does not seem to acknowledge that “...SpLD professionals at the SpLD Unit and elsewhere are trained / professionally competent enough to know when to refer to psychologists if the problem is more than dyslexia.”

In its feedback, the ADSC clearly indicated from the onset that it remains committed to:

ensur[e] the removal of all barriers that hinder candidates from accessing national examinations. It is also committed to offer this possibility with fairness to all students with any form of disability or other difficulty, and also at the same time upholding the validity of such examinations and people's trust in the value of the certification they provide to all who achieve.

This commitment is the rationale behind the Guidelines to MATSEC Exam Access Arrangements (2011) (University of Malta, 2011).

The ADSC acknowledges that there is room for improvement for SEC / Matriculation Certificate examinations and at University levels⁵ and this can be achieved by means of regular revisions of these guidelines⁶.

2.3 The Impact of the EAA Process on Schools

The data sets revealed that the EAA process may impact primary and secondary schools alike. Moreover, a number of identified factors were common to the primary and secondary school settings. The identified factors are listed below.

2.3.1 Primary schools

- 60% of the services offered by Peripatetic and Support teachers are suspended during mid-yearly and annual examinations to enable the deployment of these teachers to perform EAA duties. These duties cannot be performed by the LSAs since supply does not meet demand. This problem becomes more complex whenever members of staff report sick on examination days;
- during Benchmark examinations, the other year group classes continue with their lessons and therefore the school environment may be distracting for the students sitting for the examinations;
- to make informed decisions, Benchmark EAA requires time-consuming meetings with parents, teachers, LSAs and INCOs; and
- EAA may be quite problematic if staff resources are limited.

⁵ The ADSC recommendations submitted as part of the consultation process launched by the Ministry for Education and Employment will be addressed further below in this report. The ADSC has just published a new updated set of guidelines on the processing of applications for students who request EAA at tertiary level (University of Malta, 2013b).

⁶ It has to be noted that Letter Circular CMELD 230/2013 dated 14 June 2013 (Update of the Guidelines for SEC / Matriculation Certificate Access Arrangements – Request for Suggestions) was sent to all Heads of Secondary Schools (State and Non-State) and Sections. The Letter Circular carries an invitation by the MATSEC Support Unit for the submission of modifications in the existing Guidelines. The submission deadline was 28 June 2013. Moreover, the ADSC has updated the guidelines for dyspraxia, following consultations with Occupational Therapists (OTs). These amendments should have been published online as from September 2013.

2.3.2 Secondary schools

- the demand for EAA, during the mid-yearly examinations, is approximately 12% higher than the demand during the annual examinations period (Form 5 students would not sit for the latter examinations);
- EAA for the different levels / tracks / schemes in core subjects has become a substantial task;
- due to limited resources in a number of secondary schools, students who have no statement but have a psychological report, may either not be given EAA or EAA is restricted to a few subjects; and
- extra time is not granted during mid-yearly and annual examinations since candidates and invigilators would have no break between the examinations.

2.3.3 Primary and secondary schools

- in general, EAA requires human resource capacity building but current supply does not meet demand;
- challenges on human resource management;
- logistical organisational challenges⁷ within the school set-up. Catering for the students' personalised needs⁸ during examinations has become a mammoth task;
- it is a common practice for students who are usually supported by a *full-time one-to-one* LSA to be excused from their mid-yearly and annual examinations so that their LSAs are deployed elsewhere to provide EAA for other students. The strategy is considered to be very important to the extent that students with a statement, who attend school during exam days, are seen as an additional burden⁹;
- eligible candidates for EAA, with different levels / tracks / schemes are placed in groups (due to lack of space and resources) to meet at least some of their needs such

⁷ Data sets revealed that there are instances where human resources and logistical challenges may be interrelated. For instance, there are a number of schools allocating a quiet room in corridors. Furthermore, this necessitates the deployment of an LSA and an invigilator with the candidate.

⁸ EAA are provided to eligible students with either an SpLD or SPS report, private psychologist (usually clinical rather than educational psychologist) or other professionals' recommendations.

⁹ In actual fact, this is counterproductive to the concept of inclusion. Encouraging students with a statement to attend school during exam days and personalise their learning should be part of the school's inclusion policy, rather than a burden. It has to be stated that attending school, irrespective of whether or not this is done during exam days, is a fundamental right of every student.

as *reader on request* instead of *reader all*. At times, this may also go against the accommodations that these students may need, *e.g.* a quiet room¹⁰;

- parents and guardians frequently apply pressure for EAA by submitting psychological reports and making several telephone calls during the weeks preceding to the examinations;
- in all schools, SMTs, Inclusive Education Coordinators (INCO), teachers performing INCO duties¹¹, and occasionally Guidance Teachers fill in the required paper work to apply for Benchmark or Secondary Education Certificate (SEC) EAA. This is a time consuming exercise, especially for SEC EAA applications. The INCO and teachers performing INCO duties spend considerable time filling in the applications, including those without a statement of needs, tracking the required documents, meeting with SPS and SpLD personnel, and phoning up parents and other professionals to fill in the requested documentation. This hinders the INCO and the teachers performing INCO duties from conducting the much required observations and support in class to students with IEN, for a number of months, until the applications are completed¹²;
- the overwhelming increase in EAA every year (mainly Benchmark and even more SEC applications) is posing financial implications if one had to consider the time consuming applications, assessments and logistics involved; and
- EAA may be so complicated, especially in large schools, that the School Management Team (SMT) is facing problems due to lack of trained personnel in the field. There are also increased levels of administrative and logistical complexities during examinations which reach unsustainable levels;

¹⁰ A particular school explained the challenges it finds to allocate students during examinations and to grant EAA because the school does not have a hall.

¹¹ This report makes a distinction between INCO and teachers performing INCO duties. Whereas almost all primary schools are supported by INCOs, secondary schools are supported by teachers performing INCO duties.

¹² In secondary schools, the filling of SEC applications (which in a significant number of schools is mainly being carried out by the teachers performing INCO duties) may span from February to May, with just about time to tackle day-to-day activities at school.

2.4 Impact of EAA on SPS

As already indicated, SPS is particularly sensitive to the EAA. SPS is involved in both Benchmark and SEC EAA. However, the workload experienced by SPS has been mostly attributed to SEC EAA. Due to the ever increasing number of applications for SEC EAA, the majority of referrals received at SPS relate to learning difficulties in literacy or attention.

These applications run in parallel to the number of referrals relating to a psycho-social nature, which psychologists at SPS receive from their assigned College. Processing these referrals involves a considerable amount of time due to the intense intervention and constant support of the psychologists. However, SPS has to dedicate considerable time to assess and write reports due to the influx of referrals for EAA. In fact, the assessment and report writing are envisaged to take almost 12 hours per student (Table 1).

Table 1: Breakdown of time taken for assessment and report writing

<i>Assessment</i>	<i>Number of hours</i>
Parent and student interview	1
Psychometric testing	4
Analysis and scoring	1
Report writing	3
Supervision and re-drafting of report	1
<hr/> <i>Additional assessment (ADHD)</i>	
Psychometric testing	0.5
Rating Scale	0.5
Scoring and analysis	0.5

It has to be pointed out that the additional time for setting and re-scheduling of appointments, liaison with school personnel, co-ordinating joint referrals with SpLD, photocopying the required documents, informing parents of the recommendations and subsequent paperwork for submitting to ADSC have not been included in Table 1. This is compounded further during instances when applications are not received on time by SPS.

The assessments carried out by SPS take place mainly over the summer months, which also brings along inevitable delays, namely reduced working hours of staff and students on holidays. Consequently, parents may find it difficult to accompany their children either due to vacations or distant summer / holiday residencies. Moreover, if psycho-social issues requiring therapeutic interventions emerge during SEC assessments, SPS personnel will have to address these emerging needs, over and above the SEC assessment exercise.

In particular, for SPS to accommodate and process this influx of SEC applications, interventions (for either assessments or reviews with assigned College students and their families) are allocated a lower priority and even put on hold. In addition, SPS staff has to refrain from initiating interventions with new referrals between the months of May to mid-November, during which, processing and assessments of SEC EAA are taking place. This contributes to the ever increasing accumulation of referrals in an already lengthy waiting list.

One respondent has indicated that since SPS has limited time available for interventions and ongoing therapeutic sessions with students, families and schools, the subsequent need for SPS' intervention towards the end of secondary school is significant because SPS staff is hindered from making early intervention and prevention at a school level.

Another participant raised very important issues relating to the SEC EAA, labelling the process as a time consuming exercise for schools and Student Services Department. This point warrants further discussion. The participant explained that psychologists at SPS are trained to carry out psychological assessments and measure a range of children's abilities whilst the specialist teachers at SpLD carry out literacy assessments. The MATSEC Access Guidelines (University of Malta, 2011) state that most applicants for EAA require a psychological assessment, even if the presenting need relates exclusively to dyslexia.

It is believed that the ADSC is adamant on this requirement because it is held that presenting conditions may mask other co-morbid conditions and a more thorough psychological assessment would uncover these. Therefore, SEC applicants with dyslexia who do not have a psychological report would still require a referral to SPS. In parallel, with the SpLD literacy tests, SPS carries out the psychological assessment and the reports have to be presented jointly to the ADSC.

In the past, a discrepancy between a child's IQ and performance in literacy and other academic subjects was necessary to identify dyslexia. Recently, the criteria have been amended making it necessary to assess the full profile of the student. The identification of IQ does not determine diagnosis anymore (British Institute of Learning Disabilities, n.d.). This would mean that the specialist teachers at SpLD would be able to carry out the literacy tests and limit the psychological assessments referrals to SPS only in absolute necessary cases, rather than for each and every student. Although this will not influence the number of assessments carried out by SpLD, it will definitely save on time-consuming meetings, liaising time between SPS and SpLD, and reduce the unnecessary workload on SPS.

The participant has expressed two concerns with respect to dyslexia:

1. The SpLD team has highly trained personnel with extensive experience and expertise in identifying dyslexia and, where necessary, they do refer students for further assessment. Students with dyslexia are normally diagnosed either at mid-primary or secondary level and are then followed closely. Therefore, a psychological assessment for students with dyslexia is unnecessary if the presenting difficulties are clearly related to literacy and do not include co-morbid difficulties. (Co-morbid difficulties can be identified during the assessment sessions and from feedback sessions with parents and teachers);
2. The time consuming psychological assessment is to satisfy SEC requirements (and has no practical teaching / learning application). The process is time consuming for educational psychologists; should it be carried out when the student is younger, it would positively impact the student's educational outcome. However, psychological assessment of students after Form 4¹³ is not leading to actual educational benefits or recommendations at secondary school level. This does not reflect the recommendations made by Woods (2007), who points out that EAA are not solely for assessments but also to support the student's teaching and learning, thereby enhancing their self-confidence.

¹³ Occasionally, assessments by the SpLD and the SPS are carried out with Form 3 students who would be turning 16 by the end of the calendar year in which the examinations are held.

2.5 Participants' Opposing Views on EAA

The data revealed a small number of participants who seemed to be sceptical on EAA. All the identified views are reproduced in this section. It has been observed that these views were only received from the primary and secondary school sectors¹⁴.

...pupils who fall in the spectrum of Autism and / or Asperger Syndrome, amongst others, need further assistance during examinations. In order to include such pupils fully during examinations, one needs to provide 1:1 support... in some cases, these pupils should be exempted from summative assessment examinations and a formative assessment by the class teacher should be provided instead¹⁵.

Certain requested requirements are not feasible. If a child is assigned a *reader*, he / she is to be provided with a separate room with two adults¹⁶.

Some children who are allotted a scribe have to share with other pupils. Because of lack of space, these are generally put with pupils who are allotted a 'reader only'. This causes distractions and creates lack of concentration on the most needy¹⁷.

...other pupils with Access Arrangements have to be placed in a group of five or six. Pupils neither benefit nor perform well in a group which consists of more than two or three...having a large group means that sometimes troublesome children are placed with timid children¹⁸.

For the pupils to do well, the pupils need to be allotted the same person throughout the whole examination process¹⁹.

Access arrangement in Secondary Schools is a very complex issue and takes up a lot of energy and is a waste of human resources²⁰.

¹⁴ These views are discussed in the footnotes below.

¹⁵ Students with ASD or Asperger do not necessarily require further assistance during exams. EAA in schools should be given on a personal level as recommended by professional and based on strengths and interests. Giving them FT 1-1 support is a further strain on resources. Summative assessments should be kept to a minimum to all students and formative assessments used regularly. In this way, all students are given the opportunity to improve on their academic work.

¹⁶ If a quiet room is suggested in EAA, this does not necessarily mean that the student stays on his / her own with two adults; the school can include more students in the classroom (on a case-by-case basis) to make effective use of the available human resources.

¹⁷ Schools may require national guidelines to eradicate certain misconceptions; having a scribe warrants that candidates are in a room on their own since their answers to the scribe may be overheard by other students. In addition, the reader should only be given to eligible candidates rather than to all students.

¹⁸ It has to be made very clear that EAA are not given on a personal level and there is nothing wrong for eligible candidates to be in class with their peers who have / do not have EAA. On the other hand, the allocation of classrooms should also be up to the professional judgement of the SMT / INCO / teachers performing INCO duties.

¹⁹ Students should be allotted the same person as much as possible during examinations (imperative for students with autism). However, it should also be made very clear that students need to learn how to work with different teachers and LSAs throughout the scholastic year to enhance their autonomy.

²⁰ This is a misconception. Irrespective of the complexity or perceived complexity, students have a right for EAA and should not be regarded as a waste of resources.

Children who for some learning, physical or psychological difficulties would be hard for them to access the paper, alternative tools might be sought...but not access arrangements which actually defy the proper testing²¹.

Providing a reader during benchmark examinations in the reading comprehension section is extremely problematic. A benchmark exam is meant to measure attainment against a given standard. Our aim at this stage, in our students' development, is to help them acquire independence and autonomy in every possible manner even in the case where learning difficulties exist. However, once students start to depend on another individual to access information it becomes even more improbable that they will ever overcome the challenge to acquire reading skills.

²¹ This comment and the one which follows are discussed in more detail in this report, in sub-section 3.1.1 Concept of EAA among teaching professionals.

2.6 Recommendations Proposed by the Participants

Students eligible for EAA can be very bright, yet may have a low reading age. They may even have the potential to enrol at University or Malta College of Arts, Science & Technology (MCAST), subject that they are given the necessary support and the appropriate and timely interventions which are to be ensured at a very young age. The importance of EAA was expressed by the considerable number of recommendations that were proposed by the participants.

Following the data coding, identified recommendations were clustered into six themes²²:

1. Human Resources (capacity building and adjustments of roles);
2. Teaching and Learning;
3. Additional Support to Students;
4. Premises and Logistics;
5. EAA Workflow; and
6. MATSEC, SEC and University.

1 Human Resources (capacity building and adjustments of roles)

- .1 Suspending services provided by Peripatetic / Support teachers during examination sessions;
- .2 Assigning a number of Peripatetic staff to one school for EAA purposes only to ensure consistency of support with specific students;
- .3 Temporarily suspending LSA support in lower levels of primary years during examination sessions;
- .4 Requesting lower primary pupils not to attend school during examinations;
- .5 Hiring of people who can provide EAA (retired teachers);
- .6 Extensive training for teachers in formative assessment procedures;
- .7 Providing training to teaching staff on dyscalculia and other conditions;

²² Whilst recommendations have been clustered, they are being faithfully reported as submitted by the participants. To this extent, a small number of recommendations may be contradictory to each other.

- .8 Providing INCO and teachers performing INCO duties support to SMT, teachers, Guidance Teachers, LSAs and invigilators on EAA;
- .9 Delegating ownership of students' assessments to SpLD and SPS²³;
- .10 Ensuring the appointment of dyslexia experts on all Boards relating to EAA.

2. *Teaching and Learning*

- .1 Moving towards formative assessment rather than summative (end of year);
- .2 Establishing procedures to identify students requiring EAA at an early stage;
- .3 Developing of Departmental guidelines on EAA²⁴;
- .4 Developing of procedures to determine whether students with IEN should sit for examinations or undergo assessments only;
- .5 Developing of procedures to ensure that EAA are more specific and students become less dependent on support;
- .6 Omitting details of EAA from the students' profiles;
- .7 Refraining from comprehension reading in Benchmark examinations (except for rubrics) given that reading is a skill under test;
- .8 Refraining from providing EAA in Benchmark examinations across the board;
- .9 Adopting a two tier Benchmark assessment for lower ability students;
- .10 Providing a graded Benchmark exam paper to cater for high ability students;
- .11 Providing adapted annual examination papers for all subjects by EAU;
- .12 Providing examination papers in Maltese and English in non-language examinations;
- .13 Providing examination papers in electronic format and / or coloured paper and / or particular fonts / enlarged print;

²³ Several respondents have expressed concern on the veracity of assessments provided by private psychologists.

²⁴ This supports recommendations made by several colleges to ensure that staff members are provided with guidelines on how to address parental pressures – be it on the provision of EAA when they are not necessary. In addition, guidelines should provide clear guidelines on important factors such as the allocation of resources and logistical arrangements.

- .14 Refraining from requesting students with IEN to stay at home during examinations;

3. *Additional Support to Students*

- .1 Providing awareness and guidance to parents on different levels of teaching and implications;
- .2 Encouraging parental involvement to reinforce school support.
- .3 Providing scribe (amanuensis) or word processor for students with dyslexia and who have writing difficulties;
- .4 Providing a wider range of assessment modalities²⁵;
- .5 Extending the allocation of extra time to all students in all examinations;
- .6 Providing a reader when required, including English and Maltese comprehension tests for eligible students;
- .7 Providing guidance and training to eligible students on the use of EAA.

4. *Premises and Logistics*

- .1 Allocation of separate rooms for students with EAA;
- .2 Allocation of same rooms as peers for students with EAA, but seated at the back;
- .3 Limiting school populations to manageable numbers;
- .4 Sharing of resources between schools of the same college *e.g.* use of school hall for a particular EAA.

5. *EAA workflow*

Procedures should be streamlined to ensure that:

- .1 The EAU and the ADSC work in tandem in order to achieve a smooth transition of EAA throughout the students' school years; and
- .2 That schools become more autonomous, hence enabling them to cater for the students' IEN more efficiently.

²⁵ Various modalities were mentioned, namely computer use, oral exams, specialised software (*e.g.* text-to-speech and speech-to-text), laptops, Braille writers, video magnifiers, low vision aids, and overlays, recording of examination papers in MPEG-2 Audio Layer-3 (MP3) format.

6. *SEC, Matriculation and University examinations*

- .1 Continuous revisions of guidelines for SEC, MATSEC and University;
- .2 Providing examinations for oral / aural competencies separate from those for reading / writing competencies in Maltese and English;
- .3 Holding consultation meetings with the ADSC on separate assessment of skills for vocational courses;
- .4 Providing examinations papers, in Maltese and English, for non-language examinations;
- .5 Promoting the use of word processors for all students but disabling spell and grammar checks and predictive software;
- .6 Exploring ways and means to provide different levels of examination for students with lower ability after completing their secondary schooling;
- .7 Holding discussions with university students who require EAA in order to give them an opportunity to voice their concerns and provide crucial feedback;
- .8 Providing amanuensis to students with writing difficulties;
- .9 Limiting the assessments carried out by SpLD and / or SPS specifically to the EAA to be granted for the student;
- .10 Referral to SPS for psychometric assessments should only be recommended either in cases of evidence or suspicion of co-morbidity or complex difficulties.

In addition to the contributions received by the Ministry for Education and Employment, other consultations were held with a number of stakeholders, including Dr Susan Tresman, during the month of June 2013. These recommendations were also grouped in three of the clusters mentioned above.

1. *Human Resources (capacity building and adjustments of roles)*

- .11 Increasing the level of training for teachers on students with IEN during the undergraduate course whilst introducing specialised modules as in continuing education, *e.g.* teaching students with dyslexia, ADHD, autism, *etc.*;

2. *Teaching and Learning*

- .15 Applying multisensory teaching methods (which will benefit all students);
- .16 Influencing a culture that all students belong to the teacher. This may need to be complemented by a revision of the Education Act to ensure that all students have a right to education and the need to be catered for.

6. *SEC, Matriculation and University examinations*

- .11 Since all resources are tied up to multiple decision-taking, but only granting a limited number of EAA, the Ministry needs to accurately establish the actual level of resources engaged in the process to submit recommendations to the ADSC. Subsequently, a quantification of the total cost of all professionals involved (*e.g.* staff at the SpLD, the SPS, teachers performing INCO duties and SMT, members of the ADSC Panel, cost of private reports, OTs' reports, *etc.*) needs to be carried out, leading to a cost-benefit analysis exercise in order to determine an effective way forward with no detriment to the students or their families;
- .12 Decentralising decisions on EAA from the ADSC to Heads of Schools and teachers performing INCO duties (United Kingdom (UK) model) with the support and advice of the relevant professionals and specialised teachers;
- .13 Adopting the procedure implemented during the Benchmark exam and allocate extra time to all students sitting for the SEC exam. This may be reinforced by conducting a pilot study amongst Form 4 students sitting for core subject examinations and hence determine:
 - the percentage of students who finish at least 15 minutes before the allotted exam time;
 - the percentage of students who utilise the entire allocated exam time; and
 - consolidate or otherwise available ADSC data on the utilisation of extra time during SEC examinations.

- .14 Analyse data in order to:
- determine the number of students (namely with dyslexia) who pass the SEC examination;
 - establish the percentage of students with dyslexia who pursue further studies;
 - identify why 70% of the students sitting for the SEC examinations (*e.g.* in May 2011) do not use the allocated extra time²⁶;
- .15 Considering the EAA policy and procedure adopted by foreign universities²⁷;
- .16 Minimise on bureaucracy, which is resource hungry and contributes to extra financial burdens (which may be directed elsewhere²⁸), jeopardising support from the SPS, the SpLD and teachers performing INCO duties to these students;
- .17 Extend support to students with IEN (including students with dyslexia) at tertiary level (considering also the use of specific computer software and use of word processor during their learning process and examinations).

²⁶ The study would determine whether this high percentage was the result of the students' low reading age, which would then necessitate alternative accommodation, such as a reader.

²⁷ For instance, Cambridge University has a relatively relaxed approach to award the accommodation of extra time (requiring only a teacher specialist qualification to provide a report, which would have been compiled at any time throughout the secondary school years).

²⁸ Students with dyslexia can make significant improvement in literacy with appropriate resources and support. Moreover, resources may be redirected and more specialist teachers employed in each college to support students with dyslexia.

3 DISCUSSION

The submissions presented in the previous sections will be discussed by focusing on EAA in both primary and secondary schools and on EAA in MATSEC and University level.

3.1 EAA in Primary and Secondary State Schools

Whilst data seems to indicate a patchwork of EAA in several State schools, there are also several common challenging factors, namely the:

- process;
- logistics; and
- human resources required to grant EAA to eligible students.

These factors are all related to the increase of applicants for EAA.

3.1.1 Concept of EAA among teaching professionals

A minority of school staff members was still of the opinion that EAA provide an unfair disadvantage, claiming that the award representing the standards of attainment in that examination would be lowered and that the prospective school / training centre / employer could be misled on the students' capabilities. Therefore, a balance needs to be reached between "feasibility" and "fairness" (Woods, 2007, p. 94) so as to ensure the validity and reliability of the examination.

Part III, regulation 7(5)(b) of The Equal Opportunities (Persons Disability) Act (CAP 413) (2000) specifically refers to the right of people with disability to access examinations and pursue their studies by

...appropriately adjusting or modifying examinations, training materials or policies, providing qualified readers or interpreters, and making any other similar alterations for a person with a disability.

There needs to be a culture change amongst the teaching professionals that traditional exam formats have to give way to "valid testing accommodations" specifically designed for the student to access the exam without altering the "nature of the test" (Salend, 2008, p. 16). Salend further explains that access to examinations should be based on the student's qualities, strength and challenges and the EAA should parallel the teaching and learning in class. As a matter of fact, he cites several authors who subscribe to the view that changes in the

examination process, environment, equipment and / or technology used for specific students to gain access to examinations do not change the nature of the test in question or the objectives being tested but solely overcome the barrier set by the disability.

As indicated in section 2.5 of this report, a number of teaching professionals still oppose and perceive EAA as “actually defy(ing) the proper testing.” Teaching professionals need to acknowledge that the “intention behind many access arrangements is to meet the particular needs of the candidate without affecting the integrity of the assessment” (Joint Council for Qualifications, 2012). In fact, EAA should give the necessary assistance to the students to access an examination. However, EAA should not be granted if it alters the understanding, demonstration of knowledge or the performance of the skills that are being assessed by the examinations.

Readers during examinations also aroused conflicting views within the teaching profession. The matter was raised by a participant who gave feedback on the reader for Benchmark examinations. He described the reader as

extremely problematic...[o]ur aim at this stage in our students' development is to help them acquire independence and autonomy. However, once students start to depend on another individual to access information it becomes even more improbable that they will ever overcome the challenge to acquire reading skill.

“Independence and autonomy” may be achieved during the teaching and learning process throughout the whole scholastic year but it is unjust for these students to be denied access to any examination. It has to be highlighted to all teaching professionals that EAA are not exclusively for assessment purposes; this has to be reflected in the teaching and learning for these students (Woods, 2007). Therefore, rather than depending on others to access information, the use of, for instance, computer software for these students in their daily lives should be encouraged further so that they become autonomous learners²⁹. This ‘personalised’ learning could potentially motivate the eligible students to pursue their studies further, rather than drop out of school because of numerous barriers that they would have encountered during their school years.

Keeping in mind that examinations demonstrate the mastery of academic content and / or measure content skills, as already highlighted, EAA are an integral part of the teaching and

²⁹ A pilot project is already being carried out by the SpLD, with primary and secondary school students with dyslexia, on the effectiveness of different types of software (speech-to-text and text-to-speech) to be possibly implemented on a national scale.

learning process. Therefore, it is imperative that eligible students become familiar with the granted EAA as soon as they acquire them, so that they can actually become trained on how to utilise them. In addition, an evaluation of the process, logistics and whether or not EAA were appropriate, effective, just and beneficial for specific students should be carried out after each examination session.

3.1.2 The process, logistics and human resources required for EAA

Several colleges have pointed out in their feedback that there is an increase in eligible candidates for EAA, every year. This is presenting a challenge on the process and the logistics of the examinations, and causing a strain on the available human resources.

Several respondents in the teaching profession suggested the need of clear national guidelines on EAA so that these may help to make use of the best possible resources available at school, especially human resources. As discussed earlier, EAA are part of the learning process and should be granted by the school as soon as they are required, with relevant assessments and support from the educational psychologists and / or dyslexia specialist. To some extent, this may reduce the strain on the process since the continuous support by the College Services and the evaluation of EAA given during tests / examinations would be an on-going process.

When one considers the time consuming logistics required for EAA, the idea of doing away with the mid-yearly examinations and the (unnecessary) burden on both teachers and students to make it to the ‘race for examinations’ should be considered in depth. The actual preparation and revision for the mid-yearly examinations, and subsequently the examinations *per se* in addition to the class correction of the paper that most teachers carry out, may easily take *circa* a month from effective teaching and learning.

As one of the respondents has succinctly discussed, this precious time can be utilised more effectively by replacing the mid-yearly examinations (except for Form 5 students) with formative assessments. This would entail, however, training sessions for teachers³⁰ on this effective way of assessing students and obtaining feedback on the development of their skills, ways to improve, and how to proceed (University of Oregon, n.d.). This allows more preparation for the summative assessments at the end of the year. Therefore, the SMT can focus more on the process and logistics. Moreover, human resources can be managed better

³⁰ Training for teachers on formative assessments should take place in small groups, and subject based if possible.

for effective EAA to be granted to eligible candidates. This might require other logistical modifications, *inter alia*:

- spreading the annual examinations over a longer period of time;
- listening comprehension for the different language subjects will have to be carried out in the days preceding the examinations³¹; and
- altering the time of the school day perhaps to accommodate extra time.

These strategies can alleviate the issue of limited human resources because they enable better management, without the need to have FT 1-1 students staying at home – an issue which was highlighted by several respondents.

The participants from secondary schools commented on the logistical implications of levels / tracks (core subjects) when it comes to examinations. There have been suggestions from the participants that the different track exam papers should be available in different colours to minimise the possibility of errors, which have occurred during examinations. Occasionally, this has led to students being given incorrect tracks / levels by the invigilators.

Several participants have suggested that the EAU should also prepare adapted annual examination papers for non-core subjects from Forms 1 to 5 and made available for students with IEN. Extending the preparation of adapted annual examination papers for non-core subjects will address what seems to be a custom of exempting some students with IEN from mid-yearly and annual examinations (because there are currently no alternative examinations for non-core subjects). It will also ensure that the education system remains accountable for these students (Dempsey & Davies, 2013).

However, standardising the adapted annual examination papers for non-core subjects (by having the EAU prepare the examination papers) is debatable for at least two main reasons. Tasking the EAU to prepare adapted annual examination papers for non-core subjects (Forms 1 to 5) would entail an overwhelming logistical exercise which will burden the EAU. Then, adapted non-core subject examination papers should be prepared at school by subject teachers

³¹ This procedure has already been adopted in Church schools and may therefore be considered for State schools as well.

in liaison with the student's LSA³². This would promote autonomous schools that are able to specifically cater for students with IEN and monitor closely the progress being made and that Individual Education Programme / Plan (IEP) goals are being met.

3.1.3 Universal design of exam papers

The need of adopting a continuation in the EAA offered to eligible students throughout their schooling years (primary and secondary) is imperative. In addition, examinations also have to be designed in a way that they are accessible as practicable as possible to as many students as possible, including those with different abilities (Maxwell, 2013).

Thurlow (2010) cites several authors who have discussed the principles of universal design and the importance of adopting these principles when designing assessments on a large scale *e.g.* in national examinations. These principles will ensure that the examinations “produce fair and equitable measures of what all students know and are able to do” (Johnstone, 2003 as cited in Thurlow, 2010, p. 121).

Universally designed examinations help improve assessing students with IEN, where there are evident barriers to obtain an exact way of measuring their performance. In fact, examinations that have been well designed in both *content* (subject matter) and *design* (organisation and arrangement of information and images) can be accessed by everybody; poorly designed examinations are disadvantageous for everyone (Thompson, Thurlow, Quenemoen, & Lehr, 2002).

3.2 MATSEC and University Examinations

The ADSC Guidelines (University of Malta, 2011, p. 12) are clear that,

[a]ccess arrangements are intended to provide candidates with the necessary assistance to access MATSEC examinations. Access arrangements cannot be granted if the assessment criteria are compromised or if they directly affect performance in the skills that are being examined. Candidates must be able to demonstrate the knowledge, understanding, and skills that form part of the assessment criteria for that particular examination.

³² This practice is already carried out in certain colleges (secondary). However, the preparation of the adapted examination papers is mainly being carried out by the LSAs and the teacher only reviews the final version of the adapted examination paper. Moreover, adapted examination papers can be also provided to students who have similar needs but do not benefit from the support of an LSA.

The MATSEC Board and ADSC also recognise their responsibility to ensure that whilst granting EAA, the validity and reliability of examinations shall not be compromised.

3.2.1 Feedback by the ADSC

In principle, the feedback submitted by the ADSC has yielded interesting recommendations although several of them are still under consultation with the MATSEC Board.

The ADSC recommended that oral / aural competencies separate from those for reading / writing competencies in Maltese and English could possibly be available up to secondary level. However, this requires further consultations so that this separate assessment of skill can be carried out in parallel with SEC examinations. It was also stated that “ultimately the two examinations (*i.e.* oral / aural and reading / writing) would not be considered equivalent in standard” but may be purposeful for a number of courses *e.g.* vocational courses.

It was also suggested that SEC non-language examination papers will be available in Maltese and English. Although it may be expected that most students would prefer to use their native language to express themselves better during an examination, the increasing number of students from different cultural backgrounds or students with IEN, such as autism, would prefer to opt for an English version of the examination.

Although EAA are granted to eligible candidates, a number of students still fail the examination, irrespective of the EAA. The ADSC suggests “a dignified examination level that allows them to show their learning also at the end of secondary education in a way that they can use it for further education or employment.” This concept of basic and functional (adapted) examination papers for students with a lower ability should ideally be in continuation with the secondary school, as has already been discussed. With the recommended implementation of the Core Curriculum Framework as from the scholastic year 2013-2014, certain standardisation of curriculum content could be established³³.

³³ A way for students following the Core Curriculum Framework to exhibit their learning progress is to have formative assessments carried out from Forms 3 to 5, in addition to an adapted examination paper *e.g.* in core subjects.

3.2.2 Application of EAA to the ADSC

The overwhelming increase of applications requesting EAA has been confirmed by all stakeholders; the ADSC received 90 SEC applications for EAA in 2002 and 496 in 2012 (University of Malta, 2013a). This report has already highlighted the time and projected financial implications that MATSEC EAA applications are presenting to all those involved³⁴.

Feedback received by the Ministry for Education and Employment, from participants working in the education sector, specifically remarked the substantial workload inflicted by SEC EAA application process on the SPS. The majority of referrals, which the SPS receives for SEC EAA, relates to learning difficulties in literacy and attention. The ADSC claims that out of the 496 applications for EAA received in 2012, 158 were requests by students with dyslexia, 90 applications by students with Attention Deficit Disorder (ADD) / ADHD and dyslexia and 92 applicants with ADD / ADHD. It is not uncommon that students with dyslexia, which make the majority of MATSEC applicants for EAA, are assessed by the SpLD and have a specialist report. However, the majority of these students do not have an educational psychologist report. In this respect, the MATSEC Guidelines (University of Malta, 2011, p. 52) require that:

requests for access arrangements for candidates with SpLD must be accompanied by at least one full and detailed psycho-educational assessment by a warranted psychologist as well as an updated literacy assessment by an educational psychologist or specialist teacher.

The MATSEC Guidelines (University of Malta, 2011, pp. 27-28) tabulates the main professionals who are required to compile a report for the students with dyslexia. The Guidelines specify that in these cases, either psychologists or educational psychologists are the main professionals, and dyslexia / literacy specialists are assigned as the supporting professionals. Research shows that there is a perception amongst several educational professionals that psychometric evidence undermines all other sources of information especially when it comes to high-stake examination EAA. Others claim that psychometric tests can be very subjective (Brinckerhoff & Banerjee, 2007). More specifically, some refer to dyslexia as a “latent variable that is imperfectly measured by varying attempts to

³⁴ Most of the personnel involved during MATSEC EAA applications are SMT members, teachers performing INCO duties, and at times Guidance Teachers for paperwork, the SpLD and the SPS for assessments and subsequent paperwork and meetings with the parents. The ADSC Board Members acknowledged that the increase in MATSEC applications is presenting logistical and financial implications (University of Malta, 2011).

operationalise *unexpected underachievement* (Francis *et al* as cited in Brinckerhoff & Banerjee, 2007, p. 249).

The ADSC claims that its request for a psychological report for most of the candidates with impairment applying for EAA (even if the presenting condition relates exclusively to dyslexia) is that the presenting conditions may mask other co-morbid conditions. The ADSC claims that a thorough psychological assessment would uncover these conditions. However, as already explained elsewhere in this report, this assessment is only carried out at the end of Form 4 and there are concerns as to whether or not this is actually leading to any educational improvement. Moreover, the personnel at SpLD are highly trained and qualified³⁵ and should there be any need of referring a student, they always work closely with the SPS.

It is interesting to remark that whilst the ADSC requires psychometric assessments for students with dyslexia to be granted EAA during SEC examinations, top foreign universities do not request psychometric assessments as part of the EAA requirements for undergraduate students (Table 2).

Table 2: Personnel conducting assessment for EAA during undergraduate courses in foreign universities

University	Qualified personnel conducting assessment	Online address
University of Cambridge	Educational psychologist or Specialist teacher	http://www.admin.cam.ac.uk/univ/disability/students/exam.html
Harvard University Division of Continuing Education	Clinical or educational psychologists, neuropsychologists, learning disabilities specialist and medical doctors trained in the field	http://www.extension.harvard.edu/sites/default/files/extension_lgld.pdf
The University of Oxford	Psychologist or specialist teacher	http://www.ox.ac.uk/students/shw/das/examinations/

³⁵ Most of the personnel at the SpLD have just read a Master's degree in the subject matter and are awaiting the final results.

Although Section A of the MATSEC EAA application has been recently revised, it is believed that it is still time consuming, should be more concise, and an online version made available.

3.2.3 EAA granted by the ADSC

The received data sets focused on the lack of provision of readers for students with dyslexia in SEC language examinations. It has already been explained that this is also affecting secondary school provision of EAA during school examinations since it is argued that students need to be prepared for their MATSEC examinations. Hence, a number of schools refrain from granting a reader to eligible candidates, usually from Form 3 onwards.

The MATSEC Guidelines (University of Malta, 2011, pp. 12-13) specify that:

...even candidates with dyslexia whose reading age is below 10 years and would (in non-language subjects) qualify for a reader, cannot have the paper read to them during a language examination³⁶. In such assessment, reading and writing the language is a skill that the candidates must demonstrate.

In 2011, 36.14% of the requests received by the ADSC for SEC EAA referred to students with specific learning difficulty / dyslexia and ADD / ADHD / SpLD / Dyslexia³⁷ (University of Malta, 2013a). The ADSC records also indicate that during the same year, only 30.2% of the eligible candidates used the granted extra time (University of Malta, 2013a). However, there are no records available, which would indicate what fraction of the 30.2% captures students with specific learning difficulty / dyslexia and / or ADD / ADHD / SpLD / Dyslexia.

In the UK, the majority of requests for EAA in General Certificate of Secondary Education (GCSE) examinations are received from students with dyslexia. Furthermore, the most frequent of the UK requests is for a reader. For these students to access high-stake examinations, they require a certain level of reading accuracy, speed, and comprehension.

³⁶ Letter Circular CMELD 230/2013 dated 14 June 2013 puts forward a newly recommended procedure, which entails that candidates with a score either below 11.00 years on the locally standardised English reading Comprehension test or below 10 years on the Neale Analysis of Reading Ability (NARA) II Accuracy Scale, a reader is granted. However, this does not apply for language examinations.

³⁷ The number of students with specific learning difficulty / dyslexia and ADD / ADHD / SpLD / Dyslexia increased to 50% in 2012.

For this reason, students may undergo several assessments and their below average performance in one or more of these reading skills makes them eligible for a reader during examinations³⁸.

The lack of application of several assessments in Malta is not the only issue. Woods (2004) reported a study by Sawyer, Ferguson, Hayward and Cunningham et al, whereby it was concluded that many GCSE papers had parts of texts, which corresponded to a readability age of 15 years and even 17 years. This readability age is beyond the cut-off age of 11.00 years (Standardized English Reading Comprehension Test). There are no known studies of the readability level of SEC papers.

Thus, on the basis of lack of assessment and data on the readability levels of SEC papers, it may be concluded that students with dyslexia may be at a disadvantage with their 'non disabled' peers and that granting extra time to students with reading difficulties does not offer the same opportunity as having a reader (Griffiths & Woods, 2010). This may also explain the 30.2% figure mentioned above, although the ADSC seems to attribute this figure to the students' lack of preparation for the examinations. A reader would be crucial because the process of decoding text would not impede the higher order reading skills as in comprehension (Woods, 2004).

Although the ADSC insists that students have to demonstrate that they can read and write a language, at least one foreign examination board (whose guidelines were consulted and adopted by the ADSC)³⁹ grants a computer reader / reader for GCSE and General Certificate of Education (GCE) "in papers (or sections of papers) testing reading....since it allows the candidate to independently meet the requirements of the reading standards" (Joint Council for Qualifications, 2012, p. 15).

The ADSC feedback on EAA made reference to the above document; however, the document was considered to have "unclear and contradictory documentation" with respect to readers in language examination papers, by the ADSC.

³⁸ Notwithstanding these assessments, researchers view the cut-off points of student assessments' results as 'arbitrary' and a number of the non-identified or 'ineligible' students would also make fair use of the EAA provisions to demonstrate their attainment (Woods, 2007).

³⁹ MATSEC Guidelines were developed on the regulations and guidance of the UK Joint Council for Qualifications (September 2006 – August 2007). The UK Joint Council for Qualifications has revised the regulations and guidance (latest version dates September 2012 – August 2013).

Notwithstanding, The Joint Council for Qualifications (JCQ) (2012, p. 20) does give clear guidelines for GCSE English:

GCSE English assessment objectives show that learners must actually "read" and demonstrate understanding of the written language. This means taking meaning off the page from text or Braille, therefore, **a reader would not be permitted for components that assess reading.**

***N.B.:* A candidate may however use a computer reader in the section of the paper that assesses reading since it allows the candidate to independently meet the requirements of the reading standards.**

It is understood that for a language examination, a computer reader, rather than a human reader, is allowed since the latter may carry a limitation during examinations *e.g.* tone of voice (Joint Council for Qualifications, 2012). The JCQ also grants a reader or a computer reader for Advanced Level (A Level) English (Joint Council for Qualifications, 2012). There have been several instances where Maltese students with dyslexia, eligible for a reader, have applied for their SEC English examination and were not granted a reader. However, they were granted a reader when they applied with Edexcel.

Other EAA given by foreign universities (Durham University, n.d.; George Mason University, n.d.; The University of Vermont, n.d.; Trinity College Dublin, n.d.; University of Cambridge, n.d.; University of Oxford, n.d.; University of Stirling, n.d.) to students with learning difficulties are summarised in Table 3.

Table 3: EAA granted by foreign universities at tertiary level

University	Exam modifications	Online address
George Mason University	Extra time, oral examinations, readers, quiet environment, word processor.	http://ods.gmu.edu/students/services.php
University of Stirling	Exam papers in alternative format, separate accommodations for examinations, use of IT facilities for examinations including voice activated software for dictation, extra time and respite breaks.	http://www.student-support.stir.ac.uk/advice/disability/teaching-learning/index.php/
University of Vermont	Extra time, use of assistive equipment (computer and appropriate reading and writing software), reader, scribe, oral examinations, enlarged print, private room.	http://www.uvm.edu/epc/?Page=AltTest.html
Ireland Trinity College	Computer with assistive technology software for reading and writing, scribe, extra time, oral examinations.	http://www.tcd.ie/disability/services/Exam%20accommodations/index.php#reason

University of Cambridge	Reader ⁴⁰ , word processor, extra time, scribe.	http://www.admin.cam.ac.uk/univ/disability/students/exam.html
University of Oxford	Extra time, word processor with assistive software (read and write), scribe, one exam per day.	http://www.ox.ac.uk/students/shw/das/examinations
Durham University	Word processor with specialised software (reading and writing), enlarged papers, coloured filters for reading, spell checker, scribe, reader, quiet room.	http://www.dur.ac.uk/dusds/handbook/examarrangements/otherfacilities/

Several foreign universities facilitate the use of computer readers for students with dyslexia during their course of study and subsequently their examinations. Some even go a step further and suggest computer software that can be used for the student's perusal.

On similar lines, the University of Malta gives an overview of the support that may be available to students and staff with a disability at the University (University of Malta, 2013b). Students are encouraged to become familiar with word processors to enhance their independence. A list of EAA is provided, including waiving of specific entry requirements, time extension for completing assessments or the course, and the use of additional resources. EAA for students with dyslexia, sitting for University examinations, will be given extra time in "severe dyslexia" (University of Malta, 2013b, p. 11) but not readers or scribes since "UoM requires that all students have acquired the skills of reading and writing"⁴¹ (University of Malta, 2013b, p. 21). The use of word processors may be accepted as writing tools for students with severe disabilities including dyspraxia, however, spelling, grammar and other literacy checkers will be disabled during examinations.

Data indicates that UoM still expects prospective students to be literate even if some debate that proficiency may be expressed orally and not necessarily through written examinations. The ADSC still insists on proficiency in literacy and hence is not in a position to provide scribes and readers at tertiary level. Notwithstanding this, the ADSC encourages students to

⁴⁰ The University of Cambridge does not allow readers for language exams.

⁴¹ The UoM insists on students to acquire skills of reading and writing due to two main factors:

- i. many mature students reading for a degree could not cope with the course in spite of their work experience and maturity; and
- ii. some students would have passed the examination on the basis of irregular help received during the examination session rather than their own merits (*vide* sub-section 2.2.4 Post secondary and tertiary level).

develop strategies to become independent readers so that they will benefit from available technology after graduation. These two points seem to be conflicting.

When considering the EAA given by top foreign universities, one may be concerned that the University of Malta is at a disadvantage. Moreover, students may be discouraged from pursuing their studies, potentially losing prospective human resources.

3.2.4 Concluding thoughts

High-stake examinations play an important role in transition from schooling to further education, training, and employment. Therefore, EAA may help eligible candidates to pursue their studies / training or seek employment. Finding the most appropriate EAA, for each student, means that one has to have a certain degree of resilience rather than adopting a rigid application of the guidelines. This would depend on the candidate's needs and feasibility without affecting the integrity of the exam. However, EAA must not mislead whoever consults or refers to the candidates' certificates (Directorate for Quality and Standards in Education, n.d.), whether it is for employment or to pursue their studies.

Testing has become “the centrepiece of accountability” (Brinckerhoff & Banerjee, 2007, p. 246) since it is an information tool to determine what skills the students would have acquired. Schools therefore need to develop good identification protocols and take the responsibility to select students eligible for EAA, based on recommendations from educational psychologists and SpLD specialists. Certain EAA, such as a reader, would require a professional recommendation by the school; however, extra time would not.

The setting up of a National Examinations Authority (NEA) should be considered, with the objective of alleviating the burden currently experienced by the ADSC as a result of the ever increasing number of applications. The objectives of the NEA should be to ensure that EAA are granted for the benefit of eligible students, monitoring the process, and take any necessary actions on the basis of reported evaluations. This would also include EAA for A Levels so that a streamlined approach to teaching, learning, and assessment is ensured throughout the students' academic years in the best interest of consistency.

Modifications in the MATSEC Guidelines on EAA may also need to be considered together with the inclusion of other EAA such as oral language modifiers, bilingual translation dictionaries (for foreign students), and the use of computer processors with specialised

software. The role of the NEA should also include auditing the whole EAA process, including the veracity of educational psychologist reports, which were referred to in this report on numerous occasions. A list of appointed educational psychologist could also be compiled and revised as necessary.

Schools need to take onus of suggesting EAA. Moreover, by reducing the current bureaucracy for granting EAA in late secondary schooling years, personnel from the SPS and the SpLD would be more available to give their recommendations and support in schools. In fact, this move is predicted to be in the right direction. If students are being supported throughout their learning, given the necessary EAA, and trained on how to use them, long term beneficial results should be expected (Griffiths & Woods, 2010). As suggested elsewhere in this report, if mid-yearly examinations are replaced with formative assessments, more attention can be given to the logistics required by the annual examinations and the training required by eligible candidates on the use of EAA.

Alternative forms of testing need to be considered. The majority of students spend between 31% to 60% of their school days exercising handwriting skills; however, students with dyslexia and dyspraxia encounter difficulties to write due to challenges in visual integration and motor information (Horne, Ferrier, Singleton, & Read, 2011). Nowadays students are proficient with keyboard use and if they practice, they can type faster than they can write. Several high-stake examinations are being driven to computer-based testing, described as the “next frontier”, due to the increasing number of candidates’ requests for EAA and the presenting complexities in disabilities (Brinckerhoff & Banerjee, 2007, p. 247).

Computers have been used during examinations in Denmark, for over a decade and in 2012 a pilot project was carried out in 14 colleges where internet was also used during examinations⁴². The Honourable Bertel Haarder, who served as Denmark’s Education Minister, commented that “our examinations have to reflect daily life in the classroom and daily life in the classroom has to reflect life in society” (Association for Computing Machinery, 2010, p. 1). Although computer-based testing is more cost effective, there are other considerations, which affect the validity of the examination for students with IEN, rather than putting paper and pencil test on a computer. These may include issues of equity,

⁴² The objectives of these examinations were to locate and analyse information rather than encourage rote learning as is required by most high-stake examinations.

lack of skills in technology and computer use, and securing online data (Thompson et al., 2002).

Further high level discussions are therefore required to outline the best way for students' IEN to be assessed in the most efficient manner, and determine the feasibility of granting the appropriate EAA to meet their needs, without compromising the assessment's objectives. The recommendations received during this consultation period should serve as a detailed framework to analyse and determine short, medium, and long term strategies and eventually achieve the above.

REFERENCES

- Association for Computing Machinery. (2010). Web used for final exams in Denmark. *Communications of the ACM*, 53(1), 21.
- Brinckerhoff, L. C., & Banerjee, M. (2007). Misconceptions regarding accommodations on high-stakes tests: recommendations for preparing disability documentation for test takers with learning disabilities. *Learning Disability Research & Practice*, 22(4), 246-255.
- British Institute of Learning Disabilities. (n.d.). Factsheet - learning disabilities. Retrieved 16 March, 2011, from <http://www.bild.org.uk>
- Carcary, M. (2011). Evidence analysis using CAQDAS: insights from a qualitative researcher [Electronic Version]. *The Electronic Journal of Business Research Methods*, 9, 10-24. Retrieved 28 December 2011, from <http://www.ajbrm.com>
- Chesler, M. (1987). Professionals' views of the "dangers" of self-help groups, *CRSO 345*. Michigan: Center for Research on Social Organization, University of Michigan.
- Dempsey, I., & Davies, M. (2013). National test performance of young Australian children with additional educational needs. *Australian Journal of Education*, 57(1), 5-18.
- Directorate for Quality and Standards in Education. (n.d.). Guidelines and definitions for access arrangements during school examinations (excluding benchmark). Floriana: Author.
- Durham University. (n.d.). Provision of other facilities. Retrieved 12 June, 2013, from <http://www.dur.ac.uk/dussd/handbook/examarrangements/otherfacilities/>
- Equal Opportunities (Persons Disability) Act. (2000). Act I of 2000 as amended by Legal Notice 426 of 2007; and Acts II and XXIV of 2012, *Civil* (pp. 19). Valletta: Laws of Malta.
- George Mason University. (n.d.). ODS Process. Retrieved 12 June, 2013, from <http://ods.gmu.edu/students/services.php>
- Griffiths, D., & Woods, K. (2010). School processes in providing reading support in GCSE examinations. *British Journal of Special Education*, 37(4), 180-189.
- Horne, J., Ferrier, J., Singleton, C., & Read, C. (2011). Computerised assessment of handwriting and typing speed. *Educational & Child Psychology*, 28(2), 52-66.
- Joint Council for Qualifications. (2012). *Access arrangements, reasonable adjustments and special considerations: general and vocational qualifications*. Retrieved 15 May 2013, from <http://www.jcq.org.uk/exams-office/access-arrangements-and-special-consideration/regulations-and-guidance/access-arrangements-reasonable-adjustments-and-special-consideration-2012-2013>

- Lewins, A., & Silver, C. (2009). Choosing a CAQDAS package. 6th Edition. Retrieved 01 February, 2010, from <http://www.caqdas.soc.surrey.ac.uk/training.html>
- Maxwell, L. A. (2013). Access to common exams probed. *Education Week*, 32(27), 1.
- Muhr, T., & Friese, S. (2004). User's manual for ATLAS.ti 5.0 (2nd ed.). Berlin: Scientific Software Development.
- Salend, S. J. (2008). Determining appropriate testing accommodations: complying with NCLB and IDEA. *Teaching Exceptional Children*, 40(4), 14-22.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques*. London: SAGE Publications Ltd.
- The University of Vermont. (n.d.). Alternative testing services. Retrieved 12 June, 2013, from <http://www.uvm.edu/epc/?Page=AltTest.html>
- Thompson, S. J., Thurlow, M. L., Quenemoen, R. F., & Lehr, C. A. (2002). Access to computer-based testing for students with disabilities. (*Synthesis Report 45*). Retrieved 07 June 2013, 2013, from <http://education.umn.edu/NCEO/OnlinePubs/Synthesis45.html>
- Thurlow, M. L. (2010). Steps toward creating fully accessible reading assessments. *Applied Measurement in Education*, 23(2), 121-131.
- Trinity College Dublin. (n.d.). Exam arrangements for students with disabilities. Retrieved 12 June, 2013, from <http://www.tcd.ie/disability/services/Exam%20accommodations/index.php#reason>
- University of Cambridge. (n.d.). Exam access arrangements. Retrieved 12 June, 2013, from <http://www.admin.cam.ac.uk/univ/disability/students/exam.html>
- University of Malta [UoM]. (2011). *Guidelines to MATSEC examinations access arrangements*. Msida: Author.
- UoM. (2013a). Access Arrangements. Unpublished powerpoint presentation. Msida: University of Malta.
- UoM. (2013b). *The University of Malta access arrangements*. Msida: Author.
- University of Oregon. (n.d.). What are the most inclusive methods of assessment? Retrieved 07 June, 2013, from <http://www.tep.uoregon.edu/resources/universaldesign/assessment.html>
- University of Oxford. (n.d.). Alternative examination arrangements. Retrieved 12 June, 2013, from <http://www.ox.ac.uk/students/shw/das/exams/?path=shw/das/exams>
- University of Stirling. (n.d.). Student development and support services. Retrieved 12 June, 2013, from <http://www.student-support.stir.ac.uk/advice/disability/teaching-learning/index.php/>

Woods, K. (2004). Deciding to provide a 'reader' in examinations for the General Certificate of Secondary Education (GCSE): a question about validity and 'inclusion'. *British Journal of Special Education*, 31(3), 122-127.

Woods, K. (2007). Access to general certificate of secondary education (GCSE) examinations for students with special educational needs: what is 'best practice'? *British Journal of Special Education*, 34(2), 89-95.