MALTA

Country Report on ICT in Education

Available on http://www.eun.org/observatory

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2015
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1. THE EDUCATION CONTEXT

1.1 KEY EDUCATIONAL CHALLENGES AND PRIORITIES

The key challenges for schools in Malta include:

- Improving the success rates of students who leave the compulsory education system
- Fine tuning the educational system in order to target the needs of the current and future economy
- Fine tuning the educational system so that it caters for students with mixed abilities within a common setup.

Important measures to address the above key challenges include the drafting, design and development of the National Curriculum Framework. The new curriculum framework entered into force in 2013, after it had been approved by the Maltese Parliament. The NCF is now being implemented by a tangible design of the complete curricular system known as the ‘Learning Outcomes Framework’ (LOF). This will ensure that the challenges listed above (and others) are addressed. In all areas, curriculum experts and designers are highly encouraged to make use of ICT / e-Learning tools to enhance the students’ learning experience, in particular by means of e-Learning.

1.2 EDUCATION REFORMS

Major reforms include:

Co-ed (co-education) system: Until now, the Maltese secondary education system was divided by gender. Male students attend separate schools from girls. As from 2014, the co-ed system was introduced gradually, whereby students are no longer separated by gender.

Mixed-abilities educational system: The Maltese secondary education system consisted of two streams: the high ability stream and the low ability stream. With the mixed-abilities educational system introduced in 2009, this divide ceased to exist and students with different abilities are being given a common educational setup.

Institutional organisation: Schools now form part of ‘Colleges’. There are eight colleges in Malta & Gozo. Each college comprises: primary schools and secondary schools. Throughout the educational continuum, students progress from one school to another within the same college.

2. ICT IN EDUCATION POLICY

2.1. NATIONAL/REGIONAL ICT POLICIES

In 1992, the University of Malta and the Education Division developed a National ICT strategy. This was used as a roadmap for the integration of ICT in the curriculum.

In 1994, computers were introduced into secondary schools. Each secondary school had 12 PC’s installed in a computer lab with an average of two labs in each school. Teachers were trained in the previous summer and in-service training continued throughout the following years. ICT was phased in gradually year by year and integrated with three subjects: Math, English and Social Studies. All ICT teachers were encouraged to undergo professional development and ICT diploma courses were designed to upgrade the teachers’ ICT academic qualifications. At the same time a small unit of teachers was set up to support and create content for ICT in secondary schools.

In 1995, computers were introduced into primary schools with four computers in each class. Primary Teachers were also trained and given a laptop. The Department of Technology in Education was set up and support was extended to the primary sector.

In 2001, computer studies was introduced as an option in secondary schools and a year later ICT
as a separate subject was changed to the ECDL course.

To cater for these changes, more computers were introduced and more labs set up. In 2008, laptops were deployed to all teachers (primary and secondary) and all computers in schools were upgraded.

In 2007, the government published the National ICT strategy and National e-Learning Strategy ‘Smart Island and Smart Learning’. Interactive Whiteboards (IWB’s) were introduced in a number of schools and training continued for all teaching grades.

2.2. RESPONSIBILITIES

No information provided.

2.3. SPECIFIC ICT INITIATIVES

1:1 mobile learning initiatives (including the use of netbooks, laptops, tablets, mobile phones or other mobile devices)

To support literacy, the government will implement the ‘One Tablet Per Child’ Project. As of October 2016, one tablet computer will be given free of charge to all students in Year 4 in State and non-State Schools in the Maltese Islands. A Pilot Study has been conducted with 350 students in 20 State and non-State Schools between October 2014 and March 2015. Currently, the outcomes of the Pilot are being analysed and they will form the basis of the national implementation of the project. Around 4,300 students will benefit from the Project in October 2016. Teachers and LSAs will be trained in the pedagogy of tablets and the hardware/software. Educational and pedagogical leaders will also receive training on the use of one-to-one devices such as tablets and their role in education.

ICT for inclusion (early school leavers, migrants, etc.) and special needs (physical, mental, emotional)

A new ICT CCP (Core Curriculum Programme) has been developed for students with relatively low abilities. This programme has been designed and developed around the needs of this target audience. As such, this curriculum programme is more focused on the practical side of learning focusing on the most important, real-life needs for such students to become digitally competent.

2.4. ICT PRIORITIES

- Department for Curriculum Management, MALTA
- eLearning Centre DQSE Malta

A: Digital Competence Development

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<tr>
<th>Area</th>
<th>High</th>
<th>Mid</th>
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<tbody>
<tr>
<td>Developing measures to support digital competence for future teachers</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Developing measures to support digital competence for in service teachers</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Developing measures to support school leaders in the integration of ICT</td>
<td>X</td>
<td>X</td>
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<tr>
<td>ICT for learning initiatives targeted to boost youth employability and entrepreneurship</td>
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<td></td>
<td>X/ X</td>
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<tr>
<td>ICT for accessibility and inclusion: early school leavers, migrants, etc… and special educational needs</td>
<td>X</td>
<td>X</td>
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Reference to policy action measure related to Digital Competence Development:

- Smart Learning Malta strategy 2008 - 2010
- Digital Malta - National Digital Strategy 2014 - 2020
B: ICT in Curricula and Assessment

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<th>Area</th>
<th>High</th>
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<tbody>
<tr>
<td>Developing computer/programming skills</td>
<td>X</td>
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<tr>
<td>Developing key competences</td>
<td>X</td>
<td></td>
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<tr>
<td>Developing 21st century skills (critical thinking, problem solving, communication, collaboration, and creativity and innovation)</td>
<td>X/ X</td>
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<td>Assessing with ICT/ICT based exams</td>
<td>X</td>
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<td>Learning Analytics</td>
<td>X</td>
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Reference to policy action measures related to ICT in Curricula and Assessment:

- National Curriculum Framework 2012

C: System-wide innovation

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<th>Mid</th>
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<tbody>
<tr>
<td>Piloting and validating innovative uses of ICT</td>
<td>X/ X</td>
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<tr>
<td>Mainstreaming ICT in schools</td>
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Reference to policy action measures related system-wide innovation:

- Education in Malta

D: Mobile Devices

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<th>Area</th>
<th>High</th>
<th>Mid</th>
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</tr>
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<tbody>
<tr>
<td>Use of tablets</td>
<td>X/ X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of mobile phones</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Bring Your Own Device</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Cloud computing</td>
<td>X</td>
<td>X</td>
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Reference to policy action measures related to Mobile Devices:

- One-tablet-per-child initiative

E: Use of digital resources

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<th>Mid</th>
<th>Low</th>
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<tr>
<td>Developing educational content repositories/metadata</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Supporting the development of open educational content and resources</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Supporting the development of educational content/resources provided by publishers</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Promoting the use and sharing of educational resources with teachers</td>
<td>X/ X</td>
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F: Learning environments

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<tr>
<td>Linking formal and informal learning using ICT</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Providing equitable access to ICT (infrastructure, devices and content)</td>
<td>X/ X</td>
<td></td>
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<tr>
<td>Providing a safe learning environment to students and teachers</td>
<td>X/ X</td>
<td></td>
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<tr>
<td>Commissioning ICT related research</td>
<td>X/ X</td>
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3. THE CURRICULUM AND ICT

3.1. ICT BASED ASSESSMENT

Currently, one of the few ICT based online assessment programmes is the ‘SSr summative, simulated programme’, which is used by all Form 5 ICT students. It has been designed and developed in-house.

Another ICT based assessment programme is the ECDL certification Mock Exam and examinations which are designed and developed by ENLIGHT in accordance with the standards set by the ECDL foundation.
3.2. SCHOOL IMPROVEMENT WITH ICT

No information provided.

3.3. THE CURRICULUM FRAMEWORK

All curricula are developed centrally by the Department of Education, in collaboration with Education Officers, Heads of Department and subject/area Teachers.

3.4. ICT IN THE CURRICULUM

In primary education, ICT is not taught as a separate subject but is integrated in a cross-curricular approach, mainly based on the use of e-Learning tools. Peripatetic Teachers are responsible for this.

At secondary school level, ICT is more focused on a subject-based approach. A weekly ICT lesson is taught throughout the 5-year programme of studies. This subject covers the ECDL curriculum/certification, preparing students to become digitally competent.

3.5. STUDENTS’ ICT COMPETENCE

The targets set are those specified by the ECDL foundation through the ECDL (NEW ECDL) curriculum.

Link: http://www.ecdl.com/

3.6. ASSESSMENT OF ICT COMPETENCE

The assessment takes place as an online-mock exam that students have to pass and the subsequent actual Enlight ECDL exam. Scores are automatically calculated and generated remotely by the ECDL database system and the certification is awarded accordingly.

4. DIGITAL LEARNING RESOURCES AND SERVICES

4.1. E-CONTENT DEVELOPMENT

For grades three to eight, reusable Learning Resources were designed for the following subjects: Maltese, Maths, English, Science, Social Studies, Geography and History. They were linked to related objectives in the respective curricula.

4.2. CONTENT SHARING

The Virtual Learning Environment ‘ilearn’ allows teachers to share their contents. An increasing number of teachers is using the platform to share content. Link: https://sso.ilearn.edu.mt

4.3. ACCESSIBILITY FOR LEARNER WITH DISABILITIES AND SOCIAL INCLUSION

The department of services identifies the students who require special tools which facilitate their learning in a mainstream classroom. The department also recommends software to be purchased and eLearning support on how to use this software.

4.4. WEB 2.0

The ‘eTwinning’ platform promotes Web2.0 tools within schools through projects.

Link: http://www.etwinning.net/

4.5. LEARNING PLATFORMS

‘iLearn’ is the platform used in both state primary and secondary schools. Each year, there is an increase of usage, particularly in the primary sector. The main barrier for the uptake is related to difficulties that some teachers have with the use of hardware.

Also see section 4.2. Content sharing.
5. TEACHER EDUCATION FOR ICT

5.1. ASSESSMENT SCHEMES

The ICT knowledge of secondary teachers is already tested and verified during the teachers' selection phase, but no ongoing assessment on the use of ICT takes place.

5.2. SCHOOL LEADER SUPPORT

Regular in-service training programmes provide support to school leaders.

5.3. ICT FOR INCLUSION

A small unit within the e-Learning department is solely responsible for ensuring the accessibility of learning materials for students with special needs. This unit provides hardware and software resources and expert help for the design of specific curricula.

See also section: 4.3. Accessibility for learners with disabilities and social inclusion

5.4. ICT IN INITIAL TEACHER EDUCATION

The University of Malta ensures that all students studying to become teachers are taught a good level of ICT skills and knowledge.

5.5. ICT IN IN-SERVICE TEACHER EDUCATION

In-service training on ICT is organised on a yearly basis, offering both compulsory and voluntary courses.

5.6. TRAINING THE TEACHER TRAINERS

Specialised Teachers at the e-Learning centre provide various courses for teachers to become experts in particular fields such as: web development, photography, VLE users, Computer Aided design, ECDL advanced etc.