

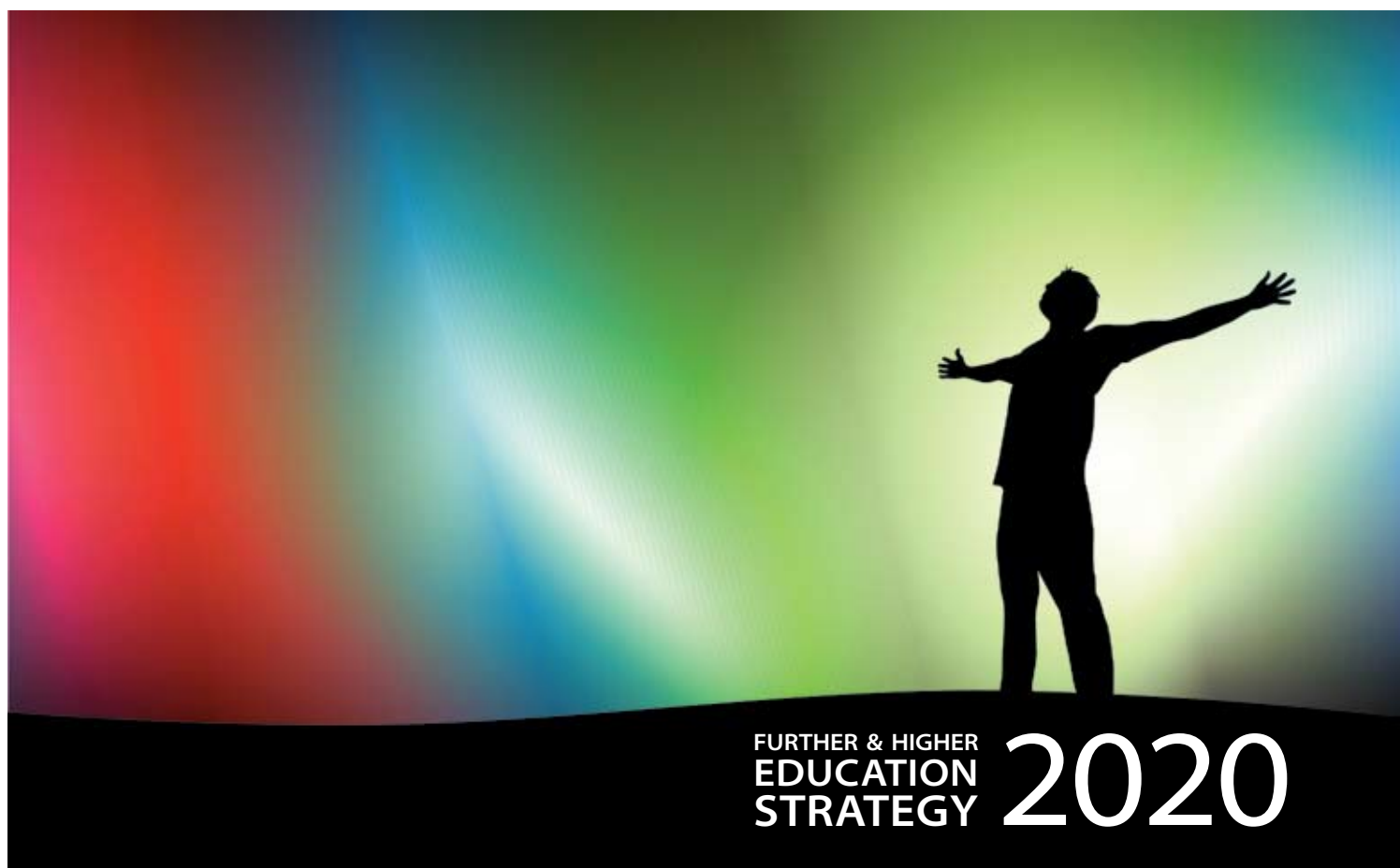


Kummissjoni Nazzjonali għall-Edukazzjoni Oghla
National Commission for Higher Education

Further and Higher Education Strategy 2020

Recommendations of the
National Commission for Higher Education

April 2009 | Malta



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Further and Higher Education Strategy 2020 – Recommendations of the National Commission for Higher Education

April 2009

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Foreword by the Chairman of the NCHE

Longer term planning and strategy formulation for further and higher education is an absolute priority for the Maltese Islands, particularly in an increasingly dynamic and global environment.

Moreover, in today's volatile economic environment, the need for a clear and focused strategy has assumed even greater significance.

The National Commission for Higher Education believes that its strategy, as outlined in this document, can serve as a reference and guide for both further policy development and actions for consideration by the education authorities.

It embodies the aspirations and commitment of students, teachers and leaders of further and higher education institutions towards our joint ambition to transform the sector into a centre of excellence by 2020.

During the course of the consultations held earlier this year, the NCHE listened attentively to the views, concerns and recommendations put forward by various stakeholders. These were debated at length by the Commission and the content of this strategy document is the product of this debate.

Some of the issues raised required more insight than others and possibly deserve further discussion and investigation. No doubt the debate on a number of issues will continue unabated.

The NCHE is committed to continue co-ordinating structured dialogue that leads to strategy formulation and informed decision taking.

The NCHE believes that the time for strategic decisions on further and higher education matters is now ripe.

Any future reforms contemplated by Government should take into consideration not only the recommendations outlined in this strategy but also the wider context of socio-economic developments, fiscal and EU policies and commitments, as well as reforms in the compulsory education sector.

2020 may seem distant. As far as further and higher education is concerned, a proportion of students aged 9-11 today will by that date be stepping into our colleges, institutes and university. Their opportunities in education depend on decisions taken today.

Dr Philip von Brockdorff
Chairman

Executive Summary



This report outlines the strategic thrusts for further and higher education development in Malta over the next decade. It outlines the socio-economic and educational challenges being faced and the national and international contexts within which education is developing.

NCHE presents a vision for these sectors based on a set of guiding principles and a set of targets necessary to measure progress. The strategy elaborates this vision and proposes a series of concrete measures towards four strategic objectives:

- 1) Attract more young students and adults into further and higher education;
- 2) Ensure fair and open access to all students willing to further their studies;
- 3) Make Malta a centre of excellence in education and research;
- 4) Sustain public responsibility for adequate regulation, resources and funding to secure an inclusive, qualitative and responsive education system.

The scale of current economic turmoil, social changes, increased globalisation, and demographic changes leading to an ageing population, all require a future workforce with a different portfolio of knowledge and skills and a new approach to education policy as an integral part of medium to long term planning to respond to these changes.

The main educational challenges which need to be addressed include the current high levels of school leavers who do not continue following post secondary education related to a number of factors in particular the structure of state secondary schooling, the need to attract more students in areas of national priority in particular science and technology related areas, and the level of adult participation rates in vocational education, training and continuous development.

The final challenge for educational systems at all levels is the need to develop a 'quality culture' and to introduce the necessary systems and practices which take institutions on a continuum of improvement.

The NCHE is urging for an ambitious response to these challenges. The following outlines the recommended actions of the Strategy:

Objective 1: Attract more young students and adults into further and higher education;

Priority 1: Attract more students to continue their studies after compulsory education into post secondary and university studies:

- Attract 85% of students leaving school into post-secondary education (both general and vocational programmes) by 2015;
- Attract 35% of school leavers into higher education by 2020.

Priority 2: Encourage students to undertake studies in areas relevant to Malta's economic, cultural and social development

- Increase recruitment to scientific and technical studies by 10% over the next 10 years;
- Attract 30,000 more students and adults in areas identified as a national priority for development; and
- Develop a structured platform for business and education research and collaboration.

Priority 3: Attract foreign fee paying students to study in Malta in various fields of study and research

- Attract 5,000 fee paying foreign students by 2020 in various fields of study and research;
- Develop an external policy for F&HE and co-ordinate efforts of the sector with Malta's international representation offices;
- Co-ordinate the entire necessary framework to ensure seamless access to education services for European and third country nationals.

Priority 4: Adapt systems for adults seeking Life Long Learning opportunities

- Provide 4% of adults between 24 and 64 year of age with life long learning opportunities in F&HE by 2020;
- Develop an F&HE Life Long Learning strategy 2020 by 2010;
- Develop a sustainable portfolio of evening and continuous professional development programmes;
- Secure fair and equitable access to all Maltese students willing to pursue studies at a further and higher education level in a state or private institution in Malta.

Objective 2: Ensure fair and open access to all students willing to further their studies:

Priority 5: Secure fair and equitable access to further and higher education with particular focus on vulnerable groups

- Sustain student support schemes;
- Ensure in particular that support systems are in place for vulnerable groups, particularly people with disabilities, people with learning difficulties and ethnic minorities.

Objective 3: Make Malta a centre of excellence in education and research:

Priority 6: Assure quality provision across all institutions and their programmes

- Promote excellence in further and higher education and in research by creating a quality culture across the sector;
- Establish a quality assurance agency and provide for independent evaluation;
- Monitor the performance and quality of outcome of all private provision offered in and from Malta and safeguard quality standards.

Priority 7: Develop Malta's Qualifications Framework and qualification recognition services

- Develop the Malta Qualifications Framework (MQF) to describe the levels of different qualifications, based on standards of knowledge, skills, competences and attitudes to be acquired by learners;
- Use the European Qualifications Framework as a reference tool to compare Malta's qualifications to the different qualifications systems in Europe;
- Encourage the use of learning outcomes to define and describe qualifications, and promote the validation of non-formal and informal learning;
- Promote the participation of all relevant stakeholders - higher education and vocational education and training institutions, social partners, sectors and experts on the comparison and use of qualifications;
- Facilitate the recognition of qualifications granted in foreign countries to Maltese students, or the recognition of qualifications awarded in Malta to foreign students or Maltese seeking to use such qualifications abroad, through the Malta Qualifications Recognition and Information Centre (MQRIC) and ensure its active participation within the ENIC/NARIC networks to provide assessments in a fair manner and in a reasonable time.

Priority 8: Increase the University of Malta's research capacity

- Develop the capacity of the University of Malta to undertake research in a broad range of areas of strategic national priority;
- Attract promising graduates into a research career;
- Ensure that quality of research reaches international standards of excellence.

Priority 9: Facilitate and promote student and teacher mobility

- Sustain foreign language learning and maintain the high level of English language proficiency in students;
- Encourage higher participation in European and international mobility programmes for students and staff such as Erasmus, Erasmus Mundus, Grundtvig and other sponsorship programmes available;
- Increase portability of local student support schemes to those students choosing to pursue studies in other EU states;
- Strengthen European co-operation on the development of initiatives for mutual exchange of students, staff and researchers.

Objective 4: Sustain public responsibility to secure an inclusive, qualitative and responsive education system:

Priority 10: Ensure responsive systems through adequate governance and funding policies

- Establish common principles, objectives, and guidelines for more proactive governing structures within the state further education sector;
- Orient the internal governance system of the University of Malta towards more strategic planning, professional governance and internal accountability;
- Review funding systems – the adequacy of public funding, the extent to which institutions can generate other sources of income and the efficiency with which funds can be utilised for timely responses;
- Promote Malta as a destination for investment in educational services for international markets.

Priority 11: Maintain active participation and co-operation within Europe and Internationally

- Consolidate Malta's participation within the Bologna Process and implement the necessary actions to position Malta with the European Higher Education Area up to 2020;
- Ensure that targets set for Malta within the renewed

Lisbon Agenda are met and maximise the opportunities for exchange of good practices and shared experience with other member states;

- Ensure that the goals of the Copenhagen Process are met on a national level, in particular through the validation of non-formal and informal learning and the implementation of the future European Credit system for Vocational Education and Training (ECVET);
- Ensure that Malta plays an active role in the development of the European Research Area (ERA)
- Develop an all encompassing external policy to embrace opportunities beyond the European level for international co-operation and visibility.

Priority 12: Develop and implement a long-term Investment Plan

The current investment plan projects the following:

- Expenditure on further and higher education will amount to €1.2 billion over the coming years up to 2020;
- Over 100,000 students and adults attaining further and higher levels of qualifications; and
- Raising potential revenues of over €1.5 million annually as a result of attracting 500 foreign fee-paying students annually by 2020 towards the objective of attracting 5,000 students to Malta in the coming decade.

Further and higher education institutions have the primary role to respond to these challenges and students are key partners in this process.

This strategy serves to outline the challenges of education systems in terms of changes in organisation, incentives, quality of resources to deliver curricula and qualifications that will improve what is available to young people and adults in the future.

The starting point is to make clear the issues that need to be resolved and measures to overcome the challenges ahead

Chapter 1

INTRODUCTION



Background

The National Commission for Higher Education (NCHE) was established in 2006 to consult and advise Government through the Minister responsible for Education, to engage in a structured dialogue with all institutions, and inform the public on issues relating to sustainable development of the further and higher education sectors to meet the needs of society.

Its main functions in accordance with the Education Act Cap. 327 of the Laws of Malta, include:

- (a) ascertaining the needs and the aspirations of further and higher education institutions;
- (b) informing the public of issues connected with sustainable development of further and higher education sectors in Malta in order to meet the needs of society; and
- (c) providing advice to Government on any matter which is connected with the further and higher education sectors.

More specifically, the NCHE has the responsibility for:

- (a) formulating the guiding principles for further and higher education, and propose a clear vision and sustainable strategic targets;
- (b) developing and promoting a structured dialogue among the institutions in the further and higher education sectors and with relevant stakeholders in the socio-economic development, including students and their organisations;
- (c) publishing studies and thematic reviews which it deems to be important as relating to:
 - (i) national strategy for further and higher education;
 - (ii) key performance indicators on the further and higher education sectors in Malta; and
 - (iii) benchmarking performance against international developments.

This document is a response to this primary function of the NCHE and represents the basis for further work, continued dialogue in defining effective measures for the development of the sector.

This document is the result of the NCHE's first two years of work, which have shaped the current recommendations after extensive consultation, research and deliberations.

It is the first Strategy being recommended and the NCHE is committed to review the strategy every three years.

NCHE's structured dialogue with all stakeholders

In 2007 the NCHE launched a consultation process to determine the most pressing structural issues perceived by stakeholders in the sector.

During this first round of consultations the NCHE identified three priorities:

- 1) the need for a new Licensing, Accreditation and Quality Assurance framework;
- 2) the need for reforms in Governance of state institutions to ensure their effective response to future development requirements; and
- 3) the need for reviewed funding systems to ensure sustainable development of all institutions in their mission to provide quality teaching and research.

The NCHE consulted with all major stakeholders and launched a series of actions involving research, seminars and reports to develop the recommendations on the three major issues identified.

The following actions form the basis of this strategy document and include:

- A conference and set of recommendations for a new "Licensing, Accreditation and Quality Assurance Framework" (2008);
- A Statistical Survey for F&HE to measure the sector in terms of student participation and type of provision (2008);
- A conference and report addressing "Skills for the Future" identifying potential skills gaps and the necessary measures to address and align educational responses (2009);

- A review of student support schemes with a view of mapping the full extent of student support schemes available and identifying any potential improvement to support all students in terms of fair access to further and higher education (2009);
- Initial research on funding and governance systems of State institutions in view of the above. In every project and at every stage of the NCHE's work, all stakeholders have been consulted. The response has been encouraging and the overall consensus on the various recommendations of the NCHE is indicative of the spirit with which the NCHE has co-ordinated this process.

With the appointment of a new NCHE Board in November of 2008, the NCHE has renewed its efforts to consolidate the work of these initial years.

In January 2009 the Minister for Education Dolores Cristina requested from the NCHE a Strategy for Further and Higher Education up to 2020.

NCHE presented a draft vision statement which outlined the main thrusts of a strategy for F&HE. During consultations held with all stakeholders during February and March 2009, the NCHE received feedback on the pressing issues which the sector continues to face.

A seminar was held on the 24th February with all stakeholders, to formally present the draft vision and to receive feedback on the initial reactions of the various institution, staff and student representatives. Written feedback was also invited.

Recommended Strategy

The NCHE has the task to set a long-term course for both the Further and Higher education sectors. The interdependence of these sectors reinforces the need for both to be presented under one framework.

The second aim is to chart the steps that will be needed to follow that course. NCHE is convinced about the need for structural change; and clear about those areas that need to be addressed immediately.

The recommendations presented in this strategy ensure that the system is not overburdened by change – however the agenda is a challenging one for all involved.

Fast responses to the priorities identified are required. NCHE urges government to act swiftly within a long-term framework of reforms.

The NCHE is presenting a strategy that reflects our very mission: “to promote more and better further and higher education to empower all students with knowledge and skills for their future.”

The principal aim is to equip young people and adults with the knowledge and skills necessary to face an ever changing future – at work and in the course of life in general.

The NCHE highlights the need for the education system to adapt itself around the needs of learners and be responsive to changing needs of employers and the economy.

Institutions must ensure that in their respective missions and their diverse approaches, they address these matters through the portfolio of courses they offer.

The NCHE believes in the primary role of institutions to respond to these challenges and the partner role of students to actively understand and participate in this process.

This strategy does not aim to prescribe in any manner the approaches that different institutions choose to adopt. It serves however to set out the common concerns and challenges of education systems in terms of changes in organisation, incentives, quality of resources to deliver curricula and qualifications that will improve what is available to young people.

Our starting point is to make clear the issues that need to be resolved and a set of recommendations on how to overcome the challenges ahead.

The report outlines the strategic thrusts for Further and Higher education development in Malta over the next decade. It outlines the vision for the sectors, the principles which should guide all stakeholders, the targets necessary to measure progress, the policy measures required, and the outcomes which will ultimately transform Malta into a growing, prosperous economy and inclusive society.

Chapter 2

FURTHER AND HIGHER EDUCATION – CHALLENGES FACED



Further Education

Further education in Malta includes all formal education of persons above the compulsory school age, leading to qualifications classified at NQF levels 1 to 5¹. This includes all post secondary public and private colleges and institutes which provide general and vocational education.

General education is provided mainly by two higher secondary schools, the Junior College, two church and two independent private sixth forms. The Further and Higher Statistics Survey carried out by the NCHE in 2008, identified a student population at this level of 4,946 in public institutions and an additional 1,151 students in independent institutions.

Post-secondary vocational education is provided mainly by the Malta College of Arts, Science and Technology (MCAST) and the Institute for Tourism Studies (ITS). The student population in these two public colleges was 5,028 in 2008. There were an additional 749 students who were pursuing vocational post secondary courses in other private institutions.

In total, there were 11,847 students enrolled in further education, with 84% enrolled in the public sector. A total of 223 courses are provided, 65% of which were provided by the public sector.

The further education sector has a critical place in delivering the necessary knowledge skills and competences to young school leavers and adult learners alike. The impressive growth of the vocational sector in the last decade has demonstrated the importance of further education and its significant impact across a broad range of political, economic and social policy agendas.

The economic impacts are reflected by increases in the number of students who continue to further their studies towards obtaining a post secondary qualification. In this sense, young people are better prepared to face the occupational demands in their future workplace.

The increasing participation of adults undertaking part-time courses primarily at MCAST and ITS are also indicative

¹ Part VI, Article 63, Education Act Cap. 327, Laws of Malta

of an increasing importance of continuous professional development, training and re-training for active participation in the labour market.

Beyond this, the performance in further education is also showing the positive impacts it is having on a much broader policy context to help address skills matches aligned with Government's efforts to attract high value added investment to Malta through the co-ordinated provision of learning.

The further education sector provides a general education pathway through sixth forms and colleges, offering the necessary preparation for progress into University level education. The growth in numbers sustains the need for a highly qualified workforce in the future.

Additionally, the vocational route in further education has offered many a chance to gain more education after completing their secondary level education, and seek occupational and practical learning opportunities and gain mid level qualifications for different occupations.

The part-time segment in further education is also offering adult learners an opportunity to access learning and improve their skills and competences. The role of further education institutions to address the needs of adult learners will in the long run determine the effective ability of our education system to assist adults who seek training or re-training to access a fast changing landscape in terms of employment opportunities.

As the economy moves into transition from low value added industries towards high value added service sectors, more alignment in the provision of adult learning opportunities would be required to ensure inclusiveness in the labour market.

The vision for excellence in various sectors of Malta's economy depends on professional standards in the underlying workforce. Different trades and occupations (e.g. construction, health care, tourism, manufacturing, mechanical engineering, information and communication services, etc.) will all require professional occupational standards based on adequate qualifications to claim excellence.

The strategy gives equal focus to ensure growing participation in this sector which poses a formidable and ambitious challenge to Government and society at large. NCHE is convinced that together we can achieve impressive results.

Higher Education

Higher education includes all formal education, training and research for persons above compulsory school age, leading to qualifications classified at NQF levels 6-8.

Tertiary education in Malta is offered predominantly by the University of Malta, which provides services for 97% of the total tertiary level student population. The number of students enrolled at the University of Malta in 2008 was 9,508 with an additional 239 in the private sector.

Private providers provide programmes of foreign universities. The private sector provides for 7% of tertiary level programmes, often in niche areas not provided for by the University of Malta.

The importance of the University of Malta and higher education cannot be stressed enough. The University of Malta has defined Malta's historic development, its social and political fabric, and economic prosperity.

In a future where a rapid economic transition towards a knowledge-based economy is envisaged, the University of Malta's ability to provide high quality teaching coupled with its other objective of undertaking research, is certainly the most crucial factor for Malta's chances of success in a competitive and open global economy.

The quality of teaching at the University of Malta in the next decade will determine the standards of quality in all the economy for the next fifty years. The quality of research will determine not only the University's ability to exploit contemporary science and technology discoveries and innovations, but also its ability to go one step ahead and be more innovative and more competitive than its peers.

Similar to the challenges of further education, the higher education sector faces funding constraints in the face of growing demands, faces exponential growth in the growing body of knowledge available worldwide, and growing costs to access ever more sophisticated teaching and research resources.

Apart from the growing participation rates of young students who successfully complete their post-secondary qualifications, the University of Malta faces the challenge of more adult learners who seek to obtain higher education at a mature age or come back to study as part of their continuous vocational training.

During an award ceremony for Scholars of the Malta Government Scholarships Scheme, the Prime Minister Lawrence Gonzi compared highly qualified students to other precious resources such as oil available in other countries. He stated that whilst natural resources are finite in supply, human resources, their knowledge, skills and genius are infinite.

The NCHE believes that the economic and social returns to investment in human capital far outweigh the costs. This together with the ability to create the necessary supporting economic climate to attract and retain the best brains in Malta, should be amongst the top priorities of any Government programme over the coming decade.

Research

The ongoing work of the University of Malta in research continues to demonstrate the potential of Malta in the field of research and innovation.

The University of Malta performed well under FP 6 and is currently participating in seven FP7 projects amounting to around € 920,000 in funding².

The Malta Government Scholarship Scheme (MGSS) launched in the last two years sponsored 44 students to follow studies at a doctoral level and 81 at a Masters level since 2006 to date . 24% of Maltese students currently pursuing a doctoral programme are preparing for a career in research³.

The Strategic Educational Pathways Scholarships Scheme (STEPS) is a new scheme intending to assist graduates in pursuing post-graduate levels of academic research in areas identified as a national priority, and will award over 400 Masters and 70 Doctoral scholarships between 2009 and 2013 in the focus areas of Research, Science and Technology, ICT, Education Capacity Building and other areas identified to address Skills mismatches⁴.

This Strategy is intended to dovetail the National Research and Innovation Strategic Plan (2007-2010) spearheaded by the Malta Council for Science and Technology (MCST).

² Data is up to the end of October 2008. Source (Malta Council for Science and Technology)

³ MGSS database, MEDC

⁴ NCHE Further and Higher Education Statistics 2008

⁵ This indicator includes enrolments at the University of Malta and through the MGSS in the fields of 'science, mathematics and computing' and 'engineering, manufacturing and construction'.

⁶ STEPS information provided by the Ministry of Education, Culture, Youth and Sport

Socioeconomic challenges

The scale of current economic turmoil, social changes, increased globalisation, and demographic changes leading to an ageing population, all require a future workforce with a different portfolio of knowledge and skills and a new approach to education policy as an integral part of medium to long term planning to respond to these changes.

Economic outlook

Current economic downturn

The recent global financial crisis is expected to have a short to medium term impact on the global economy including Malta. The world economic crisis is affecting production, trade, consumption, and in consequence labour markets and prosperity. Employment in the European Union is forecasted to fall by 3.5 million jobs in 2009⁷.

Against this background, policy makers are increasingly emphasising the role of education and training systems as important instruments to generate human capital with relevant skills, improving competitiveness and adaptation to new demands in the medium term.

Malta's education and training systems must synergise all their efforts during this phase of activity – delivering both short term responses to situations that will arise whilst also keeping in mind the necessary long term needs of the country once this phase is surpassed.

Low activity and employment rates of the working age population

Those countries being hit by economic recession and which have high activity and employment rates may be capable of absorbing certain shocks in the short term.

On its part, Malta has lower employment and activity rates, particularly female activity rates, implying that most families depend on a single breadwinner. Any employment shocks in Malta, although smaller in relative scale, could have more serious implications on households depending on a single income. Malta's current situation is a vulnerable one.

Eurostat figures⁸ show that the current total labour market activity rate in 2008 was of 58.8%, whilst that for the EU-27 was of 70.9%. This is mainly due to low participation in the labour market of females, the activity rate of which is 41% compared to the EU-27 figure of 63.8% in 2008, and due to early retirement rates. Only 28.7% of the 55-64 year old bracket was in employment in 2008⁹.

In addition Malta has relatively low employment rates when compared to the EU-27 average; 55.2% compared to 66% for 2008¹⁰.

In 2007, the employment rate of people with high education attainment was of 85.5% compared to 49.4% for those with low educational attainment¹¹.

Mobilising youth into further and higher levels of education must remain a central pillar of Malta's development policies.

Future employment trends in sectors, occupations and qualifications

Malta continues to experience considerable structural change. Over the past decade, shifts away from the primary sector and manufacturing towards services and knowledge-intensive jobs continued. Although formulated prior to the current economic crises, Vision 2015 had envisaged more of this gradual shift in the future.

Education systems are also contributing positively to these structural shifts and often have pre-empted their effects on the future prospects of their students through their revised courses, curricula and research.

At an EU-wide level, it is anticipated that fewer routine skills and more creative skills will be required, more familiarity with digital technologies, more skills specific to particular trades and a growing demand for critical thinking and adaptability of workers.

In a study conducted by CEDEFOP¹², the reference scenario outlined the need for almost 20 million jobs to be created across the EU between 2006 and 2020. This is despite losing almost three million jobs in the primary sector and 800,000 in manufacturing. The distribution and transport sector, including

⁷ Figel Jan, EU Commissioner for Education, Training, Culture and Youth, during opening speech for CEDEFOP Conference, "Continuity, consolidation and change: towards a European era of vocational education and training, Agora Conference, 16-17 March 2009, Thessaloniki.

⁸ Eurostat (2008), Data in focus, 40/2008, Population and social conditions

⁹ National Statistics Office, (2008), News Release 173/2008, Labour Force Survey: Q2/2008, Malta

¹⁰ Eurostat (2008), Data in focus, 40/2008, Population and social conditions

¹¹ Eurostat Database (website) – Persons with low educational attainment by age group.

¹² CEDEFOP (2009), Continuity, consolidation and change – Towards a European era of vocational education and training. Luxembourg: Publications Office (2009)

hotels and catering, will create more than 4.5 million additional jobs; employment in non-marketed services, including health and education, is projected to grow at a similar rate. The best prospects for employment lie in business and related services with more than 13.5 million jobs being created by 2020.

European Commission projections¹³ for Malta by sector follow the same patterns, with a total expansion demand of 14,000 jobs. Any efforts to economic recovery are anticipated to focus even further on the same trajectory and possibly sharpen the focus on fast growth sectors.

Early identification of changing needs for knowledge and skills

Recent research undertaken by the NCHE shows that not enough research and forward-planning mechanisms are in place within education policy planning, focusing on jobs and skills, identification and avoidance of skill mismatches, gaps and shortages.

In its report on “Skills for the Future”, the NCHE urged for more research actions to anticipate future skill needs for Malta and to urge institutions to link these findings in their strategies. This is echoed in the EU Commission’s communication on “New Skills for New jobs” which takes on board a focus on anticipation and matching of skills needs.

Skill mismatch in future labour markets

Skills mismatch is a complex problem to deal with. Persistent skills mismatches may prolong unemployment, discourage foreign direct investment or lead to serious operational problems within specific sectors.

For certain groups, skills mismatches pose serious consequences. Rapid change in technology and workplace organisation and insufficient updating of skills for ageing low-skilled workers contribute to skills obsolescence, putting these workers at risk of job loss and social exclusion.

Given the trends towards increasing skill requirements in all sectors and occupations, there are concerns about potential mismatches between labour force education and skill levels on the one hand, and job requirements in the labour market on the other. Workers are increasingly more likely to perform different

tasks and jobs during their working lives. Consequently, they need to be supported to cope with these transitions by a series of measures, including continuing training and guidance.

All this will lead to significant challenges to be faced by education and labour market policies. A concerted effort to cope with structural change will be required. This may include intensive retraining and continuing training requirements from the education system – in particular of adults and people at risk of unemployment and those in precarious sectors and occupations. Implementation of lifelong learning strategies and policies to reconcile flexibility and security take on a new dimension.

Demographic change

As a result of the current changing demographic features of Malta’s population, and in particular the baby boomers moving to retirement age, working age populations will decline considerably in the coming years and decades. So will student population cohorts.

The Maltese working age population is forecasted to fall from 286.7 thousand in 2007 to 284.1 thousand in 2015 and 251.5 thousand in 2050¹⁴.

In the next 40 years, the average age will increase all over Europe and despite increasing participation rates, labour supply will decrease.

Ageing impacts on education in three ways.

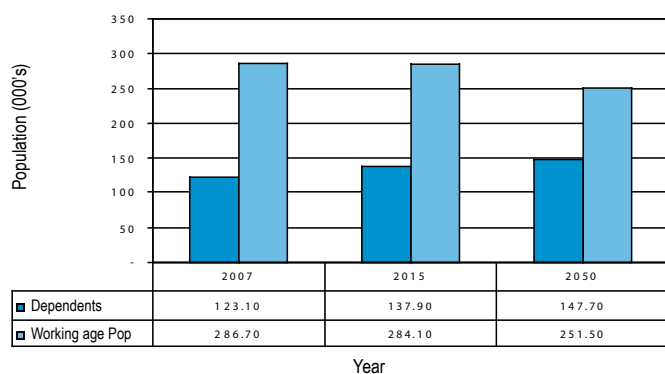
- (a) more adult learners will demand further and higher education as well as training and re-training in the future;
- (b) an increasing dependency ratio places an onus on younger generations to reach higher levels productivity, which in turn will create the need for more education, knowledge, skills and competences in younger cohorts;
- (c) declining birth rates and shrinking student populations, imply that although Malta is targeting increases in participation rates, this does not imply significant increases in absolute terms of student populations of younger cohorts.

¹³ CEDEFOP (2008), Future skills needs in Europe. Medium-term forecast: synthesis report. Luxembourg: Publications Office, 2008

¹⁴ National Statistics Office (2007), Demographic Review 2006, Malta

The impact of ageing is shown in Chart 2.1 below, where the substantial reduction in the working age population is countered by an increase in the dependents (0-14 year olds and 64+). The resulting dependency ratios would change from 2.33 in 2007 to 1.69 in 2050. This has a significant impact on the welfare costs that need to be afforded by younger generations in the future.

CHART 2.1 - DEPENDENCY RATE IN POPULATION (2007-2050)



Source: National Statistics Office (2007), Demographic Review 2006, Malta

Education challenges

High levels of school leavers who do not continue following post secondary education

In Malta, the compulsory school age is up to 15 years of age. Students who stop attending school at 16 are not deemed to be early school leavers in terms of local legislation. Structural indicators of the EU however define early school leavers as those not attending education leading to a post secondary qualification.

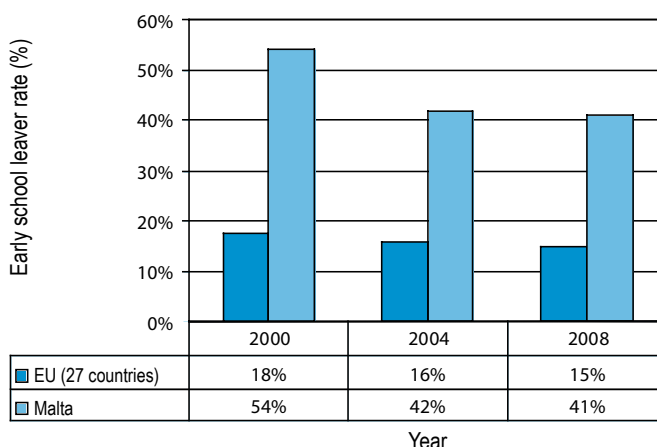
The indicator for early school leavers comprises of the following three criteria defined by the results of the EU Labour Force Survey:

- Those aged between 18 and 24 years;
- With at most ISCED Level 2 (below upper secondary qualification) and ISECD Level 3c short; and
- Not in education or training (in the last 4 weeks before responding to the Labour Force Survey).

The target set in the Lisbon agenda, is that of reducing early school leavers to 10% by 2010.

Using this definition of early school leavers, Malta has registered an improvement from 54.2% in 2000 to 41% in 2008. The establishment of MCAST contributed mostly to this decline, however recently progress has stalled in this respect. Chart 2.2 hereunder shows the relative progress of Malta and the EU 27 in this regard.

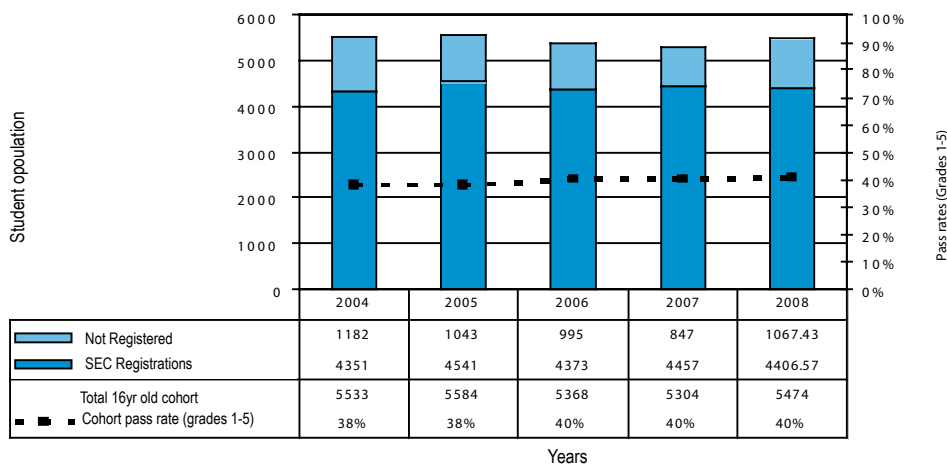
CHART 2.2 - EARLY SCHOOL LEAVERS - PERCENTAGE OF THE POPULATION AGED 18-24 WITH AT MOST LOWER SECONDARY EDUCATION AND NOT IN FURTHER EDUCATION OR TRAINING MALTA AND EU (2000 – 2008)



Source: Eurostat Structural Indicators 2000-2007; NCHE 2008

Chart 2.3 shows the share of the 16 year old cohort in Malta that registered for SEC Examinations and the pass rates in 6 subjects sufficient to proceed to general post secondary education. Over 80% of the cohort register for exams (an indicator of willingness to try), and only 40% (in 2008) succeeded in obtaining Grades 1-5 in a minimum of 6 subjects.

CHART 2.3 - 16 YEAR OLD COHORT SEC EXAMINATION REGISTRATIONS AND PASS RATES (GRADES 1-5) IN SIX SUBJECTS (2004 – 2008)



Source: MATSEC SEC Examination Report 2004-2008

As things stand, the maximum participation rates Malta can hope for in further general and eventually tertiary level education is not more than 40%.

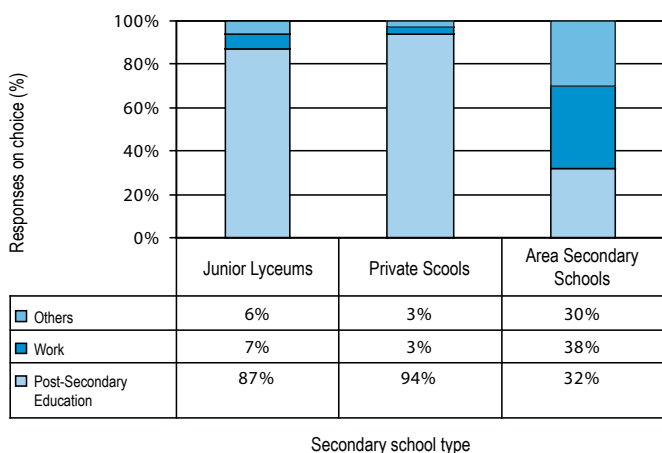
Coupled with pass rates for the Matriculation Certificate, only 22.8% of the 1990 cohort obtained obligatory entry requirements for University in 2008, and the results show that practically all those who pass seek to enter higher levels of education¹⁵.

The main challenge is to create the necessary quality assurance systems in earlier levels of education (primary and secondary) as well as reviewing the current MATSEC system. This is important to understand whether the quality of education or the examination system is fit for purpose.

On further scrutiny of the annual Tracer Study reports of 2007 published by the Guidance and Counselling Services unit within former Education Division, the outcomes in Chart 2.4 shows that 87% of respondents from Junior Lyceums and 94% from private schools respectively continued their studies at a further level compared to only 32% from state secondary schools.

Out of 5,372 respondents in 2007, 1,469 were from area secondary schools. Of the 412 (32%) who continued their studies, 198 attended the academic stream and only 8 and 3 students entered the Junior College and private sixth forms respectively. The remaining 187 students attended either the state higher secondary schools (i.e. G.Curmi Naxxar and M.Refalo Gozo) or MCAST.

CHART 2.4 - TRACER RESPONSES REGARDING POST SCHOOL CHOICES: POST SECONDARY EDUCATION, WORK OR OTHER ACTIVITIES.



Source: Tracer Study reports, Education Division (2007)

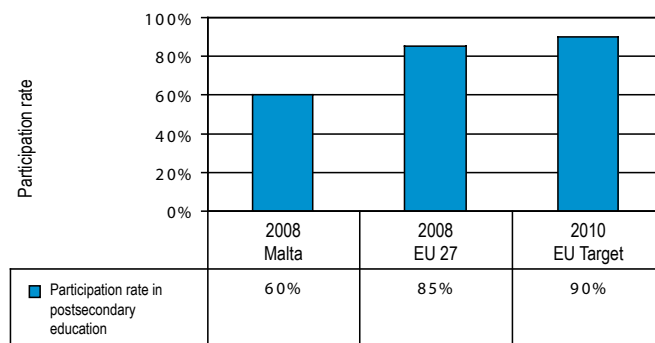
The current reform processes in schools must address the striking imbalance in outcomes of state area secondary schools which is the predominant factor contributing to early school leavers in Malta.

Low participation rates in further and higher education

The participation rate of 17 year old students in further education was at 59% in 2008. The average participation rate of 17 year olds in post secondary education during the last 5 years has been around 63%. No significant progress was made over this period.

Chart 2.5 shows the relative participation rate in Malta compared to the current EU 27 average participation rates and target rates for attainment of post secondary level education by 2010. The target of attracting 85% of students aged 16-18 into post-secondary level education by 2015 requires 25% more than the current 60%.

CHART 2.5 - 17 YEAR OLD PARTICIPATION RATE IN FURTHER EDUCATION FOR MALTA AND EU 27 (2008) AND LISBON TARGET BY 2010



Source: MT - NCHE F&HE Statistics Survey 2008; EU - Eurostat Structural Indicators 2010

The student population at the general post-secondary level increased from 5,169 in 2003 to 5,711 in 2008 whilst that for vocational education increased from 3,858 in 2003 to 6,163 in 2008. In addition, there were a total of 3,511 students pursuing short courses in 2008.

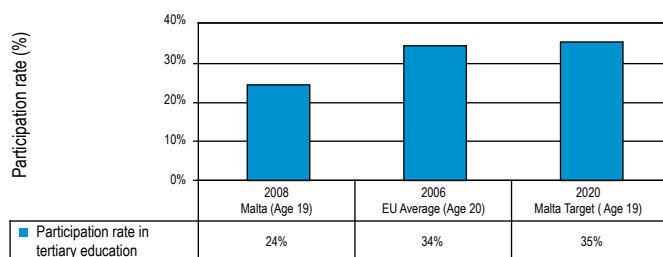
The challenge in terms of further education is not mainly an issue of capacity but more a question of ensuring that those at the tail end of achievement within the early years of secondary education receive the full qualitative support necessary to obtain the skills and knowledge required for progression into post secondary level education. More pathway options need to be explored and more needs to be done with immediate effect.

¹⁵ Matriculation Certificate Statistical Report 2008, pg. iii

In terms of participation rates in higher education, the participation rate of 19 year old students in higher education was 24% in 2008. Chart 2.6 shows the relative standing in terms of participation rates across the EU 27 and potential target rates for Malta by 2020, should we aim to achieve at least the average rates in the region.

In 2008, the participation rate of 19 year olds was relatively lower than the 54% country mean for OECD countries in 2005 and lower than the EU average of 34% in 2006.

CHART 2.6 - PARTICIPATION RATES IN MALTA AND EU HIGHER EDUCATION AGE 19-20 (2006-2020)

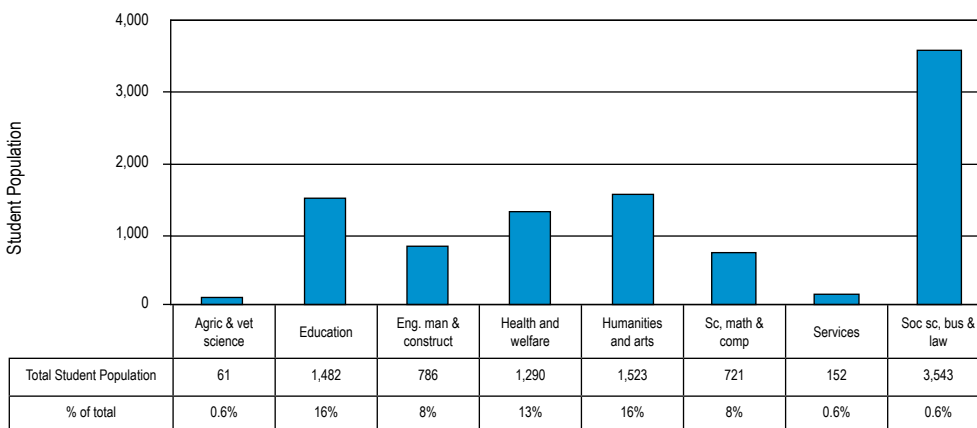


Source: MT - NCHE F&HE Statistics Survey 2008; EU - Education at a Glance 2008, OECD, pg. 34

Science and technology

Chart 2.7 shows the distribution of higher education students across different fields of study in 2008. Whilst Malta succeeded in registering relatively good progress in increasing students in S&T related areas at a higher level by 15% over the last 10 years, the relative rate share remains low.

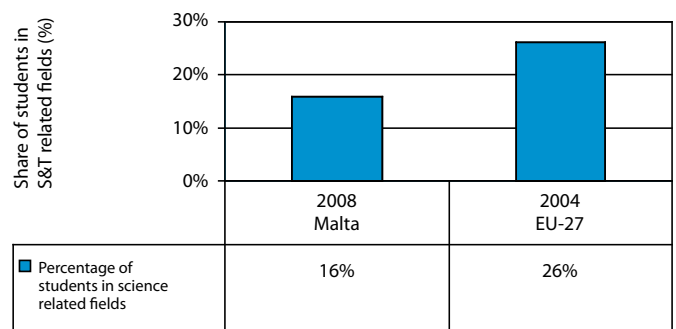
CHART 2.7 - FULL TIME HE STUDENTS FOLLOWING DEGREE STUDIES OF NQF LEVELS 6-8 IN MALTA BY FIELD OF STUDY (2008)



Source: NCHE F&HE Statistics Survey 2008.

In 2008, 16% of HE students participated in these areas: science, mathematics, computing and ICT, engineering, manufacturing and construction. Chart 2.8 shows the comparative rate of students participating in science related fields within the EU 27 is that of 26% (2004) compared to Malta at 16%.

CHART 2.8 - FULL TIME HIGHER EDUCATION STUDENTS FOLLOWING DEGREE STUDIES OF MQF LEVELS 6-8 IN MALTA IN S&T RELATED AREAS (2004/8)



Source: MT - NCHE F&HE Statistics Survey 2008; EU - Key data on higher education in Europe 2007 edition, pg. 46

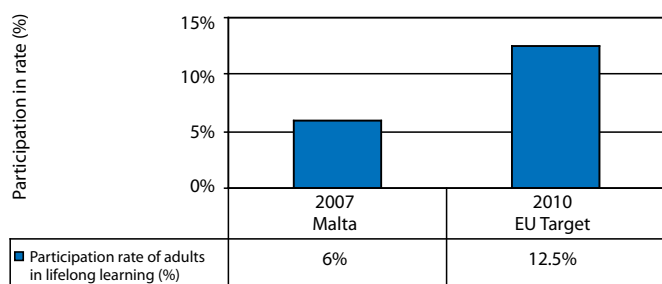
Once again, the challenge of increasing take-up in science and technology related areas must be addressed at all levels of education, from primary to secondary, through post-secondary education and eventually at a tertiary level.

Adults in life long learning

Chart 2.9 shows the rate of adults between 25 and 64 in education and training as measured by the Labour Force Survey.

In 2007, 6% of adults in Malta were participating in lifelong learning¹⁶ compared to almost 10% of adults in the EU who participate in life long learning. Progress is slow to reach the benchmark of 12.5% by 2010.

CHART 2.9 - PARTICIPATION OF ADULTS IN LIFE LONG LEARNING
PERCENTAGE OF POPULATION AGED 25 – 64 IN EDUCATION AND TRAINING FOUR WEEKS PRIOR TO THE LABOUR FORCE SURVEY (2007 – 2010)



Source: MT - Labour Force Survey 2007, NSO; EU – Eurostat Structural Indicators 2010

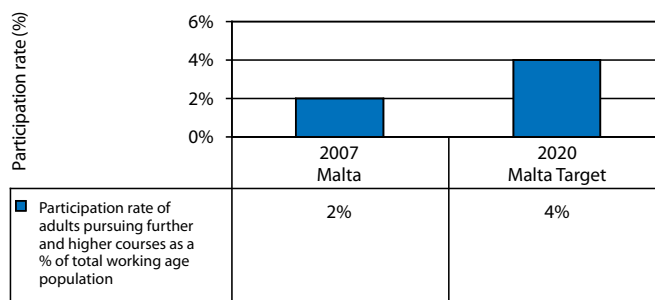
This indicator measures all forms of education and training. Chart 2.10 shows the NCHE estimates of the contribution of further and higher education towards adult learning. The sectors jointly provide education and training for 2% of the population between 25 and 64 years of age. The majority of adult learners undertake studies on a part time basis.

Students pursuing part time tertiary studies are on average 8 years older than those pursuing full time studies¹⁷. On average, part time students following Bachelors and Masters programmes in Malta take just under twice as long to complete their studies when compared to their full time counterparts¹⁸.

The case for further opportunities for adult participation in all forms of education and training requires a committed effort to review current systems and develop a coherent response for further and higher education within a life long learning framework. In line with the target to double the rate of adults in education and

training of all forms from 6% to 12% by 2010, NCHE envisages that the further and higher education sectors would need to respond to such targets by increasing their own share of contribution from the current 2% to 4% over the next 10 years.

CHART 2.10 - ADULTS WITHIN FURTHER AND HIGHER EDUCATION SECTOR
PERCENTAGE OF POPULATION AGED 25 – 64 IN F&HE FOUR WEEKS PRIOR TO THE LABOUR FORCE SURVEY (2007 – 2010)



Source: MT - NCHE F&HE Statistics Survey 2008; MT Target - NCHE

In the Bordeaux Communiqué on enhanced European cooperation held in November 2008, European Ministers for education highlighted the following:

“VET is at the crossroads of economic, social and employment policies. VET should promote excellence and at the same time guarantee equal opportunities. It plays a key role in producing the skills Europe will need. Closely linked with general education and higher education, VET is essential for implementing lifelong learning strategies. The future strategic framework for European cooperation in the field of education and training could play an important role in this context.”¹⁹

They also pointed out the role of higher education in vocational education and training and in enhancing labour market integration.

“It is particularly important to encourage the development of continuing vocational training for adults in higher education institutions, taking into account the Charter of European universities for lifelong learning.”²⁰

Malta needs to develop a sustainable framework to provide more adults with education and training pathways in further and higher education as well as work in parallel to develop

¹⁶ According to the definition of the European Council, lifelong learning includes “all learning activity undertaken throughout life, with the aim of improving knowledge, skills and competences within a personal, civic, social and/or employment-related perspective”. The “lifelong learning” structural indicator was developed to measure participation in training and further education. This indicator measures the proportion of the population aged between 25 and 64 that participate in training and further education activities. (Council Resolution of 27 June 2002 on lifelong learning (2002/C 163/01))

¹⁷ Key data on Higher Education in Europe 2007 Edition, Eurydice pg. 50

¹⁸ Key data on Higher Education in Europe 2007 Edition, Eurydice pg. 54

¹⁹ Bordeaux Communiqué, EU 2008, Pg. 5

²⁰ Bordeaux Communiqué, EU 2008, Pg. 11

informal and non formal validation of skills and competences in collaboration with F&HE institutions.

Research and development activity

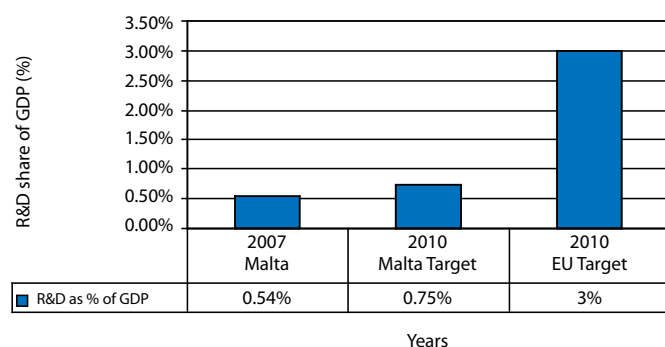
Malta has also stepped up its efforts in the field of research and innovation. The University of Malta is currently participating in 7 FP7 projects amounting to around € 920,000 in funding²¹. The MGSS sponsored 44 students to follow studies at a doctoral level and 81 at a Masters level since 2006 to date²². 24%²³ of Maltese students currently pursuing a doctoral programme are preparing for a career in science and technology²⁴.

The Strategic Educational Pathways Scholarships Scheme (STEPS) is a new scheme intending to assist graduates in pursuing post-graduate levels of academic research in areas identified as a national priority, and will award over 400 Masters and 70 Doctoral scholarships between 2009 and 2013 in the focus areas of Research, Science and Technology, ICT, Education Capacity Building and other areas identified to address Skills mismatches²⁵.

All this contributes towards creating the necessary R&D capacity for Malta to move towards its own research and development targets.

Chart 2.11 compares Malta's current overall expenditure on R&D compared to the EU target of 3% expenditure of GDP on R&D for 2010. Such a target will probably not be reached given the current economic situation faced by most countries.

CHART 2.11 - RESEARCH AND DEVELOPMENT TARGETS AS A SHARE OF GDP (2006 – 2010)



Source: MT – National Strategic Plan for Research and Innovation (2006-2010), MCST; EU – Eurostat Structural Indicators 2010

Despite Malta's limitations, much more can be done in terms of providing adequate budgets for co-financing EU research projects. The leverage of such programmes could lead to the creation of niche research segments that will in turn deliver multi-dimensional benefits on education and specific industrial activities.

The challenge is that of placing more emphasis on high quality research to be undertaken within the University of Malta, and the need to provide all the necessary support to exploit opportunities which have fiscal,

Quality Assurance

The Bologna Declaration of June 1999 calls amongst other things, for the promotion of European cooperation in quality assurance with a view to developing comparable criteria and methodologies.

On this point the Declaration accordingly parallels closely the Council Recommendation of November 1998. The recommendation focuses exactly on the need for member states to face the task of organising their higher education systems in ways that respect existing academic standards, training objectives, and quality standards.

Among the international changes affecting higher education are a growing international market for higher education, transnational education and a need for recognition of degrees due to graduate mobility. The Bologna Declaration can be viewed as a European response to these developments.

In 2009, Malta remains one of the only countries within the EU not to have a Quality Assurance system for both further and higher education. Whilst positive steps have been taken with the establishment of the NCHE and the Malta Qualifications Councils with remits to advise on quality assurance of higher and vocational education respectively, the existence of an entity with a clear remit to perform external quality assurance to serve as a basis for accreditation and recognition of Maltese qualifications is to date not available.

The NCHE recommendations titled "A quality assurance framework for further and higher education in Malta (2007)" highlight the need for the introduction of new regulations in this regard and for a set of measures to implement the recommendations over a number of years. A committed financial budget is required to start the process and synergy with all institutions is necessary to develop the necessary quality culture for this to bear fruit in the future.

²¹ Data is up to the end of October 2008. Source (Malta Council for Science and Technology)

²² MGSS database, MEDC

²³ NCHE Further and Higher Education Statistics 2008

²⁴ This indicator includes enrolments at the University of Malta and through the MGSS in the fields of 'science, mathematics and computing' and 'engineering, manufacturing and construction'.

²⁵ STEPS information provided by the Ministry of Education, Culture, Youth and Sport

Chapter 3

PRINCIPLES AND VISION FOR 2020



All stakeholders in education need to share a common set of principles and strive towards agreed objectives.

The principles highlighted in this chapter underpin the strategy proposed by the NCHE. They preserve the unique missions and characteristics that further and higher education institutions have.

The importance of effective autonomous leadership in education institutions, capable of delivering on their diverse

roles and missions in a proactive and responsible manner is the only vehicle for high quality, relevant education outcomes that guarantee a vibrant future for Malta.

The need for all stakeholders to assume their responsibilities shall be a crucial factor in determining the ability of Malta as a nation to meet its aspirations.

Based on the consultations and feedback in recent months the NCHE has re-

confirmed the overarching vision for the sectors under the title Vision 2020.

The strategy outlined in the following chapters is an elaboration of how this vision can be achieved and the actions necessary for this to be implemented.

This chapter highlights the key principles and vision for further and higher education as recommended by the NCHE.

Key principles for further and higher education development

The strength, diversity and flexibility of further and higher education in Malta is vital towards developing Malta into a nation:

- i. in which all Maltese have equal opportunities to be educated to their highest potential throughout their lifetime;
- ii. in which all citizens benefit socially, culturally, economically, and environmentally by the contributions of educational institutions;
- iii. in which individual rights are recognised, cherished and protected and individuals are fully aware of their responsibilities towards each other and to society as a whole;
- iv. whose economic growth is driven by synergy between research and innovation;
- v. enjoying a rich cultural heritage, recognising the uniqueness of its people; and
- vi. which contributes to Mediterranean, European and International education, research and relations;

All stakeholders should strive to uphold the following principles and values:

- i. Further and Higher education should enrich Maltese society, culture and the economy. Institutions are expected to be the caretakers, creators and disseminators of knowledge, to students and society at large;
- ii. a focus on effective learning implies effective teaching, which inspires learning for life and ensures relevance of knowledge and skills imparted;
- iii. a firm commitment towards the provision of quality to the highest degree possible, both in administrative and academic terms;
- iv. the affirmation of autonomy coupled with the necessity for stronger accountability and the necessary reforms and funding for this process to become feasible;
- v. preservation of equal access opportunities with the guaranteed provision of a safety net based on specified socio-economic criteria;
- vi. a commitment towards higher participation rates in further and higher education;
- vii. continued investment making the system more responsive, diverse in its offering, and capable of being innovative in its entire cycle of operations and functions;
- viii. both public and private institutions require increased competitiveness and further development of an export oriented knowledge sector in Malta;
- ix. all institutions must be socially responsible, acting ethically in all their activities, ensuring public health and safety standards are upheld, including that of being environmentally responsible.

Further and higher education systems must strive to:

- i. advance knowledge and understanding;
- ii. inspire and enable students to develop their capabilities to their highest potential;
- iii. aid the application of knowledge and understanding to the benefit of the economy and society;
- iv. enable individuals to adapt and learn, consistent with the needs of a flexible knowledge-based economy and life-cycle requirements;
- v. enable life long learning for personal fulfilment, for effective participation in the workforce and for constructive contributions to society; and
- vi. contribute to a democratic, civilised society and promote the values, tolerance and debate that underpin it.

Government must strive to:

- i. chart an effective and sustainable educational strategy and providing an adequate regulatory framework, to ensure that education is relevant in meeting the nations long term aspirations and efficient in its operational performance;
- ii. assure the quality of educational provision and respect the autonomy of higher education institutions;
- iii. provide for adequate institutional funding to meet both capacity and quality targets;
- iv. provide students with support for fair access, adequate information, effective guidance, and choice.

Vision 2020

for further and higher education in Malta

- 1. Attract more students to continue their studies after compulsory education and attain post secondary and tertiary qualifications** – increase participation of 17 year olds in post secondary education from the current 60% to 85% by 2015 and increase participation of 19 year old students in university from the current 23% to 35% by 2020;
- 2. Attract more students into areas of study relevant to Malta’s economic and social development** – increase student participation in science, technology and other areas identified in the NCHE’s “Skills for the Future” report;
- 3. Attract more adults into further and higher education within an overarching Life Long Learning strategy** – provide more adults with opportunities to attain basic skills, qualifications at the right level to gain employment and meet employers demand for skills;
- 4. Promote Malta as a destination for further and higher education in the world** – attract 5,000 fee paying students to study in Malta by 2020 in various fields of study and research;
- 5. Develop research activities undertaken within higher education in Malta** – increase funding for research at the University of Malta, sustain scholarship funding to attract promising graduates into a research career, and link measures to strategic national priorities;
- 6. Ensure fair and open access to all students willing to further their studies** – ensure that every student in secondary education has an equal chance to gain a sound grounding in English, mathematics and basic knowledge to access further education pathways, and sustain measures to ensure fair and equitable access to further and higher education;
- 7. Facilitate and promote student and staff mobility** – promote European and international mobility programmes for students and staff, ensure portability of student support schemes, and develop more initiatives for exchange of students, staff and researchers;
- 8. Assure quality provision across all institutions and their programmes** – provide for adequate internal quality assurance systems and establish a quality assurance agency;
- 9. Develop Malta’s Qualifications Framework and qualification recognition services** – promote the use of learning outcomes to define and describe qualifications, the validation of non-formal and informal learning and ensure adequate recognition services primarily through the Malta QRIC;
- 10. Reform the current governance and funding systems** - ensure efficient, accountable and autonomous institutions can respond to the challenges effectively and can develop beyond the limitations of public funds by generating other sources of income;
- 11. Secure adequate public funding and provide incentives for investment from other sources into the sector;**
- 12. Interlock Malta’s efforts with developments to position Europe as a leading destination of excellence in education** – maintain Malta’s active participation within the Bologna and Copenhagen Processes and implement the necessary actions to position Malta as a centre of excellence in education within the European Higher Education Area up to 2020.

Chapter 4

NATIONAL, EUROPEAN AND INTERNATIONAL PRIORITIES



An aligned response of Further and Higher Education

The vision for education must be aligned with other strategic objectives pronounced by Government for Malta's development and by other changes occurring outside Malta on both a European and International level.

Malta's overall direction is outlined in plans such as the National Reform Programme, the National Strategic Reference Framework and its Operational Programmes for the use of Structural Funds, and Governments pronounced work programme embodied in its Vision 2015 statement.

The recent work of the NCHE in collaboration with all further and higher education stakeholders, government development agencies in different sectors and the business community has resulted in an initial study²⁶ on the impact of such a vision on the future workforce, and the resulting derived demand on education in the immediate future.

Government's Vision 2015

Government has outlined seven areas of excellence in its Vision 2015. This includes: Tourism; Financial services; Health services; Education services; Communications and IT services; Manufacturing and related services and Gozo as an ecological island.

In its efforts to shape the type of strategy required the NCHE organised a conference on 19th of September 2008 titled 'Skills for the Future'. The conference addressed potential skills mismatches which exist in the economy as well as those which could emerge following growth in the targeted sectors outlined in Government's Vision 2015. Over 200 participants representing industry, commerce, employers, educational institutions, government sectoral agencies, students, and other social partners, attended the conference.

The outcomes of the conference together with the research finding of the research conducted by the NCHE show that the prospects of the economy over the coming decade include the following:

²⁶ National Commission for Higher Education (2009), Skills for the Future.

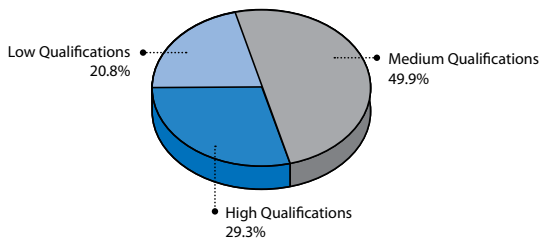
- Over 37,000 jobs would be made vacant by retiring workers;
- Additionally, over 40,000 jobs need to be created to increase the activity rate of the labour force from 59% today to a target of 70%;
- In total, over 77,000 jobs will need to be created to achieve the sustainable activity rate targets;
- Reviewing the potential job creation of the seven priority areas, the NCHE estimates that these sectors have the potential of creating 30,000 jobs;
- European Commission projections²⁷ show that the EU-25 in 2015 will require a workforce made up of 30% of workers having high qualifications, 50% having medium qualifications and 20% with low qualifications as shown in the Chart 4.1 below. The current Maltese scenario is depicted in Figure 4.2.

- 34,200 people from the inactive or active population would need to upgrade their skills to higher qualification levels;
- 63,500 of the same cohorts would have to update their skills from low to medium qualifications; and
- the proportion of low skilled workers needs to fall drastically.

For education this implies that:

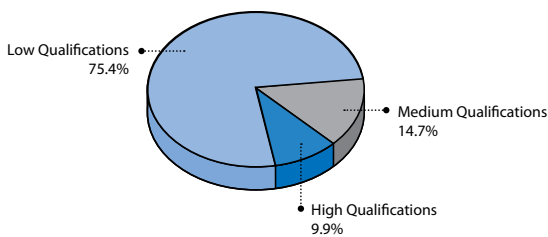
- for target participation rates to be achieved students need to increase by 40%, from 31,000 students aged 16-24 to 43,500 students in any year; and
- the funding allocation towards further and higher education would also need to increase by around 40% (not factoring for economies of scale and efficiencies), costing around € 140 million more over the next 7 years.

FIGURE 4.1: DISTRIBUTION OF QUALIFICATIONS OF EU-25 WORKFORCE, 2015



Source: Cedefop (2008)

FIGURE 4.2: DISTRIBUTION OF QUALIFICATIONS OF MALTA 15+ POPULATION, 2007



Source: National Statistics Office Malta, Pg. 6.

This implies that in the next decade:

- or female activity rates to reach 41%, 16,600 women need to join the workforce;
- for employment rates of 55-64 years olds to reach 35%, 3,400 older workers need to be retained within the workforce;

Europe's vision for Higher Education by 2020

Various developments at a European level are changing the landscape of further and higher education rapidly. The last frontier of competitive advantage within a Europe without borders remains the education level, the skills and competences of a countries workforce, and Governments are intensifying their investments, their efforts to boost participation, resources, and educational outcomes of their students towards increased innovation, which ultimately secures high value added competitiveness and in turn high standards of living.

More importantly however, Europe recognises the fact that other regions are intensifying their efforts in the same way. China, India, Australia, Asia and the US are moving in the same direction – what distinguishes Europe is its ability to collaborate and provide a rich and diverse European Landscape of Education.

Malta has been participating in three main processes at a European Level:

1. The Education and Training 2010 Work Programme (EU);
2. The Copenhagen Process (EU); and
3. The Bologna Process (Intergovernmental).

In this regard, the objectives of the various fora, aim to push a common agenda of reform in education, including joint efforts to ensure that all countries strive towards a common goal of making Europe the world's leading knowledge-based economy.

²⁷ CEDEFOP (2008), Future skills needs, medium-term forecast

Lisbon Agenda and the Education and Training 2010 work Programme:

In March 2000, European leaders committed the EU to become by 2010 'the most dynamic and competitive knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion, and respect for the environment'. The Lisbon strategy, as it has come to be known, was a comprehensive but interdependent series of reforms. Actions by any one Member State, ran the argument, would be all the more effective if other Member States acted in concert.

Following the Conclusions of the Heads of State and Governments in Lisbon in 2000 and their endorsement of the common objectives for education and training in Europe in Barcelona, 2002, a radically new process of co-operation was launched in this area, with the overall objective of making education and training systems in Europe a world quality reference by 2010.

Ministers of education agreed on three major goals to be achieved by 2010, namely:

- improving the quality and effectiveness of education and training systems;
- facilitating access to education and training systems; and
- opening up EU education and training systems to the wider world.

To achieve these ambitious goals, they agreed on specific objectives covering the various types and levels of education and training (formal, non-formal and informal) aimed at making a reality of lifelong learning.

Drawing on lessons learnt from five years of implementing the Lisbon strategy, the European Council in March 2005 decided on a fundamental re-launch of the strategy. The re-launched Lisbon strategy focuses on competitiveness, growth and productivity and strengthening social cohesion.

Investing in research, education and innovation play central roles in generating added value and contributing to the creation of more and better jobs. Education and training are seen as critical factors to develop EU's long-term potential for competitiveness as well as for social cohesion.

The five EU-level benchmarks set for 2010 include:

- the average rate of early school leavers should be no more than 10%;
- the total number of graduates in maths, science and technology should increase by at least 15%, while the gender imbalance in these subjects should be reduced;

- 85% of 22 year olds should complete upper secondary education;
- the number of low-achieving 15 year olds in reading, mathematics and science should be halved; and
- the average participation of working adults population in lifelong learning should increase by at least 12.5%.

The latest progress report of 2007 presented to the Education Council in May 2007, together with the more recent report of the EU Commission titled "Progress Towards the Lisbon Objectives in Education and Training" give a clear picture of the intense transformation of the European landscape and Malta's relative performance in this area.

Malta is catching up in the various areas, with significant reduction of early school leavers and attainment rates in post-secondary levels of education, science and technology and lifelong learning.

The EU Education and Training 2010 work programme remains a catalyst for change and development in all member states. Malta benefits immensely from the research and policy initiatives undertaken within this programme.

Work in recent years included studies on the following dimensions:

- An integrated Policy Framework 'Education & Training 2010'
- Developing lifelong learning strategies
- Higher Education Reform
- European Institute of Technology
- Developing school education policies
- Enhanced cooperation in vocational education and training
- Enhanced cooperation in adult education
- Removing obstacles to mobility
- Promoting multilingualism
- ICT for innovation and lifelong learning (Information and Communication Technology)
- Measuring progress in education and training (Statistics, indicators and benchmarks)
- Expert networks in economic and social sciences
- Other relevant documents related to the Lisbon Strategy

Source: http://ec.europa.eu/education/policies/2010/comp_en.html#3

Copenhagen Process Vocational Education and Training (VET)

Vocational education and training (VET) is an important pillar in policy developments within Europe.

European ministers from 32 countries, the European Commission and European social partners agreed a policy agenda for VET in the Copenhagen process in 2002 aimed at providing the knowledge and skills base for Europe to prosper.

Every two years, reviews are undertaken to measure VET's quality, attractiveness, good governance, and efforts to meet target dates to implement common European principles and tools.

Countries have worked on these areas emphasising equity and relevance to the labour market, but also a need to focus on excellence. The recent Cedefop analysis and countries' self-assessment show a closer alignment of national priorities and the European agenda in 2008, and although progress varies, a European VET area is emerging.

Developments in Malta over the last few years related to Copenhagen objectives include:

- Setting up a National Qualifications Framework, which is compatible with the EQF;
- Beginning the process of recognition of prior learning through the established Malta Qualifications Council;
- Beginning the process of ensuring recognition of non-formal and informal learning;
- The setting up of the National Europass Office;
- The approval of the MCAST master plan to modernise MCAST as Malta's main vocational training institution; and
- Building links with industry in an effort to respond to the labour market.

The milestones of the Copenhagen Process:

2002 Copenhagen Declaration

- Strengthen the European Dimension in VET
- Improve transparency, information and guidance systems
- Recognise competences and qualifications
- Promote quality assurance

2004 Maastricht Communiqué National and EU-Level priorities

- Put Copenhagen tools into practice (quality assurance, validation, guidance & counselling: Europass)
- Improve public/private investments, training incentives, use of EU funds
- Address the needs of groups at risk
- Develop flexible & individual pathways, progression
- Strengthen VET planning, partnerships, identify skills needs
- Develop pedagogical approaches & learning environments
- Expand VET teachers' & trainers competence development
- EQF, ECVET; identify TT learning needs; improve VET statistics

2006 Helsinki Communiqué

- Improve image, status, attractiveness of VET; good governance
- Develop further, test & implement common tools by 2010 (EQF, ECVET, CQAF/ENQA-VET, Europass)
- More systematic mutual learning; more & better VET statistics
- Take all stakeholders on board to put Copenhagen into place

2008 Bordeaux Communiqué

- Implement tools and schemes for promoting cooperation in the field of VET at national and European level.
- Heighten quality and attractiveness of VET systems
- Improve links between the VET and the labour market
- Strengthening European cooperation arrangements

Copenhagen beyond 2010

Countries anticipate national and European VET policy agendas to focus on:

- 1. Learning outcomes based curricula** – new approaches to develop programmes and curricula as well as improved methods to measure, assess and validate competence;
- 2. Securing adequate financial resources and ensuring efficiency, equity and sustainability** – adequate allocation of resources for the efficient allocation, equitable distribution and sustainability of VET growth is a prerequisite for successful implementation of VET policies. The private share of expenditure in Continuous Vocational Training remains small and governments shall continue seeking better ways to develop effective cost sharing models, including specific levies for training, vouchers, tax incentives, etc.;
- 3. Continued implementation of common European tools** – whilst the EQF is now broadly in place and progress towards its implementation is underway, countries continue developing their respective National Qualification Frameworks, the Europass is now used by half a billion citizens, bringing ECVET the European Credit system for VET into place is still in its initial phase, whilst validation on informal and non-formal learning is available in some countries but remains a challenge in terms of the necessary resources required to reach this long term goal across all the EU;
- 4. Create better links between Copenhagen and Bologna processes** – more co-ordination between various frameworks such as the Education and Training 2010 work programme be better coordinated with developments within the Bologna Process. Europass, EQF and ECVET foster policy learning and drive national change;
- 5. Balance excellence and equity to make VET more attractive** – VET is seen to play an important role in providing inclusive pathways to vulnerable groups in particular early school leavers. However, VET cannot be seen to be the solution to all problems of exclusion – more talent and excellence needs to be attracted to the sector, establishing well equipped training centres, introducing pathways into higher education programmes and increase the profile and levels of qualifications offered;
- 6. Developing adequate Quality Assurance** – the drive towards more consistent quality assurance across all types of VET provision (including apprenticeships and other modalities) as well as ensuring attractiveness, trust by employers and effective and efficient teaching are at the heart of this objective;
- 7. Recognising VET teachers as key agents of change and quality** – Countries' policies increasingly include competence development of VET teachers. More needs to be done to ensure that teachers' technical competences and teaching skills remain up to date through standards, certification and adequate CVT provision;
- 8. Lifelong guidance services with evidence based research** – Developing the capacity to obtain evidence to support guidance policies is becoming increasingly important. Promoting continuous formal and informal dialogue between education and business requires more research, facilitation and professional design to ensure that messages trickle down to students in an effective manner;
- 9. Improve governance at all levels** – More synergy between various VET providers in particular partnerships between various actors or partnerships between state and non state providers will become more commonplace. More harmonised policy co-ordination will be required to ensure effective policy implementation;
- 10. Anticipate future skills and increase responsiveness** – a coherent framework of indicators and benchmarks to follow up the Lisbon objectives in education and training requires more focus on VET related information linked to rapid changes in Europe's labour markets. Various opening for those with intermediate qualification with arise over the next decade and the sustaining higher overall skill levels remains of central importance;
- 11. Increase the role of VET in the present economic crises** – generating human capital with relevant skills to improve competitiveness and adaptation to new demands place VET in a central position. Stronger investment in education and training is a sine qua non for all policy makers facing the future. Cooperation between VET providers and industries is imperative at a time when markets are turbulent and volatile. Fast and flexible administration is vital for effective responsiveness during this phase of economic development;
- 12. Increase standards in the workforce of specific sectors** – introducing professional standards and certification may lead towards more private investment in training and certification, and an increased demand of the adult workforce to seek training and re-training for access to specific regulated trades and professions. The introduction of professional standards in various sectors could lead to a general improvement of quality and service.

Bologna Process Higher Education in Europe

The Bologna Process is the product of a series of meetings of ministers responsible for higher education at which policy decisions have been taken in order to establish a European Higher Education Area by 2010.

The milestones of the Bologna Process:

1998 Sorbonne Declaration

- A common framework of Qualifications
- A common two cycle system
- Mobility of students and teachers

1999 Bologna Declaration

- Easily readable and comparable Degrees
- A system of credits (ECTS)
- Mobility of researchers
- European cooperation in quality assurance
- European dimension in higher Education

2001 Prague Communiqué

- Lifelong learning
- Social Dimension added
- Involvement of higher education
- Institutions and students
- Promotion of the European Higher Education Area

2003 Berlin Communiqué

- Quality assurance at institutional, national and European level
- Inclusion of doctoral level as third cycle
- Recognition of degrees and periods of studies (Diploma Supplement)
- European framework of qualifications
- Closer links between education and research

2005 Bergen Communiqué

- Reinforcement of the social dimension
- Standards and guidelines for quality assurance
- National frameworks of qualifications
- Award and recognition of joint degrees
- Flexible learning paths in higher education

2007 London Conference

- Creation of a European Quality Assurance Register (EQAR)
- Strategy to improve the global dimension of the Bologna Process
- Commitment to produce national action plans with effective monitoring of the social dimension

2009 Leuven Conference

- Bologna 2020

Since 1998, six ministerial meetings devoted to mapping out the Bologna Process have been held in different European cities, namely Paris (at the Sorbonne University), Bologna, Prague, Berlin, Bergen and London.

The next meeting will be held in April 2009 in Leuven / Louvain.

At every conference a progress report of every country's achievements and progress is presented. The Last progress report was presented in London in 2007.

The recent National Report submitted by the Bologna Expert Group in Malta, reports overall progress against most of the Bologna objectives. The major area of reform still pending remains that of external quality assurance.

Developments in Malta over the last few years related to Bologna objectives include:

- The Creation of a National Qualifications Framework in line with European frameworks (EQF and EHEA QF);
- Beginning implementation of learning outcomes within ECTS system;
- Diploma Supplement Implementation;
- Ratification of the Lisbon Recognition Convention (2006);
- Establishment of Malta QRIC and membership within ENIC/NARIC networks;
- Development of portability policies in student support and exchange programmes for increase mobility;

More needs to be done for the implementation of the original Bologna objectives. These include:

- The need to set up a national quality assurance agency;
- Further development of the National Qualifications Framework;
- Full implementation of the Diploma Supplement;
- Implementation of the ECTS in terms of learning outcomes;
- Further promoting and increasing mobility; and
- Addressing Lifelong Learning.

Bologna towards 2020

The main objectives likely to be discussed by Ministers for Higher Education in April 2009 in Leuven / Louvain are outlined hereunder.

- 1. Excellence** – this must be pursued at all levels of higher education in order to properly address the challenges of the new era. Excellence requires constant focus on quality based on and further developed with reference to the European standards and guidelines;
- 2. Social dimension** – equitable access and completion – the student body within higher education should reflect the diversity of Europe's populations. Malta would require a review of performance and outcomes in secondary school education to ensure that all children get an equal chance to obtain knowledge and skills to choose different educational pathways and access higher education;
- 3. Lifelong learning** – the process urges for public responsibility towards widening access to more adults and involves giving them access to obtaining qualifications, extending knowledge and understanding, gaining new skills and competences or enriching personal growth. More flexible learning paths, including part-time studies, as well as work based trajectories need to be explored and developed potentially in partnership with employers;
- 4. Employability** – an emphasis on the importance of higher education's role to equip students with the necessary knowledge, skills and competences to seize the opportunities in changing labour markets;
- 5. Student-centred learning** – new approaches to teaching and learning and a curriculum focused more clearly on the learner in all three cycles implies the need to develop programmes using international descriptors, learning outcomes and reference points for a growing number of subject areas;
- 6. Education, research and innovation** – Higher education should be based at all levels on state of the art research and development, fostering innovation and creativity in society. Doctoral programmes should provide high quality disciplinary research and increasingly be complemented by inter-disciplinary and inter-sectoral programmes. The number of joint degree initiatives and people with research competences is envisaged to increase providing more attractive opportunities for career development of early stage researchers;
- 7. International openness** – European higher education institutions will be further encouraged to embed their activities in an institutional culture of internationalisation and global collaboration. More joint European actions and a network of national contact points will be set up. Transnational education should be governed by the guidelines and standards for quality assurance as applicable within the European Higher Education Area and as in line with the UNESCO/OECD Guidelines for Quality Provision in Cross-Border Higher Education;
- 8. Mobility** – Mobility of students, researchers and staff, embedded in institutional policies to enhance the quality of programmes and excellence in research, strengthens the academic and cultural internationalization of European higher education. A target of at least 20% of those graduating in the countries of the EHEA is being considered, together with a target of 20 % increase of incoming students from non-EHEA countries by 2020 as part of the internationalization and exchange strategy of the institutions of higher education;
- 9. Data collection and multidimensional transparency tools with an emphasis on quality** – Improved and enhanced data collection will help monitor progress made in the attainment of the objectives set out in the social dimension, employability and mobility agendas, as well as in other policy areas, and will serve as a basis for both stocktaking and benchmarking. One option could be for classification of higher education institutions to be multi-dimensional, designed in a way that helps institutions develop profiles that emphasise one or more of the main missions of higher education and that recognise the value of all these. All such instruments need to relate closely to existing quality assurance and recognition mechanisms;
- 10. Funding** – Higher education institutions have gained greater autonomy along with rapidly growing expectations to be responsive to societal needs and to be accountable. Within a framework of public responsibility recognizing that public funding remains a priority, the diversification of funding sources should be sought as an opportunity to guarantee further sustainable development of autonomous higher education institutions.

Chapter 5

STRATEGY 2020



On the basis of its consultations, the NCHE proposes that Malta's strategy for Further and Higher education should address four strategic objectives by 2020:

1. **Attract more young students and adults into further and higher education;**
2. **Ensure fair and open access to all students willing to further their studies;**
3. **Make Malta a centre of excellence in education and research;**
4. **Sustain public responsibility for adequate regulation, resources and funding to secure an inclusive, qualitative and responsive education system.**

These four objectives should be addressed across the education systems as a whole (schools, higher education, vocational education and training and adult learning), and be aligned with all other related policies. Lifelong learning is a fundamental perspective underpinning the recommended strategy.

Priorities for Further and Higher Education by 2020

Strategic objective 1: Attract more young students and adults into further and higher education;

People with low skill levels are at risk of economic and social exclusion. The persistent high levels of students who do not continue to follow studies up to a post secondary level, low participation in lifelong learning by adults require more focus and immediate action.

Economic downturn, demographic changes and volatile labour markets, require an ever higher skill level from a future shrinking work force. Further and higher education must respond to these challenges.

Their contribution towards developing an overarching Life Long Learning strategy is vital. Qualification frameworks, development of professional standards within key segments of the workforce, validation of non-formal and informal learning, and provision of flexible learning programmes all contribute towards this objective.

Strategic objective 2: Ensure fair and open access to all students willing to further their studies;

Fair and open access implies more than just sustaining financial support and free provision for students. It implies having the necessary consistent quality education services at earlier levels to ensure and that all students attain basic skills, and that all students reach their highest potential. Fair and open access should include access to opportunities within private or foreign institutions and should give special attention to key vulnerable groups.

Strategic objective 3: Make Malta a centre of excellence in education and research;

Excellence should be defined in terms of the “knowledge triangle” - education, research and innovation. Developing a “quality culture’ within institutions and establishing an external quality assurance framework is a pre-requisite towards this goal. Quality also implies an intrinsic link between teaching and research, which gives the University of Malta a key responsibility and a central role in the accomplishment of this objective.

Quality assurance as a basis of recognition for qualifications, high quality research and initiatives for mobility of student and academic staff shall define Malta’s progress towards excellence over the coming decade.

Strategic objective 4: Sustain public responsibility to secure an inclusive, qualitative and responsive education system

More is required in terms of increasing the autonomy and accountability of state institutions, to provide governors of institutions in particular the University of Malta with more flexibility to handle this challenge.

The level, efficiency and sustainability of funding are critical to achieving these objectives. More long-term planning and commitment for state institutions together with incentives for private investment is necessary. Funding for provision of education, research activity and student support.

Priorities for Further and Higher Education by 2020

The four strategic objectives form the basis for policy development and further collaboration and consultations amongst all stakeholders in the sector in the coming decade. The NCHE recommends twelve priority areas for action by 2020.

Strategic priorities:

Attract more students and adults into further and higher education:

- 1) Attract more students to continue their studies after compulsory education into post secondary and university studies
- 2) Encourage students to undertake studies in areas relevant to Malta's economic and social development
- 3) Attract foreign fee paying students to study in Malta in various fields of study and research
- 4) Adapt systems for adults seeking Life Long Learning opportunities

Ensure fair and open access to all students willing to further their studies:

- 5) Secure fair and equitable access to further and higher education with particular focus on vulnerable groups

Make Malta a centre of excellence in education and research:

- 6) Assure quality provision across all institutions and their programmes
- 7) Develop Malta's Qualifications Framework and qualification recognition services
- 8) Increase the University of Malta's research capacity
- 9) Facilitate and promote student and teacher mobility

Sustain public responsibility to secure an inclusive, qualitative and responsive education system:

- 10) Ensure responsive systems through adequate governance and funding policies
- 11) Maintain active participation and co-operation within Europe and Internationally
- 12) Develop and implement a long-term Investment Plan

Priority 1: Attract more students to continue their studies after compulsory education into post secondary and university studies

Attracting more students into further and higher education should be the mission of all the education system at large. The NCHE recommends two main targets under this priority:

- Attract 85% of students leaving school into post-secondary education (both general and vocational programmes) by 2015;
- Attract 35% of school leavers into higher education by 2020.

Following is an outline of the proposed actions.

1.1 Attract 85% of students leaving school into post-secondary education (both general and vocational programmes) by 2015

The objective of moving from the current 59% participation rate of 17 year olds in post-secondary education towards 85% by 2020 is crucial towards achieving the Lisbon target of reducing early school leavers to 10% by 2010.

The importance of reducing early school leavers is paramount. The economic and social consequences are very real, both for the individuals themselves and for society as a whole. School leavers who complete compulsory education and obtain the minimum or no qualifications face challenges in accessing the labour market later on in life. They are also less likely to participate in lifelong learning than other young people who continue their education and training.

Addressing early school leaving is also a fundamental contributing factor for social exclusion. Education levels affect both wages and employment opportunities and non-economic outcomes such as good health, longevity and successful parenting; contributes to inheritance of life chances across generations and social stratification; creates risks of benefits dependency and associated costs to society.

The benefits of addressing early school leavers include long-term savings in income transfer and public social programmes but also through the resulting increase in tax revenues, higher disposable incomes and levels of social cohesion. Participating in further education provides in the long run better educated parents who can support the learning of their children in the future and an adult population more inclined to lifelong learning.

Adults who have more initial education tend to participate more in later education. The implication is that it is much easier to get a student on a good educational trajectory at the outset than to rectify weaknesses at a later stage.

Those who leave mainstream education on completion of secondary level education may be doing so voluntarily or as a result of exclusion. An important distinction must be drawn between formal exclusion (temporary or permanent) and informal forms of exclusion, including truancy or treatment in the classroom that can result in early school leaving.

Early school leavers can therefore include:

- Positive leavers: they may have chosen to take up employment, an apprenticeship or alternative career path;
- Opportune leavers: they have not decided on a career path, but leave to take up a job, an apprenticeship or perhaps a relationship in preference to school;
- Would-be leavers, or ‘reluctant stayers’: they prefer to leave but lack opportunities beyond school;
- Circumstantial leavers: they are those who leave school for non-educational reasons, for example, family need;
- Discouraged leavers: they are those who have not had success in their schooling, and who have low levels of performance and interest;
- Alienated leavers: they are those whose needs may be similar to the discouraged students, but which are more difficult to meet.

(Restart: Project proposal for Community Action Programme 2005, pp 3-4)

The NCHE recommends a set of actions and measures related to this target, as follows:

a) *Reform of secondary level education system*

NCHE urges Government to implement the reforms necessary for the full establishment of Colleges in the compulsory education sector and to adopt and implement the recommendations presented in the review of the “Transition from Primary to Secondary Schools in Malta” presented in to the Minister of Education in September 2008.

The recommendations require immediate adoption and implementation, and should lead towards addressing the current imbalance of outcomes of state secondary schools contributing to early school leavers. All students need to attain the necessary skills and motivation to access post secondary level education.

b) Guidance and counselling services in secondary level education

Guidance services play a pivotal role in motivating students to pursue further education studies prior to entering the world of work.

In this regard, NCHE made recommendations in its “Skills for the Future” report for more professional guidance services using evidence-based research and providing information that is structured, reliable and timely.

NCHE also urges future tracer studies to explore the reasons for students to opt out of further education to inform future policy developments in this area.

c) Entry level programmes within Further education (NQF level 1-3)

The current lowest entry point into further education is either through NQF level 2 or higher level programmes offered by MCAST and ITS, or O’Level revision programmes offered by Giovanni Curmi higher secondary in Naxxar. All other further education institutions require better qualifications related to SEC results.

Students entering at the lowest entry levels, although offered a second chance to develop skills normally expected to be attained during the 11 years of compulsory education, often still find programmes being offered rather challenging as they lack the necessary basic skills. Before the reforms in compulsory education come into force and start having an effect, Malta will continue witnessing the current levels of early school leavers and drop out rates in initial phases of further education.

NCHE proposes a review of the portfolio of programmes offered by state institutions (MCAST, ITS, Giovanni Curmi and Sir M. Refalo higher secondary schools) to explore the possibility of offering programmes with an NQF level 1 entry requirement which can facilitate the transition of these students into post secondary level programmes.

This review should aim at developing programmes offered in the coming academic year and should be available for the coming five years until secondary education reforms start having their intended positive effects.

d) Review of existing Apprenticeship schemes (TAS and ESTS)

A high ratio of early school leavers seeks employment on completion of compulsory education at the age of 16. NCHE recommends a review of the current apprenticeship schemes currently available through the Employment and Training Corporation (ETC) and related to programmes available at ITS and MCAST, with a view of understanding how these schemes in collaboration with the

business community can serve to enrol those of age 16-18 already in employment to attain post-secondary level skills (within part-time or full-time modalities) whilst working.

The potential of these schemes is underestimated and could possibly offer a partial solution to reach current school leavers to attain a post secondary qualification in the coming years.

e) Portability of student support to private sector at NQF levels 1-5

In a recent review of existing student support schemes, the NCHE identified the lack of portability of student support schemes to the private sector in NQF levels 1-5 (Student Maintenance Grants and Undergraduate scholarships within the MGSS scheme).

NCHE believes that after the necessary implementation of licensing and accreditation regulations for the private further education sector are in place, support should be extended to the private sector at these levels. This would increase private investment in education and training services, would lead to wider choices for students and more support in reaching the targets set.

f) Professional standards for vocations and trades

Many early school leavers can afford to enter various occupations and trades without the necessary skills due to lack of professional occupational standards. The development of such standards for waiters, chefs, electricians, plumbers, cashiers, etc. could usher a significant change in the outlook towards initial vocational education and training.

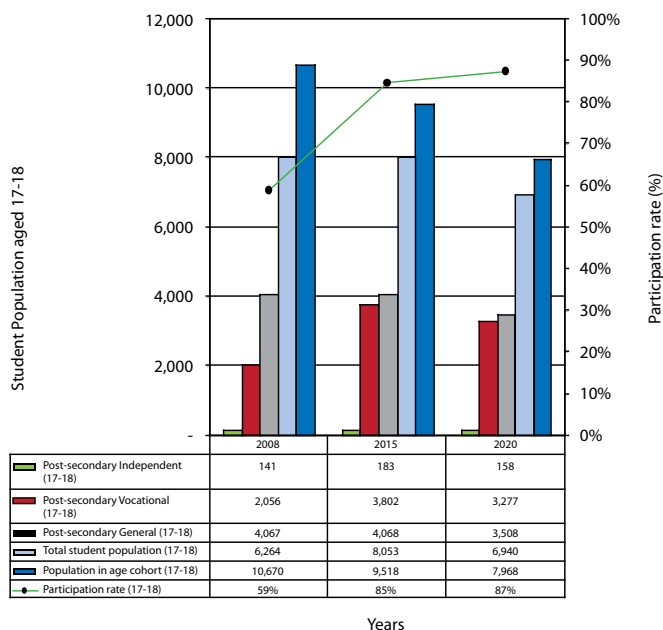
NCHE urges for a review of professional standards to be conducted by the Mata Qualifications Council in collaboration with all potential competent authorities and with education institutions to determine possible developments in this area.

g) Capacity of further education institutions

Chart 5.1 shows the impact of increasing participation rates from the current 59% in 2008 to 85% by 2015. The increase in terms of absolute numbers in population aged 17-18 will impact predominantly the vocational sector of further education up to 2015, and beyond that increase in participation rates will be compensated by declining population cohorts.

The general education sector will be able to sustain higher participation rates and targets without a major impact on capacity. These estimates assume that by 2015 the general education sector will increase participation rates from 38% in 2008 to 42% by 2015. This should sustain an increase in participation rates from 22% to 35% in higher education through better pass rates rather than growth in populations during the same period.

CHART 5.1 - FULL AND PART TIME FURTHER EDUCATION POPULATION ESTIMATES FOR 17-18 AGE COHORT (2008-2020)



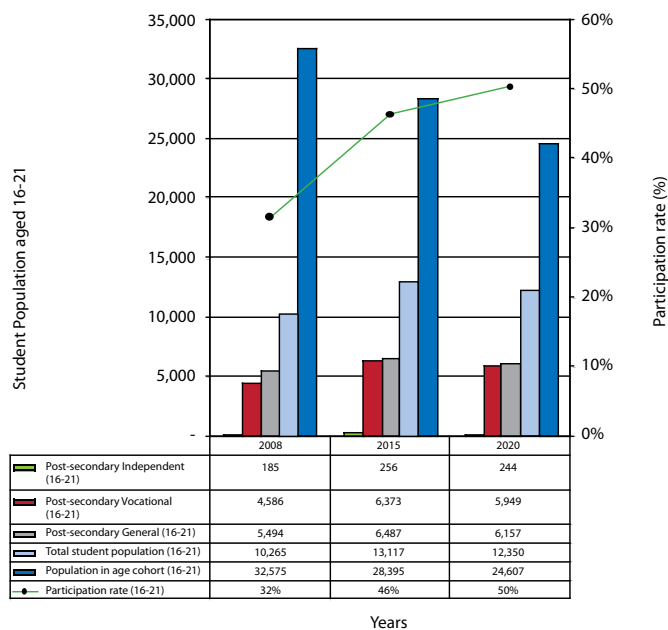
Source: NCHE estimates, National Statistics Office (2007)

Chart 5.2 hereunder extends the analysis to estimate the full student population capacity for full and part time students altogether, in the age cohorts of 16-21.

Assuming 85% of those aged between 16-18 and 30% of those aged between 19 and 21 pursue further education studies simultaneously, the absolute population would grow from slightly over 10,000 in 2008 to 13,000 by 2015, after which despite rates remaining constant, demographic effects would lead to a decline to 12,000 by 2020.

These estimates are presented to determine the potential impact on capacity and the necessary required in different segments of the sector to meet the targets set.

CHART 5.2 - FULL AND PART TIME FURTHER EDUCATION POPULATION ESTIMATES FOR 16-21 AGE COHORT (2008-2020)



Source: NCHE estimates, National Statistics Office (2007)

From the results it is clear that excluding the impact of adult participation (see potential impact on populations under priority 4), the sector that will absorb the growth in participation rates, possibly within more basic entry levels of further education will be MCAST and to a smaller extent the ITS.

The implementation of the MCAST Master Plan proposed in early 2008 is of vital importance to the long term growth of both youth as well as adult participation rates in further education and initial vocational education and training.

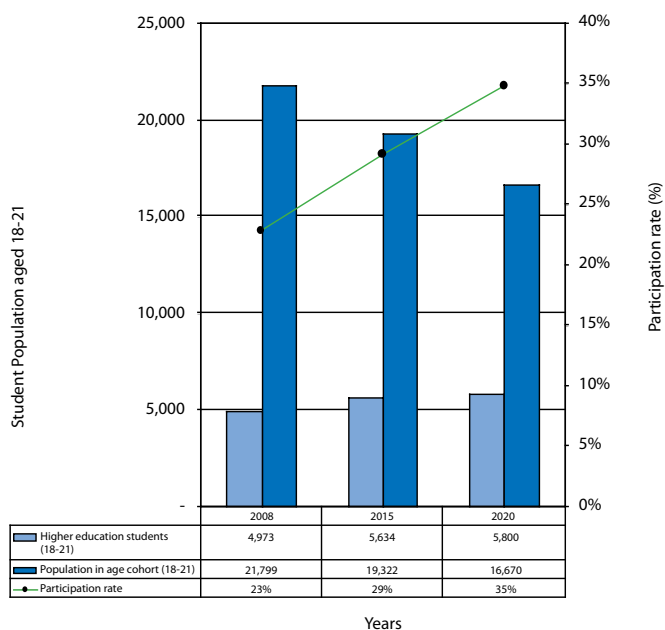
1.2 Attract 35% of school leavers into higher education by 2020

a) Teaching capacity of the University of Malta

The participation rate in tertiary education is a goal interlinked with outcomes of the system at a lower level. The target of reaching at least the average EU- 27 rate of participation in tertiary level education will determine Malta ability to compete in knowledge-based sectors having the necessary critical mass in terms of highly qualified graduates in target market segments.

Chart 5.3 shows the overall impact of growth in participation rates on the University of Malta, should the participation rate of those aged between 18-21 increase from the current 4,973 (23%) to 5,800 (35%) by 2020. Due to demographic changes the impact is not substantial.

CHART 5.3 - FULL AND PART TIME HE POPULATION ESTIMATES FOR 18-21 AGE COHORT (2008-2020)



Source: NCHE estimates, National Statistics Office (2007)

MATSEC Review

The challenge for higher participation rates will not be that of increasing physical capacity. Although some increase in capacity will need to be provided for, the main challenge for attracting more students into further and eventually higher education is that of providing more students with a high quality educational experience which leads them to meet the high standards required by the MATSEC system of examinations.

The NCHE urges government to address the recommendations of the report titled “MATSEC – Strengthening a National Examination System” submitted in 2005. Most of the feedback and recommendations made by the group at the time and recommendations made remain pertinent today.

Whilst the NCHE acknowledges that much more needs to be done in the quality of education at lower levels of education, it underscores the need to address the following points:

- Whilst understanding that the requirement for one sitting for Matriculation examinations has had a positive impact on attendance during the second year of studies, the NCHE urges for more research on alternative ways of assessing students possibly through phased coursework in a modular form in collaboration with schools, thus ensuring both regular attendance whilst reducing the concentration of exams in one single sitting. This could be combined with the recommendations for possible electronic examination systems which can be delivered simultaneously and in collaborations with schools;
- The second important review necessary is the adequacy of Intermediate Level papers. The NCHE highlights the repeated concerns raised in this regard and urges the MATSEC Board to maintain vigilance on the level setting of papers and marking for this level;
- Consultations echoed the same findings as reported in 2005, that the current structure of examinations leads to excessive private lessons.

Whilst not contrary to the provision of lessons to supplement mainstream education, the NCHE believes that attendance during regular hours of school should suffice for students to attain high pass rates – given that they apply themselves in their studies.

The current situation should draw attention towards either the quality of provision during regular hours in schools and sixth forms or the quality of examination papers being set.

- More needs to be done to encourage more students to attempt and pass SEC and Matriculation Certificate examinations, as pass rates are the main gateway for access to higher education.

Priority 2: Encourage students to undertake studies in areas relevant to Malta's economic, cultural and social development

The second priority urges for all concerted efforts to attract more students into areas of study which lead to career opportunities that respond to future economic, cultural and social needs.

The NCHE recommends the following targets under this priority:

- Increase recruitment to scientific and technical studies by 10% over the next 10 years;
- Attract 30,000 more students and adults in areas identified as a national priority for development; and
- Develop a structured platform for business and education research and collaboration.

Following is an outline of the proposed actions.

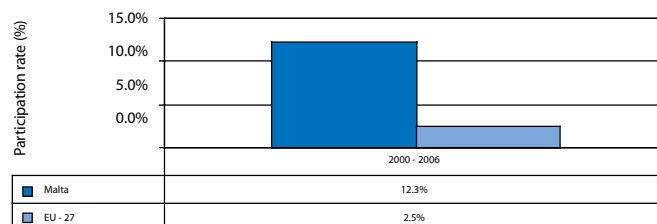
2.1 Increase recruitment to scientific and technical studies by 10% by 2020

The largest proportion of enrolments in Bachelors, Masters and Doctoral programmes in Malta occurred in the field of 'Social science, business and law' which accounts for 37% of all students enrolled at these levels. Graduates in science related fields accounted for 16% of all students.

The largest concentration of Bachelors, Masters and Doctoral qualifications awarded in OECD countries are in the field of 'Social sciences, business, law and services' and accounts for 37% of all graduates. Another 25% graduate in the field of 'Humanities, arts and education.' Graduates in science related fields account for another 25%.

Chart 5.4 shows that the number of Maths, Science and Technology graduates from the University of Malta more than doubled over the last 8 years from 700 in 2000 to 1,500 in 2008. A cross-country comparison of Malta vis-à-vis the EU-27 reveals that Malta has registered significant progress with a growth rate of just over 12% per annum over the period 2000-2006. The growth is primarily related to the increase in computing and ICT related studies.

CHART 5.4 - GROWTH RATE (%) PER YEAR IN MATHS, SCIENCE AND TECHNOLOGY STUDENT POPULATION



Source: (MT) NCHE Further and Higher Statistics, 2008, (EU-27) Progress towards the Lisbon Objectives in Education and Training – Indicators and benchmarks 2008 (pg 76)

Currently, most programmes offered in the fields of maths, science and technology are classified as prescribed for the purposes of the Student Maintenance Grant Scheme, to encourage students to pursue programmes in this field of study. Malta is making significant progress to achieve the EU benchmark for 2010 to increase in the number of tertiary graduates in Mathematics, science and technology by at least 15%.

Whilst this is positive, the choice to undertake science related studies cannot occur at a post-secondary or tertiary level solely on the basis of higher grants. Most students make their choices earlier, and this needs to be factored into the efforts of secondary schooling.

More than half of Maltese students in Doctoral programmes are preparing for a career in the field of Humanities and Arts (36%) and Social Science, business and law (22%). The number of Maltese students pursuing a career in Science and technology amounts to just under 24%.

The National Strategic plan for Research and Innovation 2007-2010 highlighted the following recommendations:

- the need for a 20-year science popularisation strategy to be drawn up in conjunction with the Ministry for Education NCHE support this recommendation (no. 47);
- sponsorship of competitions related to Science, Technology Design and Mathematics in schools (no. 48 and 49); and
- the need for conversion courses at the University of Malta to allow persons to convert from their original disciplines into SET disciplines, together with tilt in student support and scholarship schemes towards Science and Technology areas of study (no. 50 and 51).

NCHE endorses these recommendations and the recent launch of the Strategic Educational Pathway Scholarship Scheme (STEPS) which has created a strong incentive for post-graduate studies and research in Science and Technology related areas. The benefits of such initiatives will only be reaped if future research funding is aimed at projects which retain and attract back the best Maltese brains from overseas.

2.2 Attract 30,000 more students in areas as identified as a national priority for development

The NCHE report on “Skills for the Future” postulated scenarios of economic growth which reflect both government’s vision 2015 to focus on specific economic segments, as well as broad estimates of retirement and growth in different sectors which will by and large require newly skilled persons to meet their demands.

Table 5.5 shows the overall potential impact of the eight sectors identified as priority areas under Vision 2015. The report estimates that these eight sectors alone could contribute to the creation of around 30,000 jobs in the coming decade (taking into consideration both retirement and growth prospects).

Moreover the figures give an indication (which may be elaborated further by the sectors themselves) of those areas which students may be guided towards through better information, for their future training and education.

TABLE 5.5: JOB CREATION POTENTIAL BY 2020 OF PRIORITY AREAS UNDER VISION 2015

SECTORS	JOB POTENTIAL
TOURISM	5,467
FINANCIAL SERVICES	6,072
HEALTH SERVICES	4,625
EDUCATION SERVICES	4,331
COMMUNICATIONS AND IT	4,000
MANUFACTURING AND RELATED SERVICES	4,364
GOZO AS AN ECOLOGICAL ISLAND	(N/A)
MARINE	659
TOTAL JOB POTENTIAL	29,518

Source: NCHE (2009)

Moreover the report outlines the feedback from various sectoral representatives on the type of occupational and transversal skills employers are currently looking for in future employees.

Whilst understanding the limitations in the reliability of these estimates due to constraints in the research capacity available on the subject, the NCHE believes that the report is a positive start towards addressing the need to develop more objective

research on which to base guidance information for students to make intelligent choices.

The analysis highlights importance of developing programmes that address new specialisations required by various industries, and the important role of education institutions to balance the specific and generic skills and learning outcomes of their curricula.

2.3 Monitor emerging skills gaps, develop better foresight capacity and provide better guidance services to all students at all levels of education

In the same report on “Skills for the Future” the NCHE made several recommendations regarding the need to research and understand skills gaps.

These included the following

- the need to undertake more research, provide better statistics and develop foresight capacity to identify trends and anticipate change;
- the need for more synergies between education, business and government development agencies;
- the importance of providing more professional development to guidance services in schools and in further education institutions;
- and the need to ensure an ongoing debate between education and business to ensure a more responsive education sector capable of addressing identified skills gaps.

The NCHE supports intention to develop more structured fora between education and business communities. The University of Malta has proposed the establishment of a University Business forum. Likewise MCAST have ongoing discussions with business representatives to address various links between business and vocational education.

NCHE shall support all initiatives that give structure to this dialogue and will continue to provide an overarching framework of consultation under the theme “Skills for the Future”, which shall serve to inform policy developments in this regard.

Priority 3: Attract foreign fee paying students to study in Malta in various fields of study and research

The third priority urges for a concerted effort to attract foreign students to study in Malta at a further and higher education level.

NCHE is endorsing the following Government target:

- attract 5,000 fee paying foreign students by 2020 in various fields of study and research.

It proposes the following main measures:

- Develop an external policy for F&HE and co-ordinate efforts of the sector with Malta's international representation offices;
- Co-ordinate the entire necessary framework to ensure seamless access to education services for European and third country nationals.

Following is an outline of the measures in more detail.

3.1 Attract 5,000 fee paying foreign students by 2020 in various fields of study and research;

“Over the past three decades, the number of students enrolled outside their country of citizenship has risen dramatically, from 0.6 million worldwide in 1975 to 2.9 million in 2006, a more than fourfold increase. Growth in the internationalisation of tertiary education has accelerated during the past eleven years, mirroring the growing globalisation of economies and societies.” (Education at a Glance 2008, OECD pg. 352)

These developments offer Malta an unprecedented opportunity to develop cost-efficient education provision at a larger scale, and to generate alternative sources of income to supplement the financial pressures on public funding.

Attracting foreign students can also be linked towards attracting students in areas of skills mismatch with under demand from local students.

NCHE recommend the following measures:

- Assist higher education institutions to develop a portfolio of programmes that appeal to target international students;
- Support the UoM in its drive to offer more Joint Degree programmes with other leading international universities;
- Finance the development of a University Student residence facility to operate on a long term commercial basis;
- Upgrade facilities on campus including language support, reception, student's house, sports, transport and library services necessary for positioning Malta as a centre of excellence;

- Develop a framework to allow access to similar students as part of an incentive system for approved private education institutions.

3.2 Develop an external policy for F&HE and co-ordinate efforts of the sector with Malta's international representation offices;

More can be done on an international level to create the awareness of this long term strategic thrust, as follows:

- Promote networking and market research to identify the demand for niche education programmes and investment;
- Increase the visibility of Malta's F&HE sector around the world by participating in EU programmes and attending international education fairs;
- Strengthen relations with target countries in Asia, Africa and the Middle East to ensure recognition of Maltese qualifications and make Malta's education more attractive;
- Fully exploit EU mobility programmes, such as Grundtvig, Erasmus and Erasmus Mundus, aimed at promoting student and staff exchanges and work placements across Europe;
- Develop joint initiatives between NCHE, Malta Enterprise and other sectoral government development agencies, to attract Transnational education and research projects to Malta;
- Encourage F&HE institutions to develop links with overseas alumni to promote Malta's F&HE sector.

3.4 Co-ordinate the entire necessary framework to ensure seamless access to education services for European and third country nationals;

In as long as Malta cannot charge tuition fees to EU students, this thrust addresses markets outside the EU. In many instances incoming students will require entry visas.

- Better systems to provide quicker and smoother case processing for foreign applicants in terms of entry visas and residency issues for foreign students seeking to study in Malta should be developed.

Priority 4: Adapt systems for adults seeking Life Long Learning opportunities

The fourth priority relates to the need for further and higher education to articulate their role in addressing the needs for adult education, training and re-training.

The NCHE recommends the following actions for this priority:

- Provide 4% of adults between 24 and 64 year of age with life long learning opportunities in F&HE by 2020
- Develop an F&HE Life Long Learning strategy 2020 by 2010
- Develop a sustainable portfolio of evening and continuous professional development programmes

Following is an outline of the proposed actions.

4.1 Provide 4% of adults between 22 and 64 year of age with life long learning opportunities in F&HE by 2020;

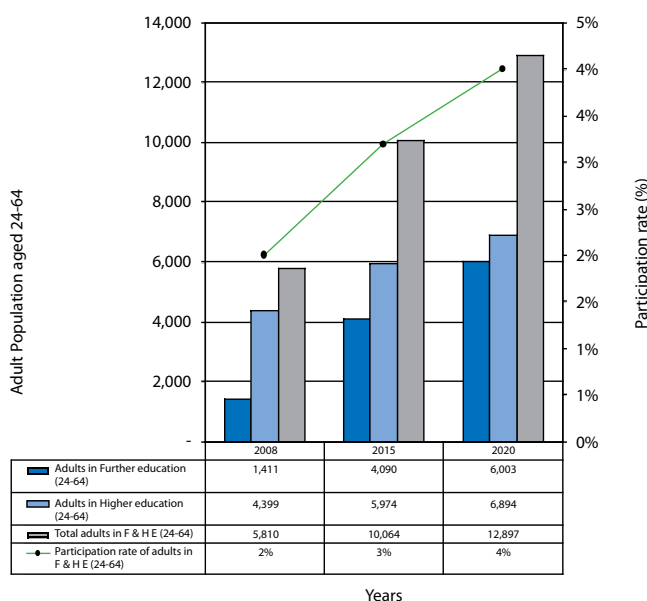
Currently F&HE provide 2% of the adult population between 24 and 64 with education and training opportunities. In total 6% of the adult population was in education and training as measured by the life long learning structural indicator for Malta in 2008.

In line with efforts in other sectors of VET, further and higher education will aim to provide 4% of adults aged between 24 and 64 with learning and training opportunities within the sectors.

Chart 5.6 shows the overall increase in adults participation in further and higher education from 5,810 (2%) in 2008 to 12,897 (4%) by 2020.

By 2020, approximately 60% of adult learners will be participating in evening classes or in part-time modalities within the respective sectors.

CHART 5.6-FULL AND PART TIME ADULT F&HE POPULATION ESTIMATES FOR 22-64 AGE COHORT (2008-2020)



Source: NCHE estimates, National Statistics Office (2007)

4.2 Develop an F&HE Life Long Learning strategy 2020 by 2010;

Recognising the need to develop a structured commitment towards lifelong learning within further and higher education, the NCHE recommends the development of a strategy in line with the European Universities Charter for Life Long Learning as referred to in the communiqué of the European Ministers for vocational education and training, in Bordeaux, in November 2008 during their review of the Copenhagen process.

Similar to the Charter, this strategy will define the respective roles and contributions of further and higher education institutions in addressing the development and implementation of lifelong learning in Malta. It should also outline the necessary commitments by Government and other partners primarily the business community, in order to transform Malta into a knowledge-based economy and centre of excellence in target areas.

4.3 Develop a sustainable portfolio of evening and continuous professional development programmes;

Potential growth in the part time sector of further and higher education could be income generating. Education institutions require full autonomy in determining fees for part time courses which ensure full recovery of cost and potentially some margin of profitability to compensate for new programmes that might not succeed in breaking even.

Governments should assist those who cannot afford such fees through a system of bursaries rather than direct control of fee levels.

Flexible and transparent learning systems need to be in place for adult learners to access and succeed in education and initial vocational training in all its different forms. It is the prime responsibility of education institutions to ensure that their educational programmes are of high quality.

Institutions on the other hand need to acknowledge the diversity of individual learner needs and therefore their responsibility to adapt programmes and ensure the development of appropriate learning outcomes in a learner-centred perspective.

Institutions need to be at the forefront of promoting wider participation and continuing education.

Priority 5: Secure fair and equitable access to further and higher education with particular focus on vulnerable groups

The fifth priority relates to the need for Government to sustain its support to students and adults, securing fair and equitable access to further and higher education.

The NCHE recommends the following actions for this priority:

- Secure fair and equitable access to all Maltese students willing to pursue studies at a further and higher education level in a state or private institution in Malta;
- Sustain student support schemes;
- Ensure in particular that support systems are in place for vulnerable groups, particularly people with disabilities, people with learning difficulties and ethnic minorities.

Following is an outline of the proposed actions.

5.1 Secure fair and equitable access to all Maltese students willing to pursue studies at a further and higher education level in a state or private institution in Malta;

In response to the educational challenges outlined in Chapter 2 above, more focus should be given to those parts of the system where equity problems arise: whether they are related to income constraints faced by families and insufficient student support, inequity of opportunities at the school level, and admissions and progression issues.

The NCHE urges for current reforms within the education sector to place lowering of early school leavers through higher attainment levels of identified school sectors as a primary objective.

The main reason for inequitable access to further and higher education is directly linked to the fact that people from certain disadvantaged backgrounds do not attain the necessary knowledge and skills at an early stage, which lead to successful progression.

Policy intervention at much earlier educational levels is necessary more effective to address equity in further and higher education. The current proposals of limiting early selection, improving quality in a consistent manner across all schools, and providing systematic help to those who fall behind at school are considered essential and urgent.

5.2 Secure fair and equitable access to all Maltese students willing to pursue studies at a further and higher education level in a state or private institution in Malta;

Student Maintenance Grants and similarly the MGSS UG scheme aim to encourage and assist students to continue their studies beyond the compulsory school age of 15. They reduce the financial burden on parents as a result of prolonged years of study and also bridge the gap between the income of a student and the forgone income from alternative work opportunities.

Post graduate scholarship schemes such as MGSS PG and STEPS have the following objectives to:

- assist exceptional students to pursue further levels of academic research;
- encourage and promote more student participation at a postgraduate level of academic research, both locally and internationally;
- contribute towards research in identified areas of national priority;
- increase the capacity and level of research, innovation and development activity in Malta;
- increase student choice of degrees and institutions.

In 2009 the Minister for Education requested from the NCHE a review of all current student support schemes, with a view of identifying gaps across the systems for coverage of students under specific circumstances or special needs. The review also focused on the implications of EU case law in relation to the different schemes in place.

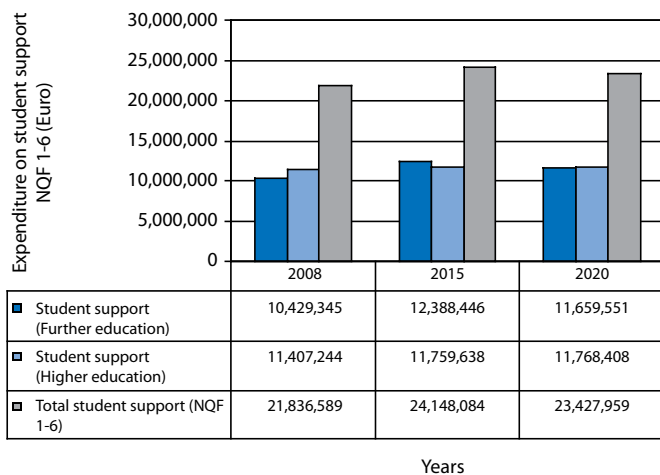
The NCHE recommended the following measures to be taken in terms of student support for those following FE studies at NQF Levels 1-5:

- Harmonise all grants for all students at these levels of education under the SMG scheme (Maltese students in state, private or foreign (EU) institutions);
- Transform the SMG Scheme to relate to the level of education rather than the name of the institution being attended, and develop criteria to determine which programmes offered by various institutions become eligible similar to those adopted under the current MGSS UG scheme;
 - Empower the SMG Board to evaluate the types of programmes offered by private or foreign institutions on the basis of formal recognition and equivalence (as verified by the Malta QRIC);
 - Vary grants by NQF level not type of institution.

- Subject to adequate licensing, accreditation and external quality assurance systems in place, extend portability of SMGs to students in the private sector following programmes at NQF Levels 1-6 rather than the present capping on level 6 only;
- Develop a common approach across all sectors to deal with the following aspects:
 - course switching, repetition within the same course, repetition of the same level and unsatisfactory progress or attendance;
 - eligibility in terms of citizenship, residence status, for Maltese, EU, 3rd Country nationals and Refugees;
 - supplementary assistance, special needs and contingencies.
- Consider extending the “tilt” effect for science and technology right through all NQF levels not just at NQF level 6.
- Review the ESTS and TAS schemes as potential schemes that can better address the vocational aspect of MQF Level 1-5 vocational programmes, towards making work experience an option for students in the same framework as Erasmus made student exchange and mobility an option at the higher level of education.

The NCHE has reviewed the financial impact of increased participation rates on student support schemes. Chart 5.7 shows the growth of support from approx. € 22 million in 2008 to € 23.5 million by 2020 peaking at around € 24.5 million in 2017.

CHART 5.7 - FINANCIAL FORECAST FOR STUDENTS SUPPORT SCHEMES [SMG, MGSS (UG), TAS, ESTS] - (2008-2020)



Source: Financial estimates 2008, NCHE estimates 2015, 2020

5.3 Ensure in particular that support systems are in place for vulnerable groups, particularly people with disabilities, and people with learning difficulties;

In its review of the current support schemes, the NCHE recommended the use of the intended contingency fund contemplated under the SMG Regulations to be utilised in assisting persons with particular circumstances requiring additional financial support. These could include persons with disabilities requiring particular equipment, support, or other assistance on a case by case basis.

Another dimension of special needs is addressed by the Supplementary grants within the SMG Scheme, which is a top up to the standard grants on a means tested basis. This takes into consideration the number of children in one family unit, and the joint parental income of the student.

Similar allowances are also in place within Scholarship schemes for post graduate scholars, in instances where the spouse accompanies the scholar abroad during long-term study periods or in cases where scholar has children.

Future scholarship schemes should also take into consideration specific disabilities and allow for those persons suffering from a disability the possibility of choosing distance learning programmes which should be considered at par with applications for full-time programmes.

More needs to be done and the NCHE will be incorporating this dimension in its annual statistical survey to inform policy about the necessary scale and type of special needs being met in further and higher education institutions.

Priority 6: Assure quality provision across all institutions and their programmes

The sixth priority calls for implementation of a new licensing, accreditation and quality assurance framework to assure quality provision across all institutions and their programmes in Malta.

The NCHE recommends the following actions for this priority:

- Promote excellence in further and higher education and in research by creating a quality culture across the sector;
- Establish a quality assurance agency and provide for independent evaluation;
- Monitor the performance and quality of outcome of all private provision offered in and from Malta and safeguard quality standards.

In line with the recommendations presented in March 2008 and the consultations held with all stakeholders, the NCHE recommends immediate implementation of a new regulation framework which takes into account the need for the following dimensions.

The aims and principles of quality assurance are based on the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (ENQA, 2005) adopted by the ministers responsible for Higher Education within the Bologna Process in Bergen 2005.

On a European level Malta is committed within the Bologna Process to developing a quality assurance system and has agreed to the ESG. 41 countries participating in the Bologna Process have a national quality assurance body. Malta is expected to be part of this process in the near future.

6.1 Promote excellence in further and higher education and in research by creating a quality culture across the sector;

For any quality assurance system to serve its purpose the first step is to ensure that institutions assume their responsibility for providing quality education and for having adequate quality assurance systems within to be able to evidence this externally.

The quality assurance framework aims to foster a 'quality culture', to improve the quality of education offered to students, to provide a means of accountability for the use of public funds, and make available reliable information about the quality of providers and their programmes to students, employers and the public.

- More emphasis on developing internal quality assurance systems is required to form the basis of future external evaluations;
- NCHE recommends that institutions review ESG standards for Internal Quality Assurance and develop the necessary

training and capacity to implement the necessary process in advance of an external quality audit;

- All external quality audits are based on the assumption that an adequate internal quality assurance system exists and can be relied upon as part of the overall quality assurance process – an internalised 'quality culture' will always need to be the basis of any effective system of quality control;
- Internal quality assurance systems should be in place for a target external review completed by latest 2015 for all major further and higher education institutions in Malta.

6.2 Establish a quality assurance agency and provide for independent evaluation;

The need for a quality assurance agency in charge of external evaluations to be independent of education institutions, and have trust in their internal quality assurance processes has been articulated sufficiently.

The NCHE calls for the adoption of new regulations on Licensing, Accreditation and Quality Assurance based on its recommendations submitted in March 2008.

Following the adoption of such regulations, the appropriate accreditation set-up is to be established, and experts required for future accreditation and quality assurance decisions identified, approached and engaged. The NCHE recommends that the NCHE jointly with the Malta Qualifications Council (MQC) act in unison for the purposes of Licensing, Accreditation and Quality Assurance of all institutions and programmes.

Membership within the European Association for Quality Assurance in Higher Education (ENQA), the European Network on Quality Assurance in VET (ENQA-VET) and the European Quality Assurance Register for Higher Education (EQAR) will be necessary for these agencies.

A specialised unit is required in order to support the work of the licensing authority and accreditation agency functions. Approval of funds for major state institutions to conduct the necessary internal reforms and develop their internal quality assurance systems is necessary, as well as their ability to afford external quality assurance.

In order to help providers of further and higher education understand the full implications of the new licensing, accreditation and quality assurance framework, a programme of support and information is to be organised which will serve to inform providers on the process to be adopted, and also to clarify queries.

The accreditation set-up will develop the adequate capacity to help providers of further or higher education to build their own internal quality assurance processes and issue guidelines, communicate and help providers to plan for eventual external accreditation and review.

All state institutions should undertake external quality evaluations and accreditation decisions should be completed by not later than 2015.

Budget commitment is necessary over the first 5 years to cover the development of internal quality assurance systems as well as the establishment of an external quality assurance agency.

Students play an important role in quality assurance and should be involved within all aspects of quality assurance.

6.3 Monitor the performance and quality of outcome of all private provision offered in and from Malta and safeguard quality standards;

There is growing interest by private providers to invest in further and higher education in Malta. Such investment requires a better framework than the current legal requirement of a licence to operate as a school.

Under the proposed framework, private institutions may seek accreditation under different classifications, which authorise such entities to deliver approved and recognised programmes.

The outcomes of external audits will form the basis of formal accreditation, licensing and recognition of qualifications awarded in or from Malta.

The framework will prove beneficial to students seeking to have to their qualifications recognised, to local and foreign providers operating in Malta and to providers offering home-grown programmes overseas. It ensures that the Malta's reputation for excellent further and higher education provision is safeguarded and that investment in quality private provision is an integral part of a strategy to increase further and higher education activity in the future.

Priority 7: Develop Malta's Qualifications Framework and qualification recognition services

The seventh priority calls for the implementation of the Malta Qualifications Framework (MQF) to classify and map the level of different qualifications awarded in Malta and use this tool to map foreign qualifications.

The NCHE recommends the following actions for this priority:

- Develop the Malta Qualifications Framework (MQF) to describe the levels of different qualifications, based on standards of knowledge, skills, competences and attitudes to be acquired by learners;
- Use the European Qualifications Framework as a reference tool to compare Malta's qualifications to the different qualifications systems in Europe.
- Encourage the use of learning outcomes to define and describe qualifications, and promote the validation of non-formal and informal learning;
- Promote the participation of all relevant stakeholders - higher education and vocational education and training institutions, social partners, sectors and experts on the comparison and use of qualifications;
- Facilitate the recognition of qualifications granted in foreign countries to Maltese students, or the recognition of qualifications awarded in Malta to foreign students or Maltese seeking to use such qualifications abroad, through the Malta Qualifications Recognition and Information Centre (MQRIC) and ensure its active participation within the ENIC/NARIC networks to provide assessments in a fair manner and in a reasonable time.

In line with the proposals of the Malta Qualifications Council²⁸ working documents, the NCHE is proposing its recommendations and feedback. Following is an outline of the proposed actions.

7.1 Develop the Malta Qualifications Framework (MQF) to describe the levels of different qualifications, based on standards of knowledge, skills, competences and attitudes to be acquired by learners;

Currently the 8-level MQF provides information on the level of education and its associated outcomes, clarity on pathways and potential routes for progression. The NCHE calls for all institutions to start mapping their qualifications to the MQF.

This mapping should follow the standards of knowledge, skills, competences and attitudes to be acquired by learners according to level descriptors. Protocols are being signed between the different education institutions and the Malta Qualifications Council.

7.2 Use the European Qualifications Framework as a reference tool to compare Malta's qualifications to the different qualifications systems in Europe;

The European Qualifications Framework (EQF) is the result of collaboration within the Bologna and Copenhagen processes. The frameworks of both these processes provide countries with an overarching platform map their educational systems to the wider world.

The EQF is a framework developed by the EU within the LLL work programme and relates to eight qualifications levels, whereas the EHEA Qualifications Framework (EHEA-QF) developed within Bologna provides for a three cycle system for higher education degrees.

In the align course of implementing the MQF, efforts need to be made to align both frameworks and avoid unnecessary duplication of mapping and referencing.

The 8-level EQF provides a common reference tool for the translation, recognition and transferability of qualifications amongst EU member states. The 8-level framework of the MQF has been benchmarked to the EQF. Thus, Malta's qualifications are aligned to those of other European member states.

NCHE recommends that for new qualification certificates, diplomas and 'Europass' documents issued by competent authorities should contain a clear reference, by way of referencing to the MQF, to the appropriate EQF level.

7.3 Encourage the use of learning outcomes to define and describe qualifications, and promote the validation of non-formal and informal learning;

An approach based on learning outcomes defined in terms of knowledge, skills and competences should be used to define and describe qualifications. This approach parts from a purely input-based approach (based on duration and teaching methods) and focuses on what an individual holding a particular qualification actually knows and is able to do.

F&HE intuitions should implement learning outcome methodology in their respective curricula and qualifications. To this end the NCHE recommends that the Bologna Expert Group in collaboration and support of the European Union Programmes Agency (EUPA), implement a more extensive training programme for academic staff within University of Malta, and urge the University of Malta to develop a joint project with other Universities that have implemented learning outcomes successfully and are willing to share best practices in this regard.

²⁸ Valuing All Learning, Working Documents 1-4 Malta Qualifications Council (2007,2008)

Similar initiatives should be developed in the further education sector under the co-ordination of the MQC.

The validation of non-formal and informal learning through certification and level rating within the MQF is encouraged since this provides an added value to the employment sector in Malta. The process of validation should be done by MQC in collaboration with further and higher education institutions, particularly the vocational sector. MQC should undertake research and provide recommendations with regards to the most appropriate model for the validation of non-formal and informal learning in Malta which will contribute to broadening the range of learning outcomes.

7.4 Promote the participation of all relevant stakeholders - higher education and vocational education and training institutions, social partners, sectors and experts on the comparison and use of qualifications;

Stakeholders involved in the comparison and use of qualifications include individual learners, business and voluntary organizations, the education sector, national policy makers on lifelong learning and European policy makers.

More structured relationships must be ensured between industry and education institutions in Malta whereby educational institutions are to be responsible for competences and learning outcomes whilst industry should be responsible to set occupational standards. Both sectors should work simultaneously.

7.5 Facilitate the recognition of qualifications granted in foreign countries to Maltese students, or the recognition of qualifications awarded in Malta to foreign students or Maltese seeking to use such qualifications abroad, through the Malta Qualifications Recognition and Information Centre (MQRIC) and ensure its active participation within the ENIC/NARIC networks to provide assessments in a fair manner and in a reasonable time;

The service provided by MQRIC is deemed very important in the recognition of qualifications. This Centre should be further strengthened in terms of capacity to handle the growing number of requests within reasonable time frames. Malta's participation in the ENIC/NARIC network which is the gateway to recognition of academic and professional qualifications should also be ensured.

Priority 8: Increase the University of Malta's research capacity

The eight priority calls for structural improvements of the University of Malta's research capacity as the main driver of local research activity.

The NCHE recommends the following actions for this priority:

- Develop the capacity of the University of Malta to undertake research in a broad range of areas of strategic national priority;
- Attract promising graduates into a research career;
- Ensure that quality of research reaches international standards of excellence.

The NCHE proposes the following actions under this priority:

8.1 Develop the capacity of the University of Malta to undertake research in areas of strategic national priority;

When addressing the mission of University, Government should pay attention to the multiple roles it has. Beyond the direct economic benefits of tertiary education – derived through the effects of human resource development, R&D and knowledge diffusion on technological innovation – the University of Malta supports many fields of knowledge and research that have no initial economic role to speak of, yet an enormous social and cultural significance. Protecting and fostering such fields, especially during times of financial restraint, is an increasingly urgent policy challenge.

The National Strategic Plan for Research and Innovation 2007-2010 (NSRI) adopted by the Malta Council for Science and Technology (MCST), urged for the placement of research and innovation at the heart of the Maltese economy to support value-added growth and wealth. The strategy highlighted that by and large the establishment of an R&I framework had been neglected.

The strategy made a series of recommendations, in particular related to the key role of the University of Malta to support research and innovation. The research capacity of the University of Malta practically underpins the entire strategy and determines the chances of success in reaching the goals set.

The NSRI presented the main priority areas in Science and Technology R&D as Health, Biotechnology, ICT, Energy, Tourism and hi-tech engineering. The second level of priority areas identified include water, transport, environment, marine, agriculture and masonry.

NCHE believes that in addition to Science and Technology related R&D, potential exists in areas related to humanities and

social sciences, which could have significant value added impacts on economic and social well being in Malta.

The NCHE reconfirms the objectives set in the NSRI in particular the recommendations that call for the need to invest in the necessary resources and critical mass required for the University to undertake research in identified areas of strategic importance. It argues that a strong Research Fund is a pre-requisite and inseparable condition for a high quality teaching institution in the future, and whilst calling for Government to assume the public responsibility for funding basic research, business and EU programme funding should be sought to compliment this effort.

NCHE is aware that some initial actions are giving signs of an exciting future for research activity. The outstanding performance of the University of Malta under the Sixth and Seventh Framework Programmes indicates the ability of Malta to develop innovative and exciting breakthroughs despite the various limitations it faces in this area.

NCHE recommends that a strong public commitment is made to research and a thorough review is conducted by the University of Malta to identify the necessary funding for research infrastructure, instruments and equipment required for the University to respond effectively to identified national research priorities. This should include both the resources of the tertiary education system with respect to its teaching, routine research and knowledge storage functions (including a structural investment in the Library resources available), and the more specialised scientific facilities required by certain research projects undertaken with industry.

Large science facilities are increasingly transnational in funding and operation, and this imposes a need for collaborative policies across countries. The increasing internationalisation of R&D presents significant opportunities for Malta to be part of international consortia.

The University of Malta currently makes use of two types of funds for research – direct public expenditure for internal research projects which amounts to aprox. €0.82 million (LM 0.35 million) per annum, and EU funds which such as FP7 funds (available for 2007 to 2013).

The current expenditure on R&D carried out by the UoM amounts to 0.08% of GDP. The budget for basic research and research capacity is very limited despite its significant potential to leverage EU funding.

EU funded projects can typically range from €200 – 600 thousand (depending on the type of project). For an average project worth €400,000, the University of Malta could attract €380,000 from

EU funds for every €60,000 of net government funding to the UoM. Such social returns to investment are unseen in any other area of public investment to date. According to NCHE estimates, the University has the potential of attracting at least €20 million over 6 years through net co-financing of €3 million (initially spending €8 million of which €5 million are recoverable through Income and value added taxes).

The UoM has the capacity to attract and generate such multiplier effects in research if a 6 year commitment can be made. No similar economic and social returns on investment (+600%) exist in any other venture funding initiative known to Government to date.

8.2 Attract promising graduates into a research career;

Part of the strategy to develop the University's research capacity is the ability to attract promising graduates into research careers. This in part is linked intrinsically with expansion of tertiary education career opportunities, and although a significant increase in part-time work is being witnessed, more full-time posts would be necessary to sustain the development of R&D and to make the career path more attractive. The NCHE notes positively the recent outcomes of the collective agreement which ensure that salaries remain commensurate with other professions.

Developing researchers takes time. The successful match between supply and demand for researchers depends on a flexible and rapid response from University as well as incentives for mobility. Science and Technology graduates are a crucial for R&D, persons with technical skills and vocational training are also a central part of the research and innovation system. Innovating firms are not necessarily engaged in the development of radical, new to the world goods, services or processes, therefore many innovation activities are a key function of vocationally trained individuals.

The recent Malta Government Scholarship Schemes (MGSS) and Strategic Educational Scholarship Schemes (STEPS) launched by the Ministry for Education, Culture, Youth and Sport, are an important incentive to attract more graduates into post graduate studies. The important 'tilt' factor inbuilt in the STEPS scheme for Science and Technology related areas is a positive response to recommendations made within the NSRI.

Whilst portability of grants under these schemes encourages mobility and contributes towards addressing skills mismatches and areas of specialisation not covered by programmes available locally, the main challenge for Government in the coming years is the follow up of the Alumni of such schemes in a proactive manner to ensure that the best brains are attracted back and engaged in vibrant research and innovation activities in Malta.

8.3 Ensure that quality of research reaches international standards of excellence;

NCHE in collaboration with MCST participated in a CREST Working Group (WG) on "mutual learning on approaches to improve the excellence of research in universities".

The report highlights the importance of the following instruments:

- Capacity building, focusing on the setting-up, updating and development of infrastructures, young researchers and career development
- Competitive research stimulated by a framework of autonomy and competition in a bottom-up approach, based on incentives, quality management systems, evaluation and peer review
- Prioritization of research groups and fields, promoting the setting-up of elite segments to achieve world-class excellence through policies ensuring the promotion of excellent research groups and the stimulation of network structures.

NCHE urges for more strategic focus, prioritisation and long term planning in R&D policies related to the UoM, linked to national strategies and backed up by committed public funding. NCHE further recommends that new funding systems linked to fiscal incentives should be developed to compliment this area of activity within the higher education sector.

Priority 9: Facilitate and promote student and teacher mobility

“... The global battle for talent has reached fever pitch. The winners of this battle will be countries with a whole-hearted, serious and professional approach. The losers will have a half-hearted, tentative approach, with a “nice-to-do” rather than “need-to-do” view of internationalisation.

The “whole-hearted” approach is led politically with the government setting the pace for national internationalisation efforts so that the political/administrative system and institutions work together, create synergy through coordinated efforts and, equally importantly, ensure the public investment necessary to realise the strategy.

The “half-hearted” approach means that internationalisation efforts are primarily at institution level. Some institutions will have a formal strategy laid down by management, while others will benefit from enthusiastic individuals who create international contacts on behalf of their institution. There is only limited political leadership, with inadequate and short-sighted public investment.”
Akademikernes Centralorganisation Sekretariatet – 23.05.07

Mobility is fast becoming a critical aspect of any students’ or academics’ personal development, career goals and employability potential. It is also an increasingly important factor in educational policies.

The NCHE recommends the following actions for this priority:

- Sustain foreign language learning and maintain the high level of English language proficiency in students;
- Encourage higher participation in European and international mobility programmes for students and staff such as Erasmus, Erasmus Mundus, Grundtvig and other sponsorship programmes available;
- Increase portability of local student support schemes to those students choosing to pursue studies in other EU states;
- Strengthen European co-operation on the development of initiatives for mutual exchange of students, staff and researchers.

Following are the proposed actions under this priority:

9.1 Sustain foreign language learning and maintain the high level of English language proficiency in students;

- Provide for more language support to those students willing to attend programmes in a foreign language;
- Sustain high levels of English language proficiency at early stages of education and promote further the learning of other foreign languages at all levels of education.

9.2 Encourage higher participation in European and international mobility programmes for students and staff such as Erasmus, Erasmus Mundus, Grundtvig and other sponsorship programmes available;

- Malta should sustain its efforts to secure funding for current EU mobility programmes to sustain its mobility targets;
- Malta should take measures to ensure that the tools and instruments are available to ensure that the envisaged European target of having 20% of graduates mobile by 2020 is reached;
- Increase efforts and undertake campaigns to promote the benefits of mobility to further and higher education students;
- Increase the number of structured mobility windows in programmes, during which students are encouraged and able to spend time abroad;
- The best champions for promoting mobility are academic staff members who benefit from mobility themselves. Opportunities for staff mobility should be sustained;
- Provide for the integration of foreign students studying in Malta, with the provision of language and cultural support.

9.3 Increase portability of local student support schemes to those students choosing to pursue studies in other EU states;

- Sustain the portability of Student Maintenance Grants during the time when Maltese students are attending foreign universities within exchange programmes;
- Sustain the current policy of portable Scholarships under the Malta Government Scholarship schemes and the STEPS Scheme to students following graduate or postgraduate studies in foreign universities;
- Maintain the additional support provided through the APS Youth Specialisation Scheme, providing subsidised loan finance for those students require financial loans to complete their studies;
- Provide more information on scholarships and reception programmes available internationally to Maltese citizens, through the NCHE.

9.4 Strengthen European co-operation on the development of initiatives for mutual exchange of students, staff and researchers.

- Consolidate efforts to promote Malta as an education destination under the branding of “Study in Malta” as a stand alone initiative as well as within the EU’s Study In Europe Campaign;
- Increase awareness of Maltese Embassies and develop stronger links with international networks;
- Continue developing the NCHE web portal to provide an overview of all recognised Maltese further and higher education institutions and programmes, and which provides information about the practicalities to be dealt with before starting a programme (e.g. legal considerations prior to travel, general information, etc.).

Priority 10: Ensure responsive systems through adequate governance and funding policies

“Institutions are likely to be more effective in achieving their mission if they benefit from ample autonomy in the area of human resource management, e.g. with faculty and staff being formal employees of institutions, institutions having broad discretion over the setting of academic salaries, the freedom to create academic positions in line with their strategy, the ability to determine the career structures which reflect the distinct roles academics play within them (including the balance between teaching and research), and the design of promotion, assessment and professional development strategies.

In this context of ample autonomy over the management of human resources, the role of national legislation should focus on principles rather than specific processes. The transparency of staff appointment, promotion and performance appraisal processes should be given particular attention, e.g. principle of open competition for positions, selection on the basis of merit, external assessors for senior positions.” (Tertiary Education for the Knowledge Society, OECD 2008)

NCHE acknowledges the importance of governance and funding systems in defining the accountability for use of public funds, determining the quality of educational outcomes and the responsiveness of the system to social and economic realities.

The following actions are recommended for this priority:

- Establish common principles, objectives, and guidelines for more proactive governing structures within the state further education sector;
- Orient the internal governance system of the University of Malta towards more strategic planning, professional governance and internal accountability;
- Review funding systems – the adequacy of public funding, the extent to which institutions can generate other sources of income and the efficiency with which funds can be utilised for timely responses;
- Promote Malta as a destination for investment in educational services for international markets.

Following are the proposed actions under this priority:

10.1 Establish common principles, objectives, and guidelines for streamlined governing structures within the state further education sector;

Currently the state further education sector is fragmented in terms of different models of governance and accountability. Giovanni Curmi and Sir M. Refalo higher secondary schools are under the remit of the Directorate for Educational Services

within the Ministry for Education, Culture, Youth and Sport, the Junior College part of the University of Malta, whilst MCAST and ITS are both governed by appointed boards. All institutions have a principal, Sir M. Refalo of Gozo also falls under the joint responsibility of the Ministry for Gozo, whilst the Junior College has a Governing Board which however is subject to the University Council in terms of overall and final approvals.

NCHE recommends a more streamlined approach to ensure more consistent models of governance across the sector. Reforms in governance should ensure that a common set of principles are developed for all state further education institutions. These could include the requirement for all institutions to be governed by a “governing board” whose function is to define and promote the mission of that particular institution, to outline the strategic plans and financial requirements of that institution and to direct the executive of these institutions in terms of strategic decisions required.

The governing boards will also take an active role in ensuring the effective implementation of internal quality assurance systems and in conjunction with the executive management of these institutions, collaborate and respond to recommendations of external quality assurance processes. This does not preclude the possibility of having different institutions remaining attached to different competent authorities under the present situation, however ensures that principles receive the necessary focus, direction and support in terms of governance from boards that are more focused and vigilant on the specific mission of these key institutions.

Reforms also need to ensure that further education institutions also have the flexibility of developing the necessary teaching and staff development conditions that are fit for purpose. Conditions cannot be transposed from either secondary level education or tertiary level education – the system needs to have the flexibility and the chance to develop conditions that address the growing demands on high quality further education in its diverse forms (academic education for high achievers, second chance academic opportunities, vocational and technical training, and support for special needs).

10.2 Shift the internal governance system of the University of Malta towards more strategic planning, professional governance and internal accountability;

A review of the internal governance structure of the University of Malta is necessary.

NCHE believes that the primary role of the University Council as the supreme governing body should be that of developing the

strategic priorities and ensuring its relevance and responsiveness to national economic, social and cultural needs. It should shift from the current management of the University to the management of change – change outside the walls of the University and strategic changes necessary within.

The NCHE recommends the following:

- Council members responsible for the governance of the University of Malta require professional development through a programme of regular workshops with peer governors of reputable Universities, to exchange best practices;
- Council should have the power to organise its functions through the establishment of sub committees to which specific functions can be delegated either through its statutes or in certain instances by requirements entrenched within the Education Act;
- Council would benefit from the appointment of external stakeholders on sub committees who can lend the University expertise and impartiality in certain areas of important decision making. To this end, NCHE recommends that the Rector be empowered to nominate external experts within specific sub committees and for Council to approve such nominations to assist in its governing functions as appropriate;
- Furthermore, the NCHE recommends a review of the current accountability structure for senior appointments with an emphasis being placed on a rigorous and transparent selection process. This should lead to more accountability towards achieving the objectives set by Council.

Functions of Council that would benefit from the proposed sub committee structure include:

- Human resource management: staff appointments, promotion, dismissal, incentives for academic career structure and working conditions;
- Resource planning and management: decisions relating to University assets, endowments and companies;
- Finance: decisions relating to revenue generation, borrowing of funds, allocation of funds in relation with the approved strategic objectives set by Council, tuition fee setting and other considerations related to managing collaborative agreements or competitive measures on an international level;

- Quality assurance: decisions related to internal quality assurance systems and processes, technical reviews of quality assurance findings, and review of necessary decisions related to external quality assurance recommendations;
- Research priorities: develop the research capacity of the University, focusing on its existing strengths, developments in Maltese industry and emerging areas of opportunity in Europe and worldwide.

10.3 Review funding systems – the adequacy of public funding, the extent to which institutions can generate other sources of income and the efficiency with which funds can be utilised for timely responses;

The NCHE believes more transparent long-term financial planning is required to reach the targets set by Government in this sector.

In particular, funding systems should take into account the following:

- Annual budgetary allocations should be determined in relation to increasing participation rates and quality improvements necessary within education institutions;
- University funding for research should be determined in relation to R&D targets, long term capacity requirements;
- Co-financing opportunities available within EU programmes
- Allow education institutions more discretion to review tuition fees to ensure full cost recovery of their part-time programmes, and in the case of the University of all its post-graduate programmes, and ensure fair access opportunities through grants or scholarships – suppression of tuition fees without adequate subsidies jeopardises quality and viability of educational offers in these sectors over the long term;
- Tax incentives for private donations towards supporting teaching and research activities should be implemented – this could assist institutions develop a Trust Fund through donations from business or alumni to finance additional research or teaching activities;

Whilst the potential funding requirements for this strategy are outlined in the investment plan proposed hereunder, the NCHE recommend an improved practice in the determination of budgets for educational institutions. The NCHE shall establish a funding committee to consult with institutions and determine the adequacy of funding commensurate to the numbers of students, the necessary level of resources, quality and infrastructural developments, and the attainment of key strategic objectives.

The NCHE shall propose three year rolling forecasts, reviewed on an annual basis to inform Government and education institutions in the budget process. The NCHE Funding Committee will limit itself to an advisory role as contemplated in the current Education Act.

10.4 Promote Malta as a destination for investment in educational services for international markets;

- NCHE reiterates the potential role of the private sector in providing more educational pathways to Maltese students as well as developing Malta as an international destination for education.
- In line with incentive packages for investment in other sectors of the economy, more attractive conditions need to be developed for education institutions seeking to establish in Malta.
- Any measures contemplated in this respect should occur in tandem with recommendations under Priority 3 above, in particular the capacity and will to provide fast and seamless entry visa processing.
- Support private institutions to integrate within the existing quality assurance, licensing and recognition frameworks.

Priority 11: Maintain active participation and co-operation within the Europe and Internationally

Malta's place within the world community is intrinsically linked to the role of education and its higher education institutions. The continued development of Malta into a dynamic Mediterranean and European actor requires increased focus to be given to the country's active participation within international higher education forums, peer learning exercises and increased cooperation with Malta's European and Mediterranean neighbours.

In terms of higher education, Malta is already an active member of the Bologna Process, the Copenhagen Process, other European Union HE initiatives, together with Commonwealth and Mediterranean networks and forums. This participation must be sustained and Malta should strive to ensure that decisions in these forums guarantee that smaller states' perspective is taken into consideration.

The developments in Maltese higher education are testament to the role played by the country over the past years within these forums. Taking the Bologna Process as an example, its role as a driver for change within European Higher Education over the last ten years is evident while its influence will increase over next ten years and so with it must the part Malta plays in the process.

For Malta to position itself as a strategic Higher Education hub of excellence within Europe and the Mediterranean the NCHE recommends the following priorities:

- Consolidate Malta's participation within the Bologna Process and implement the necessary actions to position Malta with the European Higher Education Area up to 2020;
- Ensure that targets set for Malta within the Lisbon Agenda are met and maximise the opportunities for exchange of good practices and shared experience with other member states;
- Ensure that the goals of the Copenhagen Process are met on a national level, in particular through the validation of non-formal and informal learning and the implementation of the future European Credit system for Vocational Education and Training (ECVET);
- Ensure that Malta plays an active role in the development of the European Research Area (ERA);
- Develop an all encompassing external policy to embrace opportunities beyond the European level for international co-operation and visibility.

Following are the proposed actions in more detail:

11.1 Consolidate Malta's participation within the Bologna Process and implement the necessary actions to position Malta with the European Higher Education Area up to 2020;

- Further support the work of the Bologna Process as the main driver of change and increased compatibility of HE systems;
- Support the fulfilment of the Bologna goals by 2020
- Work towards sustaining the current structure within the Bologna Process as an intergovernmental initiative based on consensus;
- Ensure sufficient resources are given to national Bologna Expert Groups in order for the process to further the impact it has on Maltese Higher Education Institutions and students;
- Increase the publicity given to the goals of the process and Malta's efforts in this regard;
- Sustain the stakeholder involvement in the process both on a European and National level;
- Further support the development of the envisaged "Bologna Policy Forum" and within this framework promote Maltese and European Higher Education to countries outside the European Higher Education Area (EHEA).

11.2 Ensure that targets set for Malta within the renewed Lisbon Agenda are met and maximise the opportunities for exchange of good practices and shared experience with other member states;

- Sustain Malta's presence in the Lisbon Agenda's continued development and ensure the particular requirements of small states are taken into consideration;
- Ensure that adequate follow up structures on a national level exist and are given the necessary resources to fulfil their role;
- Ensure that the instruments and tools are provided so that the benchmarks set out in the EU's renewed strategic framework are met;
- Sustain Malta's presence in EU forums and networks with particular emphasis on capacity building and mutual learning activities.

11.3 Ensure that the goals of the Copenhagen Process are met on a national level, in particular through the validation of non-formal and informal learning and the implementation of the future European Credit system for Vocational Education and Training (ECVET);

- Sustain Malta's presence in this Process and ensure adequate resources for national structures to implement the process' goals;
- Ensure that the process to intertwine Vocational education & training and Higher Education is continued;
- Sustain Malta's participation within European and International vocational education and training forums, meetings and networks and continue building international links and following international developments in this regard.

11.4 Ensure that Malta plays an active role in the development of the European Research Area (ERA);

- Strengthen and consolidate Malta's involvement in any developments resulting from the emerging European Higher Education Area (EHEA) and the European Research Area (ERA);
- Work towards ensuring that the European Research and Higher Education Areas continue on their path of convergence;
- Closely follow developments relating to the European Institute of Technology (EIT) and further develop the role of Maltese Higher Education Institutions in this regard;
- Further pursue agreements particularly relating to research, mobility, recognition, mutual learning and exchange of best practices with neighbouring Mediterranean countries and European partners.

11.5 Develop an all encompassing external policy to embrace opportunities beyond the European level for international co-operation and visibility;

- Actively participate within the various European, International, Mediterranean and Commonwealth forums, networks and intergovernmental initiatives dealing with Higher Education – with a particular focus on Malta's role as a strategic Mediterranean country, within the Bologna Process, the EU's Education and Work Training Programme and the Copenhagen Process;

- Malta's strategic position enables it to exploit its role as a bridge between the Middle East, Africa and Europe and increased co-operation in terms of student and academic exchanges, capacity building and mutual learning needs to be prioritised;
- Consolidate an alumni network of graduates from Malta's HEIs - which will ensure an increased profile for the Maltese Higher Education sector;
- Encourage and promote alumni to act as role models for students in Malta, particularly in areas of importance to the country such as Science and Technology;
- Strengthen Malta's role within existing Mediterranean higher education networks and strengthen Maltese Higher Education Institutions' role within the Euro-Med region;
- Make use of EU mobility programmes, such as Erasmus Mundus, to further develop links with non-European States and Higher Education institutions;
- Sustain the NCHE's participation within the Organisation for Economic Co-operation and Development's (OECD) Programme on Institutional Management in Higher Education (IMHE) and similar international networks;
- Increase Malta's exposure by from hosting higher education events, which will both serve to promote Malta as a HE destination but will have positive spill over effects into other areas of the economy;
- Provide for adequate support, in particular in terms of recognition, for students who actively participate in international and local organisations as a part of a holistic higher educational experience.

Priority 12: Develop and implement a long-term Investment Plan

More is required for the development of long term investment in further and higher education. The financial impact of the participation targets set in this strategy and the major measures that require funding and implementation are included in the estimates presented under this priority. NCHE recommends more long term planning and open consultation in this respect, and is committed to continue developing its research capacity to

inform Government of the implications of funding levels on the overall outcomes of the system.

Table 5.8 shows the current public expenditure on further and higher education including student support. Total public expenditure amounts to € 86 million in 2008 and is anticipated to increase to € 99 million in 2009. These current recurrent expenditure rates are used as a basis for future projections

TABLE 5.8 – CURRENT STATE FUNDING TOWARDS FURTHER AND HIGHER EDUCATION SECTOR (2007 – 2009)

	ACTUAL 2007 €	APP. ESTIMATE 2008 €	ESTIMATE 2009 €
Gross Domestic Product (a)	5,415,000,000	5,676,000,000	5,987,000,000
Total Further and Higher Education	72,106,272	86,181,000	99,403,000
<i>Total Further and Higher Education as a % of GDP</i>	<i>1.33%</i>	<i>1.52%</i>	<i>1.66%</i>
FURTHER EDUCATION			
Recurrent Expenditure - General	11,983,732	11,990,000	13,672,000
Institute of Tourism Studies	1,268,614	1,274,000	1,288,000
Junior College	5,357,559	5,358,000	6,192,000
Malta College for Arts, Science and Technology	5,357,559	5,358,000	6,192,000
Capital Expenditure	1,721,043	3,774,000	5,565,000
Institute of Tourism Studies	46,588	47,000	45,000
Malta College for Arts Science and Technology	1,674,455	3,727,000	5,520,000
Capital Expenditure - EU Funds	4,500,000	7,573,000	7,471,000
Malta College for Arts Science and Technology	4,500,000	6,662,000	7,471,000
Institute of Tourism Studies	-	911,000	-
Total Further Education	18,204,775	23,337,000	26,708,000
<i>Total Further Education as a % of GDP</i>	<i>0.34%</i>	<i>0.41%</i>	<i>0.45%</i>
HIGHER EDUCATION			
Recurrent Expenditure - General	27,659,934	30,224,000	33,030,000
Office of the University Ombudsman	10,272	12,000	30,000
University of Malta	27,486,606	30,049,000	33,000,000
Foundation for International Studies	163,056	163,000	-
Capital Expenditure	372,541	3,145,000	3,070,000
University of Malta & Junior College	372,541	3,145,000	3,070,000
Capital Expenditure - EU Funds	4,300,000	7,670,000	13,805,000
University of Malta	4,300,000	7,402,000	13,674,000
Foundation for International Studies	-	268,000	131,000
Total Higher Education	32,332,475	41,039,000	49,905,000
<i>Total Higher Education as a % of GDP</i>	<i>0.60%</i>	<i>0.72%</i>	<i>0.83%</i>
STUDENT SUPPORT			
Stipends to ITS students	768,595	769,000	769,000
Student Maintenance Grants	19,268,747	19,334,000	21,007,000
Malta Governments Scholarships Fund	445,586	466,000	466,000
Technician Apprenticeship Scheme	400,036	373,000	(b)
Extended Skills Training Scheme Subsidy	312,059	373,000	(b)
Total Student Support	21,195,023	21,315,000	22,242,000
<i>Total Student Support as a % of GDP</i>	<i>0.39%</i>	<i>0.38%</i>	<i>0.37%</i>
POLICY			
Malta Qualifications Council	164,355	210,000	268,000
Commission for Higher Education	209,644	280,000	280,000
Total Policy	373,999	490,000	548,000
<i>Total Policy as a % of GDP</i>	<i>0.01%</i>	<i>0.01%</i>	<i>0.01%</i>

Source: Financial estimates 2008-2009, Ministry of Finance, Malta.

TABLE 5.9 - INVESTMENT PLAN FOR FURTHER AND HIGHER EDUCATION (2009-2020)

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
STUDENT POPULATION													
VOCATIONAL	4,586	5,069	5,426	5,704	6,010	6,430	6,746	6,373	6,311	6,300	6,115	5,957	5,949
GENERAL	5,494	5,612	5,714	5,621	5,557	5,735	5,961	6,487	6,439	6,354	6,216	6,132	6,157
FURTHER EDUCATION	11,643	12,513	13,181	13,596	14,092	14,900	15,650	16,162	16,633	17,090	17,321	17,623	18,160
HIGHER EDUCATION	9,737	10,042	10,312	10,519	10,690	10,793	10,920	11,121	11,368	11,591	11,653	11,641	11,642
ADULTS IN F&HE	6,175	6,661	7,147	7,633	8,119	8,605	9,091	9,576	10,062	10,548	11,034	11,520	12,006
TOTAL F&HE STUDENTS	27,554	29,216	30,640	31,747	32,901	34,298	35,660	36,860	38,063	39,230	40,008	40,784	41,807
PUBLIC EXPENDITURE (EUR)													
VOCATIONAL EDUCATION (FE)	6,632,000	6,041,536	6,249,639	6,278,261	6,275,282	6,413,787	6,656,784	6,747,995	6,801,160	6,851,144	6,795,476	6,654,095	6,696,265
GENERAL EDUCATION (FE)	6,493,555	6,984,239	7,122,096	7,120,106	7,206,609	7,575,051	7,773,850	7,840,671	7,872,007	7,929,803	7,782,454	7,784,756	7,932,535
RECURRENT EXPENDITURE (FE)	13,125,555	13,025,775	13,371,735	13,398,367	13,481,891	13,988,837	14,430,635	14,588,666	14,673,167	14,780,947	14,577,931	14,438,851	14,628,800
CAPITAL EXPENDITURE (FE)	3,774,000	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750	9,442,750
TOTAL FURTHER EDUCATION	16,899,555	22,468,525	22,814,485	22,841,117	22,924,641	23,431,587	23,873,385	24,031,416	24,115,917	24,223,697	24,020,681	23,881,601	24,071,550
RECURRENT EXPENDITURE (HE)	30,049,000	33,193,194	34,203,006	34,904,563	35,479,745	35,834,837	36,252,117	36,908,650	37,719,037	38,466,013	38,696,967	38,672,443	38,672,106
CAPITAL EXPENDITURE (HE)	3,145,000	3,070,000	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875	4,698,875
TOTAL HIGHER EDUCATION	33,194,000	36,263,194	38,901,881	39,603,438	40,178,620	40,533,712	40,950,992	41,607,525	42,417,912	43,164,888	43,395,842	43,371,318	43,370,981
FURTHER EDUCATION SUPPORT	10,452,120	10,331,744	10,739,605	10,921,334	11,175,874	11,709,753	12,191,682	12,460,616	12,692,760	12,911,570	12,928,531	13,008,096	13,299,122
HIGHER EDUCATION SUPPORT	11,977,607	10,836,045	11,150,299	11,370,248	11,538,274	11,606,270	11,708,516	11,921,260	12,200,399	12,446,267	12,452,156	12,350,572	12,266,284
SCHOLARSHIPS	400,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	400,000	400,000	400,000	400,000	400,000	400,000	400,000
STUDENT SUPPORT (SMG+SCHOLARSHIPS)	22,829,727	23,667,789	24,389,904	24,791,582	25,214,149	25,816,023	24,300,198	24,781,876	25,293,160	25,757,838	25,780,687	25,758,668	25,965,405
QUALITY ASSURANCE AND POLICY	841,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194	805,194
RESEARCH FUNDING	1,900,000	3,166,667	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000	3,800,000
CAPITAL PROJECTS	14,975,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000	22,056,000
EU FUNDING	16,875,000	25,222,667	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000	25,856,000
TOTAL PROJECTED EXPENDITURE (F&HE)	90,639,476	108,427,369	112,767,464	113,597,332	114,678,605	116,142,517	115,185,769	116,482,012	117,888,183	119,207,617	119,258,405	119,072,782	119,469,130
TRUST FUND	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000	900,000
FOREIGN FEE-PAYING STUDENTS	900,000	900,000	900,000	1,200,000	1,200,000	1,200,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000
POTENTIAL REVENUE (F&HE)	1,800,000	1,800,000	1,800,000	2,100,000	2,100,000	2,100,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000	2,400,000

Source: NCHE estimates

The current cost model estimates the following:

- expenditure on further and higher education to amount to €1.2 billion up to 2020;
- leading over 100,000 students and adults to attain further and higher levels of qualifications; and
- and potential revenues of over €1.5 million annually as a result of reaching 500 foreign fee-paying students in 2020 and 5,000 students between 2009 and 2020;

The estimates assume:

- growth in student participation rates up to 85% of 17 year olds in further education by 2015 and 35% of 19 year olds in higher education by 2020;
- current recurrent expenditure rates per capita used for future estimates;

- current Student Maintenance Grant rates for students and STEPS scholarship (€10 million by 2013);
- the implementation of the approved MCAST Master Plan of €116 million over the coming 10 years;
- approx. €.8 million annually for internal and external quality assurance developments in F&HE.

The NCHE recommends that more research is done to link the investment strategy of government and the operational and financial plans of respective state and dependent institutions to the objectives within this strategy.

Furthermore, the NCHE is developing a model to estimate the potential economic benefits and value added of the target student rates in further and higher education. Past experience shows that the social and economic returns to investment in education are high and have been the key factor for Malta's rapid social, cultural and economic development.

Chapter 6

THE WAY FORWARD



NCHE recommends the following actions moving forward:

1. A reform of the current Education Act with a view to developing a Further and Higher Education Act incorporating the recommendations on Governance, Funding, and Quality Assurance;
2. The development of a medium term investment plan in education, taking into consideration the necessary funding for the various measures proposed under the different priority areas;
3. Review by state institutions of strategies currently in place in response to this strategy;
4. An NCHE annual strategy conference to monitor the progress of the sector towards the targets set, and an update report reviewing the strategy every three years.

Annex 1

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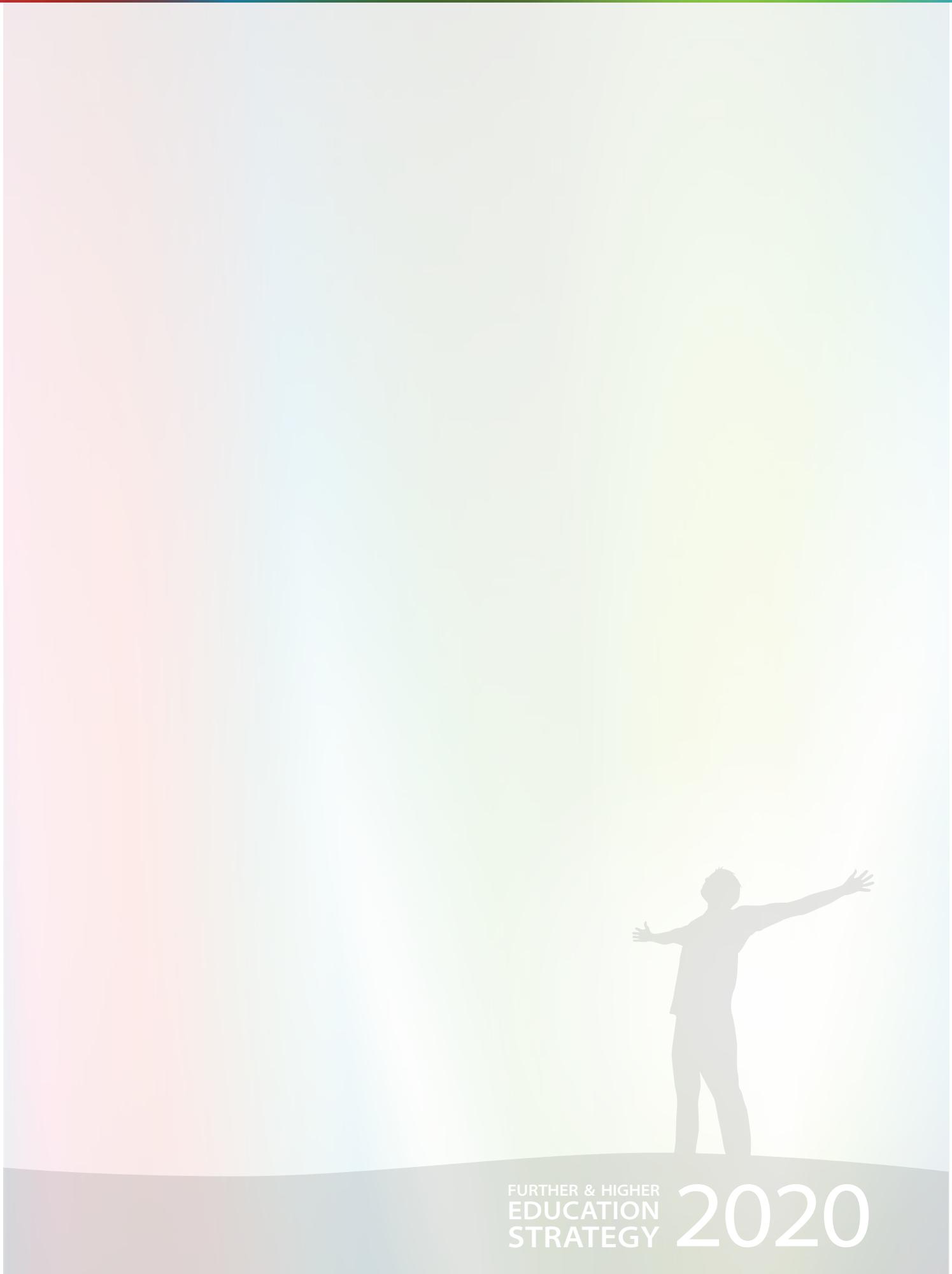
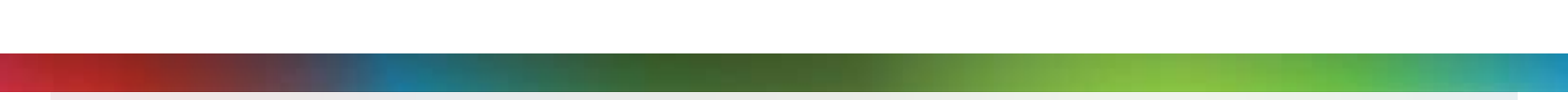
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