

2020 VISION OR OPTICAL ILLUSION?

2020 VISION OR OPTICAL ILLUSION?

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As I come to the end of this term as Rector (2006-2011), this report captures my mood, my personal thoughts, and the state-of-play at the University of Malta in the context of the evolving national milieu. It is an extended version of a chapter, which I dedicated to Prof. David Attard in his *liber amicorum*, and which I dedicate to him again in this extended form in recognition of his exemplary service to our *alma mater* in his capacity as Pro-Chancellor and President of Council during my tenure; his presence and friendship made all the difference.

17th September 2010

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An abstract graphic composed of numerous overlapping, semi-transparent blue rectangular blocks of varying shades, creating a sense of depth and movement. The blocks are arranged in a way that suggests a funnel or a series of steps leading downwards and to the right. The overall effect is modern and digital.

1. SOVEREIGNTY AND IDENTITY

Malta's geographic location at the centre
of the Mediterranean has conditioned our past
and if we are smart, it should remain
axiomatic to our future.

SOVEREIGNTY AND IDENTITY

Our country has seen its destiny unfold principally through foreign eyes, which throughout the ages, have projected their values and cultures on us, some leaving a hallmark on our identity, language, and personality.

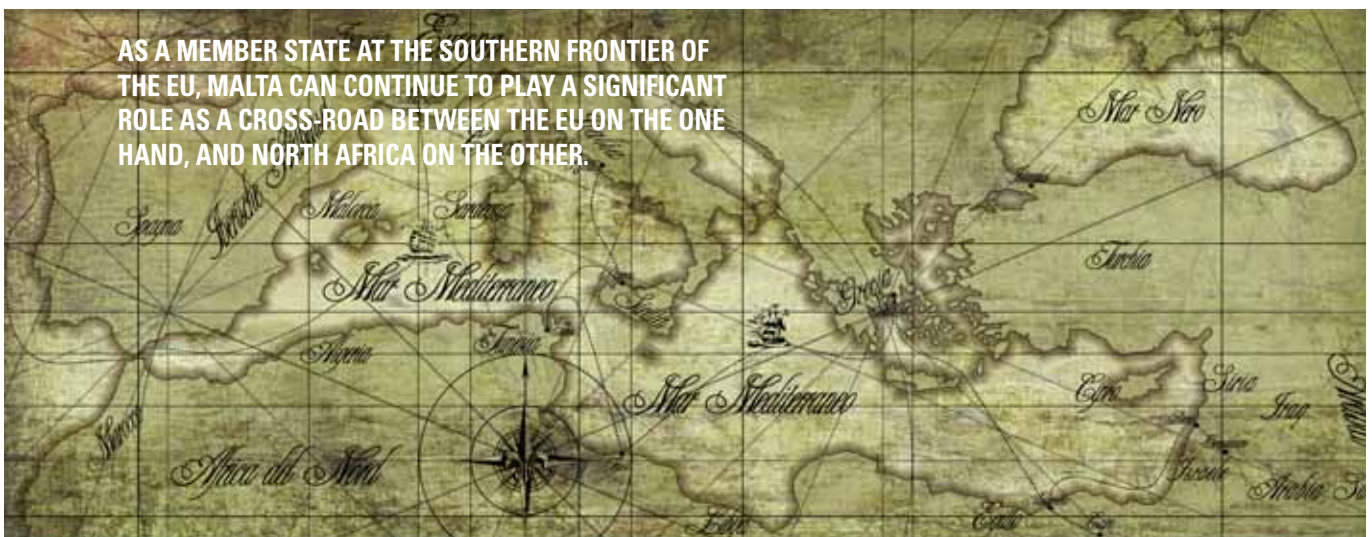
Ironically, it is precisely this exquisite blend of cultural legacy spruced with the blessing of St. Paul which makes us a unique embodiment of central Mediterranean past. Today, having established our identity and our sovereignty, Malta has understood that it can proactively influence the Mediterranean's future, but this time, by projecting back our values, hospitality, expertise, and spirit of enterprise.

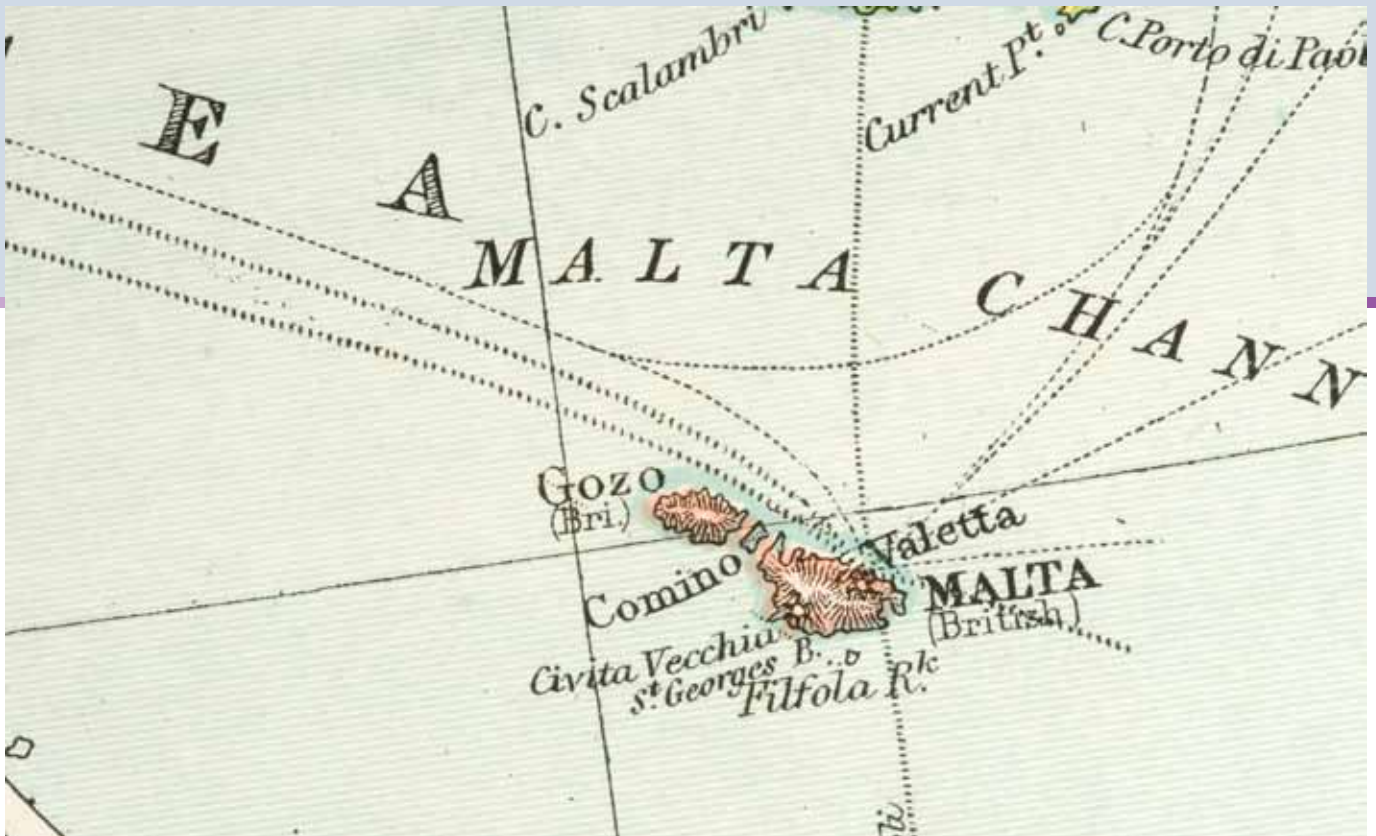
As a member state at the Southern frontier of the EU, Malta can continue to play a significant

role as a cross-road between the EU on the one hand, and North Africa on the other. Moreover, since we have the hallmarks and the economic infrastructure of a strategic location for interregional and intercultural trade in a global economy, our role in the Mediterranean invites us also to look beyond: to North America, the Middle East, and the Far East.

Malta is undergoing rapid and radical socio-economic change, catalyzed, and at the same time cushioned, by EU membership. The EU, and indeed the adoption of the Euro, not only expose us and provide us with access to a seamless European market-space, they are the backbone of the operational and reference framework that will condition, and to a large extent enhance, Malta's socio-economic development going forward.

AS A MEMBER STATE AT THE SOUTHERN FRONTIER OF THE EU, MALTA CAN CONTINUE TO PLAY A SIGNIFICANT ROLE AS A CROSS-ROAD BETWEEN THE EU ON THE ONE HAND, AND NORTH AFRICA ON THE OTHER.





Having established its credentials as a mainstream European state, it is now crucial, perhaps more so than ever, that we project a clear medium-term vision for the country, as it is precisely this vision that should brand Malta:

first and foremost, in the eyes of the Maltese people: it is crucial that our citizens derive their identity from our country's aspirations for the future, as well as from the legacy of the past;

second, in the eyes of our European partners: it is crucial that Malta projects its aspirations clearly in the evolving European debate, thus establishing its identity and influence on European policy formulation whilst safeguarding national interest; and

third, in the eyes of the world at large: as mentioned earlier, our vantage at the southern-most flank of the EU, and our uniquely blended Mediterranean identity, provide us with the opportunity to project our island-state as an 'intelligent' interregional as well as intraregional broker.

Projecting a vision is not projecting a dream. One must set some broad goals and targets but one must also project them at the right time and from a solid and convincing vantage, with clearly charted 'next steps'. Failure to do so transforms vision and aspiration into illusion and frustration.

By way of example, recall that in 1992, the Government of the time commissioned the Malta Council for Science and Technology to compile its first national vision document entitled Vision 2000.¹ This projected Malta as a regional hub and identified Information Technology as a key economic driver; as a revenue-generating



MALTA COUNCIL FOR
SCIENCE & TECHNOLOGY



TODAY, SOME TEN YEARS LATER, WE WITNESS VISION UNFOLDING INTO REALITY IN THIS REGARD; ICT MANIFEST IN SMART CITY HAS BECOME AN INEXTRICABLE PART OF BRAND MALTA

sector in its own right, but more important, as an indispensable revenue-support sector enhancing all other sectors of the economy.

Having already started the process of civil-service reform based on the introduction of Information Technology and modern-day Management Systems,² in 1993 the Government commissioned a broader study to formulate a National Strategy for Information Technology. This was published in 1994;³ it laid the foundation for subsequent periodic strategies to the present day.

Although much groundwork was done on certain aspects in the interim period, it was the establishment, in the late nineties, of a Ministry dedicated to the formulation and implementation of the evolving national ICT strategy⁴ that cut through the rhetoric, placed Malta on the international ICT map, and concretely attracted significant foreign direct investment into the country.

Today, some ten years later, we witness vision unfolding into reality in this regard; ICT manifest in Smart City⁵ has become an inextricable part of brand Malta. The construction of Smart City is underway, but, to date, information about which companies have committed to build or transfer their operations to this modern-day township is not publically available. Malta has a unique opportunity in hand, but, in the wake of the economic spasms being felt globally, it is

important that we tackle the challenges ahead holistically and work together to mitigate any threats that may be looming.

Malta's sound track-record of achievement must not be derailed: the attraction and retention of significant foreign direct investment; the opening of the new hospital *Mater Dei*; the construction of an extensive road network; the opening of the cruise-liner terminal; the refurbishment and construction of new schools; the range of conservation projects; the significant prettification of the urban and rural environment; are amongst the achievements that are noteworthy.

It is crucial, however, that the momentum of past success stories is not lost, and that Malta projects a credible vision for the country for the next decade and beyond.



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2. VISION 2015

As stated earlier, identity is not merely drawn from deeds of the past, and sovereignty is not merely gained, it must be sustained. Both our identity and our sovereignty depend on our actions today and on our vision for the future.

VISION 2015



The following vision statement made by Prime Minister Lawrence Gonzi⁶ in 2007 is timeless and can apply to Malta now as well as for many decades to come. Given that few would fault its ideals let's coin it Malta's 2020 Vision; Malta's 'perfect vision':

Our vision is of an intelligent European, Mediterranean island nation, promoting peace, security, justice and well-being, a smart hub generating wealth and prosperity and an incubator fostering expertise, innovation and entrepreneurship.

No doubt, this statement inspired the formulation of Vision 2015. More concretely, Vision 2015 invites us to aspire to attain excellence in the following revenue-generating services sectors of the economy:

Hospitality Services: destination, cultural, thematic, transit, conference tourism;

Health and Care Services: foreign patient care, retirement destination;

Maritime Services: flag; transshipment; port; ship/boat/rigs; leisure, security;

Business and Financial Services: back-office; legal; banking and insurance; transaction processing, data warehousing, call-centres; and

Educational Services: language schools; executive training; postgraduate schools; educational tourism.

It is reasonable to envisage, moreover, that Malta's manufacturing and software development base will depend more and more on our being able to





move up the value-chain in specific niches, which in turn, will require such industries to be backed by cost-efficiency, creative product development, and readily available expertise.

In short, our future depends on the quality of our human capital; it depends on our aptitude, but, perhaps more so, on our attitude. The strategic thrusts set in Vision 2015 are no less than the initial steps in a quest to transform Malta into a knowledge and creative economy and society on

a sector-by-sector basis. We must also be realistic and realize that not all of the sectors mentioned are at the same stage of evolution and that some will require more work and sustained investment than others for excellence to be attained. Moreover, in line with the original Vision 2000, and in the light of modern-day information and communication technologies, realistically excellence in all the sectors identified can only be achieved through a harmonious interplay between technology and human capital.



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3. THE HIGHER EDUCATION SECTOR

Having identified the critical importance of Higher Education to the social and economic wellbeing of the country, it is worth reflecting on the major broad issues that must be considered in depth. Before doing so, let's put things in perspective.

THE HIGHER EDUCATION SECTOR

At present, the following Higher Education institutions operate with direct public funding:

- The University of Malta: this operates at both post-secondary as well as at tertiary levels as a full-blown autonomous University with a mission to conduct teaching and corporate research, and to actively and directly participate in the socio-economic development of the country. It has an affiliated college - the Junior College - operating semi-autonomously under its aegis, and with distinct governing structures.
- The Malta College of Arts, Science, and Technology (MCAST) which at one extreme provides vocational and remedial schooling at secondary level, and at the other, has started to offer undergraduate degree programmes. If one had to go by public statements made by senior officers of the College, it seems that this is planning to expand its programmes to post-graduate level and its mission to conduct both teaching and research.
- The Institute of Tourism Studies (ITS) which offers specialised vocational courses at secondary and post-secondary level in areas related to the tourism sector. There

has been a long-standing relationship between the ITS and the University of Malta whereby students of ITS completing their advanced studies at post-secondary level are accepted in the second-year of studies at the University thus their studies at ITS are seen as partly fulfilling the requirements for a University undergraduate degree in Tourism Studies.

- The Giovanni Curmi Higher Secondary School and the Sir Michaelangelo Refalo School – operating at post-secondary level under the direct authority of the Directorates of Education and in this sense these are not only publicly-funded but are part of the public service.

There are, moreover, a number of private operators providing training and educational programmes at both post-secondary and tertiary level. At tertiary level, these operate under the aegis of foreign educational institutions and universities. Though these are not funded directly by Government, students attending these institutions are eligible for scholarship and grant schemes organised by Government and thus one can argue that their operations are being supported indirectly by public funds.

Though one can be flexible with regards to the entry requirements into, or in the variety of pathways leading to, a degree programme, the requirements for successful completion should be rigorously monitored. Ultimately, quality should take precedence over numbers


When measuring Malta against various EU and OECD benchmarks for further and higher education,⁷ it is evident that we must work harder to entice a larger percentage of the 16 to 18 year old cohort to pursue postsecondary and tertiary education respectively. The mainstream feeder systems into the University of Malta that are catered for locally are currently the Matriculation Certificate (MC), the International Baccalaureate, and when applicable other recognised Advanced-level qualifications; and into the Junior College and other sixth-form colleges, SEC, and when applicable other recognised Ordinary-level qualifications.

There are a significant number of students who do not achieve the prerequisites to gain entry to sixth-form immediately after leaving school and to University immediately after leaving sixth-form. Understandably, there has been much emphasis on, and investment in, addressing the needs of such students - through ITS, MCAST, and other private providers of further and higher education - as it is important that these be encouraged to pursue further education even if this takes a more vocational slant or if it is focused on the acquisition of specific skills for specific job profiles. Of course, there are also students who do have the aptitude and qualifications to enter sixth-form and subsequently University, who choose to pursue a programme at ITS, MCAST, or at one of the private providers, simply because they perceive them to be more suitable for them.

Undoubtedly, any investment made to broaden the catchment of 'school-leavers' who pursue further and higher education is money well spent, and moreover, the adoption of flexible systems of continuous and skills-oriented assessment typical within vocational colleges may be desirable to cater for a broad range of aptitude up to post-secondary level. Having said this, one needs to tread very prudently and carefully when it comes to assessment at undergraduate and postgraduate degree levels. Though one can be flexible with regards to the entry requirements into, or in the variety of pathways leading to, a degree programme, the requirements for successful completion should be rigorously monitored. Ultimately, quality should take precedence over numbers.

If indeed it is envisaged that there will be more than one publicly-funded tertiary education institution, then one should take a close look at some issues this raises.

First, it is crucial that rigorous examinations conducted 'anonymously' under classical examination conditions remain the principal means of assessment at undergraduate level. Such examinations ought to be available for scrutiny by external review. Otherwise it will be very difficult to create national benchmarks, mutually recognised qualifications, and student mobility across institutions.



Second, it is important that academic staff within any institution, who are appointed to teach at tertiary education level, ought to have different conditions of work to those who teach at secondary and postsecondary level, on the basis that the work and academic effort involved is intrinsically different at each level. Failure to do so will undoubtedly result in serious corporate and cost implications. This differentiation, which was recently acquired at significant cost, now exists between academics appointed to perform duties at the University with respect to those appointed to teach at the Junior College.

Finally, one needs to seriously consider the additional costs of general infrastructure, library acquisitions, laboratory consumables etc., which are by far more expensive at tertiary level than at post-secondary; and this in the context of the growing investment required to maintain and improve the standing of, and standards at, the University of Malta.

If Government had the financial resources to support two or more universities without compromising on quality then the benefits of that are clear. This will enhance employment opportunities for academics and choice for students, and may mitigate the risk, for Government, of a single institution failing to meet the country's future needs. If by financing a second university, Government aspires to attain the classical benefits of competition experienced in other sectors, it is worth noting, although admittedly some may find such a comparison odious, that in most commercial contexts 'effective competition' is only really attained when there are at least three players operating on a level playing field. This said, if the current economic climate prevails, financing one University will prove increasingly

challenging for the country and thus one must question the wisdom of attempting to build two or more. Let's not kill the prospect of depth, on the altar of choice!

It is important that while we continue to invest to broaden the accessibility to, and to augment the percentage of students pursuing, further and higher education, we must keep in mind that very significant investment is required for the University of Malta to continue its transformation into a modern-day 3rd Generation University⁸ built on three pillars, namely: teaching, corporate research, and direct and active participation in sustainable socio-economic development.

There have been various rumblings that the Education Act must be updated to herald a new life into the postsecondary and tertiary education sector. This, however, is a very delicate process which goes beyond the day-to-day governance of the stakeholder institutions. When considering the reformulation of those aspects of the Education Act which govern post-secondary and tertiary education, initially, one needs to consider the milieu one wishes to create for the development of this sector, both as a revenue-support sector as well as a revenue-generating sector in its own right.

To animate the discussion further, consider two somewhat radical and fundamentally distinct scenarios of how the higher education sector can develop, namely: a market-oriented scenario; and a differentiated-player scenario. The aim here is not to advocate the adoption of one of the scenarios or some variant, but, merely to highlight the complex interrelationship of the various issues that must be considered as a backdrop to the formulation of the new Higher Education Act.

3.1 THE MARKET-ORIENTED SCENARIO

In this scenario all operators of post-secondary and tertiary education operate on a level playing-field. There is no notion of public *vs* private sector institutions, neither of publicly-financed *vs* privately-financed institutions; there is merely the notion of a licensed postsecondary and/or tertiary education institution and all such institutions operate one or more accredited programmes of study at the appropriate level of accreditation.

The Higher Education sector is regulated by an autonomous and appropriately constituted and resourced National Commission for Higher Education which must oversee the licensing of institutions and the academic accreditation of programmes. Operators are allowed to establish their own fees and to market their programmes both locally and abroad. This said, a degree of price regulation may be required when the Government determines that there is no effective competition locally in specific areas of study, or if all operators are by-far exceeding their underlying cost-base thus undermining accessibility to a particular area of study. The Government, moreover, may stimulate the establishment of specific programmes of study which are deemed necessary for the socio-economic development of the country, if none of the licensed operators does so spontaneously. This may be the case in certain disciplines which are important but, by their very nature, will only attract a very small number of students.

In the market-oriented scenario, Government establishes scholarships for EU nationals who are *established residents*¹ of Malta (referred to


hereinafter as *local students*). Such scholarships will include both a maintenance grant as well as a tuition grant. Thus local students can use their grant to finance or partially-finance their education, reading the accredited programme of their choice in the licensed institution of their choice, be that located and licensed in Malta or not. While retaining established standards, all local operators will have to compete to attract students as student fees will be the main source of income² for such institutions.

Of course, Government scholarships may vary on a programme by programme basis depending on the cost-base of the pedagogical resources deployed, national needs, and other supply/demand considerations. For example, the cost-base per capita will be high in the case of programmes, which albeit important, by their very nature, may only attract a small demand; thus the scholarships for such programmes must be relatively high as otherwise such programmes will not be economically viable. Similarly, the maintenance grant component of a scholarship may vary to reflect the policy adopted by the Government of the day; the main principle to be preserved, as a minimum social and economic obligation, being access to higher education for all those who would otherwise not afford to do so.

This scenario, described as ‘market-oriented’ rather than ‘market-driven’, assumes that Government is acting as a benevolent client ‘behind-the-scene’ and is capable to incentivise, through the instrument of an evolving scholarship policy, the creation of a healthy portfolio of programmes covering breadth and depth, the ‘esoteric’ disciplines as well as the ‘utilitarian’, stimulating demand when deemed important and when market forces left to their own devices may fail.

1 Defined as having lived in Malta for a minimum of five years in the ten years prior to applying to join the course programme of choice.

2 Other sources of income can include research grants, industry commissions, endowments, intellectual property etc



In the context of an adequately resourced and effective National Commission for Higher Education acting as the ‘regulator’, and an inspired Government acting indirectly as the ‘benevolent client’ as described, there are many advantages to be gained by this scenario. Amongst these one notes that all operators:

- are submitted to the appropriate degree of external quality control;
- are allowed to compete freely within a regulated level playing field;
- are free to manage their finances as they deem fit as Government will not be financing individual institutions directly; and
- are free to run their institutions on the lines of the private sector as long as the human resources engaged to teach are appropriately qualified and the facilities provided are appropriate.

Perhaps this may be the best way forward from an institutional perspective particularly vis-à-vis the growth of the higher education sector as a revenue generating sector in its own right. The scenario will create an onus on institutions to be competitive, to eradicate mediocrity, to reduce waste, and to seek students aggressively from foreign markets.

This scenario will not work cleanly without the establishment of a scholarship scheme which is an equitable and indirect means of Government financing, and a subtle way of allowing the Government to influence the direction of the sector whilst minimizing the risk of any Government becoming overbearing. It is hard to envisage a variation of this scenario based on some equitable means of direct financing to all licensed operators as this would be prohibitively expensive, is unlikely to create the market-oriented dynamic envisaged, less still the leanness of operation and competitiveness.

Irrespective of the scenario it is applied to, the advantage to the establishment of fees in tandem with a scholarship scheme for ‘local students’ as defined and described above is that all institutions can market themselves aggressively in the EU as well as in other countries. This will resolve a very serious anomaly that is unsustainable in the current system, namely, that programmes which are free for Maltese students must be free for all EU nationals. On the other hand, if programmes were to have a fee, and all EU nationals who are established residents of Malta were eligible for a scholarship as described, then while treating all EU nationals who are ‘established residents’ of our island equally, we would be in a position to charge fees to all non-residents be they from the EU or otherwise.

The most serious challenge of the market-oriented model is whether Malta has the independent academic resources necessary to support the National Commission for Higher Education to conduct comprehensive academic audits of all programmes of study from post-secondary all the way to doctoral level.

It has to be said that, locally, the vast majority of the right academic resources are engaged with some academic institution or another, and at tertiary level, nearly all of these are actually employed by the University of Malta. Therefore, rigorous external auditing, as is necessary to establish a level playing-field, means that Malta will once again have to depend on foreign accreditation agencies, a number of foreign academic institutions, or at least a significant team of foreign academics engaged specifically for this purpose. Knowing who to engage, where and how far to ‘dig’, and being able to weigh the technical advice given in context, is onerous, and, undoubtedly, engaging the right expertise will cost significantly.

Perhaps, the NCHE can be less stringent with institutions which can demonstrate that they have installed effective cross-checks and balances in their administrative systems to self-regulate and conduct regular internal academic audits on a programme by programme basis. This notwithstanding, a significant degree of expertise, autonomy, and integrity will always be required within the National Commission for Higher Education even if its role is merely to oversee such internal academic audits and quality-assurance processes.

3.2 THE DIFFERENTIATED-PLAYER SCENARIO


In the second scenario, referred to hereinafter as the *differentiated-player scenario*, one acknowledges upfront that not all players in the higher education sector ought to have equal treatment. One obvious line of delineation is a differentiation between operators that are publicly-funded as opposed to those which are privately-funded. Another possible line of delineation is differentiation based on an institution's ability to self-regulate the quality of its academic programmes at all levels as opposed to one which relies extensively on external review. A third line of differentiation distinguishes between those institutions which are predominantly dedicated to teaching as opposed to those with a significant capacity to conduct research which in turn helps in the continuous upgrading and updating of teaching programmes.

One can argue that the very nature of the players operating in the sphere of post-secondary and tertiary education in Malta, is intrinsically diverse and that any attempt at judging the respective institutions by the same yardstick is likely to denature them.

One can argue also, that there is no harm in having a broad diversity of entities as this gives rise to a healthy mix of sources for human capital. Notwithstanding this, even strong advocates for a differentiated-player scenario would agree that it is imperative that the right quality control mechanisms should exist locally to license operators and accredit their programmes even if these are 'external programmes' of foreign universities of repute. Therefore, the onus on the National Commission for Higher Education to create a rigorous mechanism of external academic quality assurance is strong irrespective of the scenario being considered.

With regard to Government financing, one has already established that even private higher education institutions benefit from indirect public financing through Government scholarship and grant schemes. We have also highlighted in the previous scenario the benefits of having all institutions operate through an indirect financing mechanism (at least with respect to teaching) through a student scholarship scheme which, apart from maintenance costs, covers the cost of course programmes. So on what basis are we to differentiate between operators?

Realistically, one can only really differentiate on the basis of existing resources, expertise and experience. One cannot move towards a market-oriented scenario overnight without taking into consideration the fact that tertiary education institutions cannot survive on student fees alone unless a significant premium is added to cover the cost of research necessary to maintain high-standards of teaching. In short, universities such as the University of Malta should have a strong research mission which interplays with the teaching mission. Indeed, in a 3rd Generation University, the research conducted must go beyond the personal research conducted by academics to remain ahead in their field of expertise; it must



include a significant corpus of corporate research that addresses topics of national and international importance, with an eye to stimulating innovation and sustainable socio-economic development. Given that research requires very expensive infrastructure, and given that one cannot expect significant private finance for research in the light of Malta's current industry profile, it is clear that Government must invest heavily and directly in research and development – and this investment ought to be consolidated and focused and not spread thinly.

In this context, the future role of MCAST must be defined clearly, particularly in view of the fact that certain initiatives at MCAST have started to move this institution into the realm of a typical university. There is nothing intrinsically wrong with this, but, i) can the country afford such replication?; ii) are we denaturing MCAST's role as a vocational college thus losing an important aspect of secondary and post-secondary education?; and iii) as stated earlier, though the system of continuous and skills-oriented assessment typical within vocational colleges may be desirable up to post-secondary level, one needs to tread very prudently and carefully when it comes to assessment at undergraduate and postgraduate degree levels.

Another issue that must be studied seriously is the role of the Junior College. Should there be just one Junior College of 3,000 students or is it better to have three or four with distinct personalities and which provide for a smaller student intake and smaller classes? Should Giovanni Curmi Higher Secondary School and Sir Michaelangelo Refalo be gradually transformed into Junior Colleges with their respective personality and perhaps brought in as affiliated colleges of the University of Malta? Or should the Junior College be given its autonomy, perhaps be merged with other postsecondary schools, and be allowed to

operate independently of the University of Malta? Can the private sector be incentivised to take a more active role in postsecondary education? Is it not time to consider the postsecondary sector in a holistic manner and rationalise the system that feeds the tertiary education sector irrespective of the number of players and their nature, be they publicly-funded or otherwise.

Discussions are underway to allow the Junior College to operate as a local community college after hours. In fact, the prospect of the Junior College offering an unstructured, modular undergraduate certificate, diploma and degree programme in the liberal arts and sciences after normal school hours is being considered. This will address an important adult education niche in a mode of teaching and learning which has not been addressed by the University thus far. One needs to emphasise that different modes of learning and different learning paradigms can be entertained in an affiliate college of the University of Malta irrespective of what is normally done at Tal-Qroqq. The academic umbrella and resources of the University will undoubtedly assist the Junior College to set up the appropriate systems of self regulation and quality assurance thus avoiding any unnecessary additional burden on the NCHE.

ITS can also be brought into the equation. The University of Malta has been working closely with ITS for over a decade and has created a seamless path for students to move naturally from ITS to University. The University has just upgraded its department of Tourism Studies within FEMA into an Institute for Tourism, Travel and Culture and this will create more opportunities for close collaboration with ITS. Should we study the possibility of making ITS an affiliate college of the University of Malta on the lines of the Junior College? In such a scenario ITS can retain its independent governing structures but the future activities of ITS and the University in this



important sector may be coordinated better. This said, one can understand those who might argue that arms-length cooperation such as that fostered to date is more conducive to preserve the distinct character of ITS as a focused vocational school.

Finally, if MCAST is not intent on becoming a significant player in the tertiary education sector, then would it make sense to consider having MCAST become an affiliate college of the University of Malta? Without denaturing or stifling MCAST in any way, it is important that MCAST and the University coordinate better, particularly with regard to seamless transition paths for students from one institution to another, if need be on a programme by programme basis.


The prospect of bringing all publicly-funded higher education institutions under the academic umbrella of the University of Malta is an option to be considered. In such a scenario, each of the affiliated colleges of the University can continue to have a distinct governing board which operates at arms-length, and which can be chaired by a dedicated Pro-rector of the University of Malta. This will facilitate collaboration and sharing of resources across institutions, and whilst every effort should be made to preserve the distinct personalities of the distinct affiliated colleges, the common framework will facilitate self-regulation

and quality assurance, student migration, reduction of waste, and avoidance of unnecessary overlap.

If such a radical move is made vis-à-vis the publicly-funded institutions, then there is a clean way of creating a differentiated-player scenario, namely:

On the one hand, the institutions that are currently directly funded by Government can be brought together as affiliated colleges under the umbrella of the University of Malta. A decision can be made as to whether these should continue to be directly funded in the way they are today. As discussed previously, the teaching dimension of the University and its affiliated colleges ought to be financed, indirectly, through Government scholarship and grant schemes, while the laboratory, research and library infrastructure required may best be financed directly and shared as much as possible.

On the other, any private higher education institutions can be required to target the international market aggressively. Their aim can predominantly be to attract foreign students to Malta and thus they can be required to have a significant percentage of foreign students in each of their programmes. In such a scenario, the University of Malta and its affiliate colleges, can



work in tandem with private higher education institutions to make Malta an attractive destination for foreign students.

As hinted earlier, the main advantage to the affiliation of all publicly-funded higher education institutions with the University of Malta is the possibility of extending the quality assurance and self-regulation of the University to such institutions, thus significantly reducing the workload of the NCHE in these cases, to one of ‘monitoring’ rather than ‘conducting’ of comprehensive academic quality assurance audits.

A perceived disadvantage to the affiliation of publicly-funded higher education institutions to the University of Malta, is the risk that the governing bodies of the University and the affiliate colleges will fail to preserve the blend of styles and character of the respective institutions. Admittedly, it is hard to manage and administer distinct institutions concurrently, each with distinct priorities and needs, each addressing its niche, without encountering the challenge of institutional ‘schizophrenia’, and the danger of bias towards some aspect or style at the expense of others. These concerns may be mitigated, however, if the right governing structures are set up in which a degree of operational autonomy for affiliate colleges is preserved through legislation, provided the desired academic standards are attained.

In essence, the two scenarios presented thus far highlight, at least to my mind, the following. Yes, a National Commission for Higher Education is always required; but definitely a much stronger and more expensive one is needed in the market-oriented scenario described. Yes, the criteria for successful completion of degree programmes should be monitored closely and the method of assessment should be objective, rigorous and

auditable. Yes, a system of indirect financing of higher education institutions, through cost-based fees, may be the most desirable way forward, at least to finance the teaching aspect of such institutions. Yes, moreover, the financing of corporate research ought to be consolidated and financed directly based on longer-term programmes.

No, it does not make sense to replicate infrastructures, programmes, and effort with public funds – not unless money is no problem! No, it does not make sense to allow a tertiary education sector to evolve on the basis of fundamentally incongruent assessment philosophies which undoubtedly will hamper student mobility down the line. No, it does not make sense to have certification which poorly reflects students’ abilities.

There is a third scenario that may be of interest, its prospects in the foreseeable future perhaps are somewhat obviated by events as they have unfolded. Let’s refer to it as the *common facilities scenario*.

3.3 THE COMMON FACILITIES SCENARIO

Irrespective of which of the scenarios described in 3.1 and 3.2 above, or variants thereof, is implemented, it is clear that the options going forward are conditioned by the resources in hand. Let’s imagine for a minute the construction of a world-class campus – a township which includes accommodation for international students, a commercial centre, state-of-the-art sports facilities, a well-provisioned library and IT services centre, a digital network across campus linked to the European Dark-fibre Cloud for Research and Education, state-of-the-art language, design, and science laboratories, modern lecture theatres of varying sizes, auditoria/theatres,

conference facilities, adequate transport and parking facilities, amongst others.

Imagine this “City of Knowledge”⁹ housing on one site and on one common infrastructure all the Higher Education Institutions of the island. In such a scenario, the debate as to whether there should be one or more universities becomes easier to contemplate as the Higher Education Institutions would become ‘brands’ operating on a common infrastructure, and the infrastructure and facilities management of the campus will be distinct from the academic administration of the respective institutions.

In such a scenario, having two universities will not double costs; the universities will derive their personality from the quality of their teaching, research, and social and economic outreach programmes. The situation ceases to be zero-sum; one institution’s gain by way of limited or expensive physical resources ceases to be the others’ loss. With such facilities it will also be easier to attract international brands of repute to operate from Malta in collaboration with local institutions or independently.

The infrastructure and campus facilities can be built as a public-private partnership on a long-term build-operate-transfer basis. A prospective site would be St. Andrews to complement the Sports Village project proposed at White Rocks.

Nice vision – the reality that has evolved seems to suggest a different direction.

MCAST has presented a project, envisaged to cost circa €120 million, to construct a new campus on an extended footprint of its current site which given the scale and scope seems to suggest a stand-alone campus that may or may not become a university – the options in this latter regard may still be open. On the other hand, given the acute space problems it is experiencing, and the challenges in hand, the University must step up its expansion and upgrading plan, albeit somewhat boxed-in within the confines and on the periphery of the ring-road. Alas, circa four hectares of land which was originally earmarked for University expansion have now been used to construct Mater Dei hospital.

The list of infrastructural projects at University, which ideally should be embarked upon in the next five years, will require an investment of no less than €175 million. Once such significant investment is embarked upon on the existing sites of MCAST and University respectively, it does not make sense considering alternative sites for a few decades, even if this is intended to consolidate and streamline operations through the creation of a common campus and facilities as described.

The scenarios presented above may illustrate the options and issues in hand when charting the way forward. Of course, the decisions therein are the prerogative of Government after a broad consultation with stakeholders; the consequences of specific courses of action or indecision will condition Malta’s future for decades.



MUSEO VIGILIO
CANTO DE ANTONIO
CANTO DE ANTONIO



A decorative graphic in the top-left corner consisting of overlapping, semi-transparent blue geometric shapes that form a fan-like or arrow-like shape pointing towards the center of the page.

4. THE UNIVERSITY OF MALTA

As stated earlier, unless a country invests in its human capital, in a strong framework for indigenous research, in a milieu conducive to creativity and innovation, and in the ability to translate knowhow and innovation into wealth and value creation, then its status as a sovereign state with a distinct identity may be challenged by a modern-day form of colonialism – an intellectual colonialism – which in time will lead to social and economic subservience.



THE UNIVERSITY OF MALTA

For this reason the debate regarding the development and sustainability of the tertiary education sector deserves special consideration and should not be trivialized and reduced merely to a debate on numbers and percentages, on whether we should have one or more universities, on whether a vocational college should confer degrees, and on whether we should differentiate the publicly-funded from the privately-funded institutions and how.

The debate should first and foremost focus on the intellectual assets of the country, how best these can be strengthened, and how best these can be leveraged to ensure that this country is future-proof. Here we are not only talking about training the skills for today's jobs in some graduate production machine. Here we are talking about equipping this country with the world-wisdom and intellect to survive and thrive in tomorrow's world. With a legacy of over 400 years and with the expertise and experience it has been nurturing, particularly in the past two decades, it stands to reason that the University of Malta continues to aspire to retain a central role in the 'Malta story' as it continues to unfold.

Despite its legacy born in the tradition of the University of Bologna, and despite the British character it acquired as 'the Royal University of Malta' in the run-up to Malta's independence, the University of Malta has since not followed the

same pattern of development as other mainstream European and British universities.

It is important to note, that there were fundamental changes taking place in universities in Britain and across Europe during the late seventies, throughout the eighties, and into the nineties which saw many traditional 'teaching' universities embark on major corporate research programmes funded by national, European, and International public agencies. With these substantial funds, and following the cue emerging from the United States, many long-established universities in Europe transformed themselves from traditional teaching institutions into research-oriented institutions. On the Framework Programmes for Research and Technological Development alone, the European Union invested circa €50,000 million between 1984 when the first Framework Programme was launched until the end of the fifth Framework Programme in 2002.

Initially, the Framework Programmes started to augment national funding in the respective European countries to create and support research groups of excellence in individual universities merely based on excellence of the researchers involved and irrespective of how esoteric the scope of the research may have been. They slowly progressed to encourage research groups working on similar themes in various universities and in different countries to collaborate with each other.


The debate should first and foremost focus on the intellectual assets of the country, how best these can be strengthened, and how best these can be leveraged to ensure that this country is future-proof.

Gradually more emphasis started to be placed on university industry collaboration, and by the fifth framework programme they had moved on to increasingly emphasise trans-European research projects involving universities and industries on topics which could contribute to some practical applications.

The transformation which took place in European universities, starting in the late seventies, through to the early nineties was both fundamental and unprecedented. Unfortunately, the circumstances in Malta at the time meant that the University

of Malta, despite its long-standing legacy, missed out on the renaissance that was sweeping across Europe. At a time when European universities were beneficiaries of significant funding for corporate research, and at a time when the infrastructure for European university-industry collaboration was being forged, Malta was still coming to terms with nationhood, it was still striving to identify a way of creating new industrial sectors to diversify the economy, and it did this by focusing primarily on attracting foreign direct investment to set up some manufacturing or commercial activity in Malta. Alas, the foreign companies which did





set up a service or manufacturing operation in Malta, did not invest in the University of Malta as by-and-large they conducted their research and product development abroad. In this respect, the role of the University of Malta then was to create just enough graduates ready for the 'production lines' that awaited them. More generally, the University of Malta took the role of a school to train the traditional professions; bereft in the eighties of its Faculty of Science and its Faculty of Arts, and bereft of a research milieu except for the personal scholarship of some individual academics conducted mostly to sustain their teaching.

This notwithstanding, in the past two decades we have seen the University:

- expand its capacity to cater for circa 10,000 students with a healthy mix of international and exchange students;
- evolve from an undergraduate training school for the classical professions dedicated exclusively to teaching, to one which is steadily stepping up its research focus;
- extend its undergraduate and postgraduate degree programmes to a broad range of disciplines;
- encompass a wide range of ancillary activities including MATSEC, the Junior College and several commercial companies; and more recently,
- engage in a variety of EU and international research and teaching programmes.

One must keep in mind that the notable investment made in the past two decades has not sufficed to bring the University of Malta back into synchrony with the development cycle of mainstream European universities. Nor has the significant effort made by all parties concerned been enough to create the university-industry dynamic which is expected in a main-stream European state.

Admittedly, the investment and funding that the University of Malta has attracted since membership of the European Union in 2004 has started to alleviate the situation somewhat, but, it is crucial that investment is sustained and stepped up.

More work is needed if we aspire to become a knowledge-based economy and society. In times of economic uncertainty, let's not fall in the age-old trap of thinking that our tertiary education system is merely there to create employees, and that our industry is merely there to provide jobs. Our tertiary education system should continue to reorient to create tomorrow's innovators and employers, as well as employees, and through innovation and indigenous startups our industry needs to continue to reorient to create and sustain value as well as create tomorrow's sustainable employment.

The challenge in hand for the University of Malta is significant as, unlike its European counterparts, it has not started the process of transition from a teaching university to a 3rd Generation University based on the luxury of two decades of substantial funding in corporate research and industrial collaboration. We have embarked on this transition whilst in tandem we are working to build the infrastructure and an operational framework for corporate research, and this, within the existing context and profile of Malta's industrial-base.

Building on the foundations laid by my predecessors, I present here an overview of the initiatives and achievements of the University of Malta during my tenure as rector (2006-2011); a possible future direction is also charted.

4.1 GENERAL FACTS AND FIGURES

In the period 2006 to 2010, the total ‘recurrent’ revenue of the University has increased by just over 54%; an average increase of circa €5 million per annum (see Table 4.1). In 2010, internally-generated ‘recurrent’ funds, which are mainly derived from registration, examination and tuition fees, constitute just over 15% of total revenue.

INTERNALLY-GENERATED ‘RECURRENT’ REVENUE

It is worth noting that the internally-generated revenue-stream has not grown in absolute terms as one would have wished, as there are considerable restrictions: the University cannot charge local students, and therefore all EU students, for day courses¹; and the fees for MATSEC, evening courses and for non-EU students are regulated by Government.

In this light, the adoption of a system of fees for all courses and for all students in tandem with a scholarship scheme which covers both tuition fees and maintenance for EU nationals who are *established residents* of Malta, as described in Section

3.1, is crucial. This will allow the University to aggressively market its programmes in Europe.

One needs to note also that the non-EU foreign student market is subject to aggressive competition and therefore is susceptible to considerable risk. For example, up until 2006, the University used to attract a significant number of students from China. Unfortunately, issues related to the granting of student visas, the lack of an agreement between the Government of China and that of Malta vis-à-vis mutual recognition of academic qualifications, and the aggressive marketing campaigns of US, British and Australian universities in China, have since resulted in a decline in the number of students coming to Malta from that country. Moreover, as new countries progressively joined the EU, we have seen some good ‘markets’, such as the Bulgarian, dissipate as, on membership, students who previously were fee-paying, gained the right for free tertiary education at the University of Malta.

More recently, the University has revised the fees for foreign students upwards and thus the University has repositioned itself in the international market: we no longer offer a good education at a cheap price; we now offer a good education at a good price, in fact in a price-band of the leading British

¹ The only exception being degrees offered jointly with foreign universities.

Table 4.1: ‘Recurrent’ Revenue Profile of the University and the Junior College

Revenue	2006	2007	2008	2009	2010
Internally-Generated	6,961,312	5,707,512	6,369,800	6,750,116	8,771,688
Government - JC	5,357,559	5,678,523	6,078,840	6,616,980	8,000,000
Government – UoM	25,157,233	28,784,826	30,041,736	36,039,969	41,000,000
Total	37,476,104	40,170,861	42,490,376	49,407,065	57,771,688

and European universities. If we wish to remain competitive, this means that our facilities have to improve on campus, and the quality of education and care we offer our international students must be consistent and excellent.

In the context of these realities, the International and EU office of the University has sought pastures new, and the efforts are starting to pay off. Having built a very close relationship with the Kuwaiti European Cultural Office in Paris, the University has managed to attract a significant number of students from Kuwait who are sent to Malta on scholarship. Moreover, the University has employed an officer at the Malta Embassy in India to facilitate marketing, and recruitment of students, and is in the process of employing another to be stationed at the Malta Embassy in China. There are also indications that the agreement between Malta and China regarding the mutual recognition of academic qualifications is likely to be reached soon; this will help the University of Malta significantly to regain ground in the China market.

Finally, it is important for Government to note that the policy and processes adopted to issue student visas to non-EU nationals has direct repercussions on the University's ability to attract such students. Such students often expect to be granted temporary work permits while they are studying in Malta, and as is the case in some other

competing countries, they are usually allowed to work in the country where they study for at least a year after they graduate.

GOVERNMENT FINANCED 'RECURRENT' REVENUE

When analyzing the funds provided by Government for the University separately from the Junior College, one notes that the University budget has increased in 2010 by circa 63% over the 2006 allocation, while the Junior College budget has increased by circa 49% in the same period. In both cases, the lion's share of the increase over the previous year happened in 2009 and 2010; this reflects the cost impact of the new collective agreement of the academic staff, and the relatively 'stepped-up' increase in wages in the latter years of the current collective agreement of the non-academic staff.

FUTURE PROJECTIONS

This brings us to the budget projections for the next three academic years 2011-2013 (Table 4.2).

To sustain the rhythm of growth and expanding scope of the University and the Junior College, the total 'recurrent' revenue must increase by a further 46% in the period 2011-13 over the 2010 figures, and this to meet costs which will be analysed in more detail later.

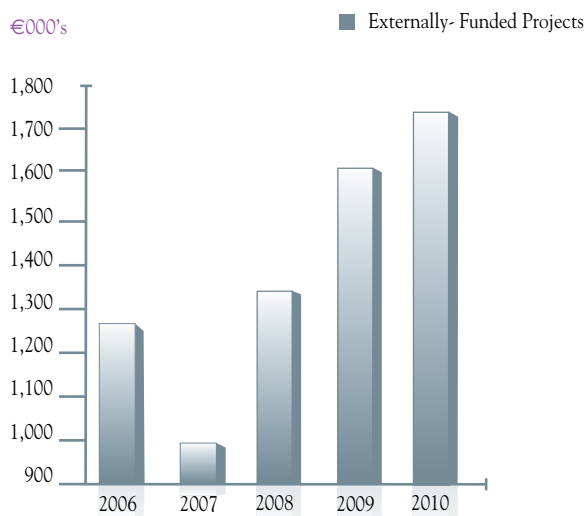
Table 4.2: Projected 'Recurrent' Revenue Profile of the University and the Junior College

Revenue	2009	2010	2011	2012	2013
Internally Generated	6,750,116	8,771,688	9,209,101	10,451,943	11,648,447
Government - JC	6,616,980	8,000,000	8,500,000	8,721,000	8,943,000
Government – UoM	36,039,969	41,000,000	49,685,000	57,414,000	63,907,000
Total	49,407,065	57,771,688	67,394,101	76,586,943	84,498,447

REVENUE FROM EXTERNALLY-FUNDED PROJECTS

Apart from the ‘recurrent’ revenue discussed above, the University has also managed to secure other revenue as a result of its participation in projects funded through local, EU and other international agencies:

Table 4.3: Revenue from Externally-Funded Projects



This revenue-stream has prospects for significant growth in the future; it is a good indicator of the ‘enthusiasm’ and ‘available capacity’ of academic staff for international cooperation and joint university-industry projects. As an example, it is worth noting that in the recent call for Interreg projects to be partially-funded by the EU, twenty-four projects were submitted which have University of Malta academics as partners, and if they all were to be funded, which of course will not be the case as the overall value of the projects exceeds by far the budget available, the University of Malta share would exceed €6.5 million. There was a similar response to the most recent call for proposals as part of the National R&I Programme issued by the Malta Council for Science and Technology. Once again, the number of projects

proposed that have the direct involvement of the University of Malta, have an overall value that by far exceeds the modest allocation of €700,000. Alas, not enough money is being allocated and some very valid projects will remain shelved.

It is already evident that the recent revision of the conditions of work for academic staff has marked a major milestone that is allowing the University to enhance the quality of its teaching and research portfolio and will facilitate both international cooperation and collaboration with industry. Despite the new spate of enthusiasm that this has generated amongst academic staff, and assuming that more funds are allocated to R&I locally, it is important to note that there is a missing link in the chain which, unless addressed, will severely limit the University’s ability to grow in this regard.

In a bid to augment the number of students it caters for and the range of degree programmes on offer, during the past 20 years the University of Malta has invested in a significant cohort of academics who have pursued their doctoral research in some of the most prestigious universities in the world. Recently, the Government of Malta has launched a number of scholarship schemes, namely MGSS and STEPS, aimed at promoting emerging local talent further, by providing funding for young researchers to undertake postgraduate training in Malta or overseas.



Hitherto, many of the doctoral students who went abroad to pursue their studies have returned to an academic post at the University of Malta. This said, a significant number, particularly those reading doctorates in fields of engineering, science and technology, have not returned to Malta simply because, to date, the country has failed to create an environment that is conducive to research, technological development, and innovation (RTDI). As the University is still building its teaching portfolio and capacity, most of those who return to the University of Malta on completion of their doctoral research, have to immediately immerse in a grueling teaching-load which effectively stunts the growth of their research potential just as they are starting to become international currency.

The bottom line: the University of Malta lacks the crucial stratum of post-doctoral research fellows and this is the principal reason why it has failed, to date, to build a corporate research portfolio and a much more significant profile of international cooperation, and university-industry collaboration. This is also one of the main reasons why Malta continues to lag behind vis-à-vis the Lisbon benchmarks with respect to RTDI.

Now that the collective agreement for academic staff provides the right enabling framework, the University of Malta needs Government's support to establish a Post-doctorate Research Fellowship Scheme which will support young outstanding researchers to dedicate their full-time effort in research initiatives that are



essential to the socioeconomic development of the islands. Amongst the targeted areas of priority there should be those identified in the National Strategic Plan for Research and Innovation 2007-2010,¹⁰ namely: ICT, Health-Biotech, Environment and Energy Resources, and Value-added Manufacturing and Services.

In Section 4.3, a Corporate Research Framework that the University of Malta can adopt as a reference framework to prioritize its medium to long-term corporate research projects is presented.

REVENUE FROM THE EUROPEAN ESF AND ERDF PROGRAMMES

One of the main achievements of the University since 2006 has been the acquisition of circa €47.3 million worth of projects which are mainly targeted at enhancing the capacity of the University for teaching, research, and to engage in 'external' projects (see Table 4.6). A further €3.8 million worth of projects have been submitted to date. As the projects unfold and after factoring in savings

Table 4.4: Projected schedule of expenditure on ESF-ERDF Projects in hand

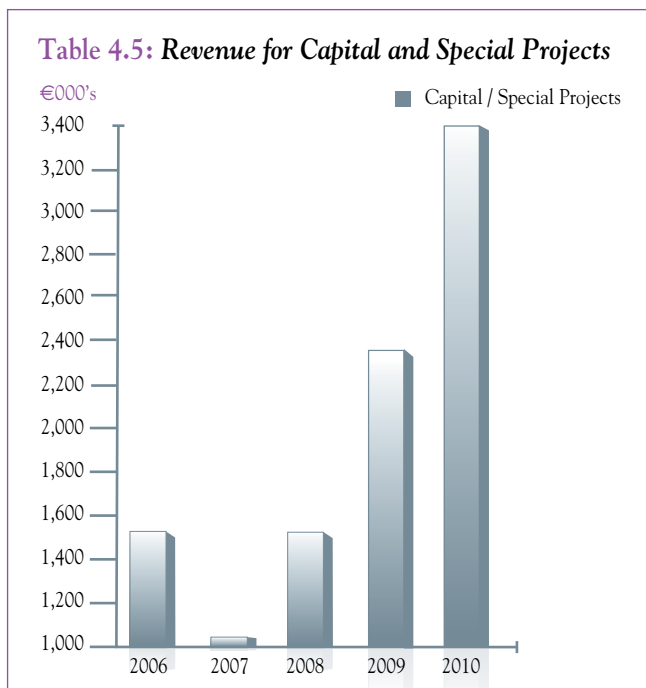
ESF/ERDF revenue	2009	2010	2011	2012
EU Funding	631,462	22,663,739	12,546,439	3,677,542
Government Funding	111,435	3,999,483	2,214,078	648,978
Total	742,897	26,663,222	14,760,517	4,326,520



made thus far during implementation we forecast the expenditure schedule shown in Table 4.4.

REVENUE FOR CAPITAL AND SPECIAL PROJECTS

Finally, the University receives a specific additional vote from Government mostly to cover the cost of construction of new facilities, to upgrade infrastructure, or to implement special projects which require the provision of dedicated funds within a definite timeframe. The amount allocated under this vote for the period 2006-2010 is as outlined in Table 4.5:



Given the acute space problem being experienced on the main campus at Tal-Qroqq, and given the need to augment and upgrade various facilities some of which haven't been addressed since the sixties, it is imperative that an aggressive and far-reaching refurbishment and construction programme is embarked upon. The projects envisaged will be outlined briefly in section 4.6, and if all are approved, the capital expenditure envisaged is estimated at circa €175 million in the next five years.

RECURRENT EXPENDITURE

Table 4.7 illustrates the expenditure profile of the University and the Junior College over the period 2006 to 2010 although one needs to keep in mind that the 2010 figures are still tentative and reflect provision for the worst-case scenario; any savings made in operational expense will be channeled to the research 'consumables' fund or the library fund where additional funds are sorely needed.

Based on the projected expenditure for 2010, one sees a 52% increase in recurrent expenditure in



the period 2006 to 2010; an average increase of circa €4.8 million per annum. Of course, when one analyses the figures more closely one realises that the majority of this increase was due to the increase in salaries and in the number of employees (FTE) recruited in this period. It is important that we put this in perspective.

Table 4.6: The ESF-ERDF Projects that are underway

ERDF Projects	Project Value €
ICT Faculty building	17,355,905
IT Services building	7,959,688
Junior College	1,582,007
Materials and Testing Lab	5,011,898
Chemistry and Biology Labs	834,436
Analytical Chemistry Lab	
Electromagnetic Lab	1,658,310
Biomedical Engineering Lab	
Biotech for Health Laboratories	4,445,919
Super Computer Cluster	685,420
Control Systems Laboratory	608,768
Climate Monitoring Equipment	489,678
Energy Conservation Laboratory	642,114
Mechanical Eng. Modeling Lab	482,165
Signal Processing Laboratory	483,116
Campus Alternative Energy Project	4,685,449
ESF Project	
Research Analysis & Library Training and Systems Upgrade	435,450

First, the long-drawn melee between UMASA and MUT for recognition of the academic staff of the University and Junior College meant that negotiations for a new collective agreement were delayed with the consequence that salaries for academics did not increase substantially between 2003 and 2009; and this despite an interim collective agreement signed in 2007 to mitigate this predicament. In the case of non-academic staff moreover, the annual increase contemplated in the current collective agreement, which covers the 2005 to 2010 period, grows significantly in the latter years of the agreement (Table 4.7).

Second, the University has had to employ a significant number of new staff (see Table 4.8) to cope with the increased activity which will be discussed in more detail later, and this despite the significant rationalization that has taken place to ensure better utility of both academic and administrative resources. This recruitment included a senior management team which can cope with the increasing demands and broadening of scope of the University administration.

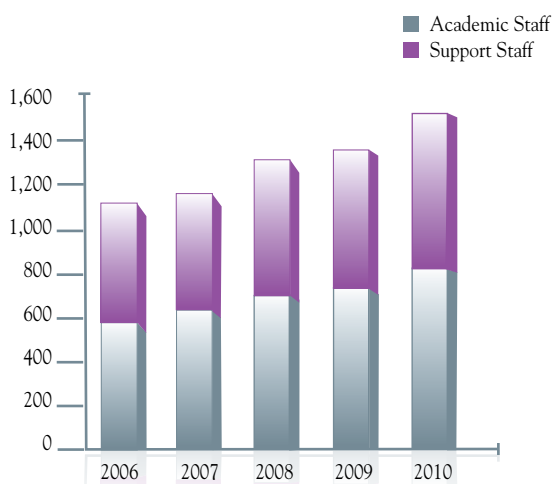
Third, the promotion exercise for academic staff which was effectively frozen since 2003, was revived and as a consequence the progression of a considerable number of academics to higher grades resulted in additional costs. Moreover, the recategorisation of academic posts at the Junior College, to differentiate them from University academic posts, in the 2009 collective agreement, has meant that many Junior College academics immediately became eligible for promotion within the new structure.

Finally, it is worth noting that up until 2008, the University used to engage hundreds of people on a casual part-time basis to assist with the teaching programmes; these were paid at embarrassingly low rates. As stated above, in 2009 an extensive rationalization exercise took place to sort out

Table 4.7: 'Recurrent' Expenditure Profile of the University and the Junior College

Recurrent Expenditure	2006	2007	2008	2009	2010
Salaries	26,961,313	30,558,703	32,575,522	37,358,057	43,245,065
General Operational Expenditure	8,328,383	7,570,627	7,315,060	8,586,936	10,980,733
Library Operational Expenditure	1,506,34	1,094,203	1,413,497	1,362,083	1,642,000
Research Support / Consumables	309,094	405,621	433,000	384,000	609,008
Total	37,105,131	39,629,154	41,737,079	47,691,076	56,476,806

Table 4.8: Number of Employees (Full-Time Equivalent)



which casual part-timers were actually required in view of the workload of resident academics, and those who were in fact required, and who were qualified to become visiting academics, were engaged formally at respectable rates of remuneration.


Table 4.9 highlights the average salary per full-time employee based on the FTE-count at the end of each year. Though this is a fairly good indicator of how things progressed, one needs to note that the average for academic staff in 2008 is somewhat skewed because of the significant recruitment that took place towards the latter part of the year. This notwithstanding, when one looks at the 2006 to 2010 period, one can safely state that the percentage increase in the average salary of academic staff for the period is of less than 18% and for non-academic staff is less than 17%. Considering the significant underlying changes that took place in the period as described, and when one considers that the increase in the wage bill absorbs annual inflation, it follows that the increases are amply justified.

General Operational Expenditure

Table 4.7 shows that Operational Expenditure was kept under very tight control in the period 2006 and 2009, and this is a major achievement

Table 4.9: Average salary per full-time employee

Average Salary (per FTE)	2006	2007	2008	2009	2010
Academic staff	29,845	31,685	29,599	33,738	35,147
Support staff	17,780	19,106	19,274	20,000	20,773



given that a significant number of people had been recruited in that period, and given that the academic and administrative activity increased substantially. This said, one cannot operate on a tight budget indefinitely without jeopardizing progress. New recruits have to be supplied with office furniture, equipment, and consumables; new equipment and activity bring with them new costs; and existing holdings need to be maintained, upgraded, and sometimes replaced. One can delay certain expenditure, but, not indefinitely!

As stated earlier, the Operational Expenditure for 2010 is still tentative, and any savings will be channeled to the research 'consumables' fund or the library fund. It is good to note that €400K of the 2010 operational expenditure is payment due to our foreign partners for fees we collected from students on their behalf; 2010 is the first operational year of the dual International Masters Programmes being done in joint-venture with foreign universities. Furthermore, though significant effort has been made to reduce energy consumption, as new equipment is installed, the carbon footprint of the University grows inevitably. For example, the energy consumption of the Super Computer Cluster which has just been acquired and installed thanks to European Funds, consumes as much energy alone as consumed by the Faculty of Engineering put together. Of course, the increase in water and energy tariffs in 2010 is taking its toll.

If one had to look at the 2006 to 2010 period as a block, the percentage increase in operational expenditure is just short of 32%, or if averaged out, of circa 8% per annum. When considering that this includes inflation and when one considers the increase in activity, once again this constitutes very good value.

LIBRARY OPERATIONAL EXPENDITURE

Alas, the amount of money that can be dedicated to the library is nowhere near what should be spent

in a University that is growing its postgraduate degree portfolio and which aspires to support postdoctoral and corporate research. In fact, in the past five years, the University has not been in a position to consistently sustain the level of expenditure on the library enjoyed in 2006, less still increase it (see Table 4.7). On average, the University has been spending circa €1.4 million on the library and this covers consumables as well as new acquisitions and ongoing subscriptions of electronic books and journals. Ideally the library budget should be doubled, and then doubled again!

RESEARCH SUPPORT AND CONSUMABLES

The funds available for research assistants and for consumables related to new and on-going research projects are earmarked to be double in 2010 (€600K) of the amount in 2006 (see Table 4.7). This money augments where relevant the funds obtained for 'externally-funded projects' as shown in Table 4.3. To date, the modest funds in hand have been used to seed new initiatives or to sustain on-going lines of inquiry. In fact, if it were not for this fund, it is unlikely that the University would have managed to secure additional external funds (circa €1.7million in 2010) for collaboration with industry and international counterparts.

As stated earlier, the University must continue building on its strengths, and where necessary must nurture its capacity to create research groups focused on concerns or opportunities of national significance. It can only do this if it is in a position to recruit post-doctoral research fellows and to build research clusters within a framework such as the one discussed in section 4.3.

The appointment of a Pro-Rector dedicated to Research and Innovation has helped to increase the scope and visibility of research at the University.

4.2 STUDENT AND ACADEMIC FACTS AND FIGURES

Table 4.10 highlights the number of students by course-type. One must note that the number of students has increased steadily but the increase is less than what is needed if Malta is going to achieve EU and OECD benchmarks. For example, according to a report published by the NCHE,¹¹ in order to reach the average in EU-27 countries, Malta needs to double the student participation rate (%) in tertiary education of those aged 18-39. This can only be achieved if one works on the following three thrusts:

First, one needs to increase the number of students in the 18-year-old age bracket who are eligible to enter University. According to the 2009 NCHE survey cited earlier, “only around 23% of the 18 year old cohort manages to obtain the Matriculation Certificate, so entry to the University is restricted for the remaining 77% of this cohort.” One has yet to see whether the reforms that are underway in primary and secondary education will yield the desired result of increasing the number of students leaving school who have the aptitude and qualifications to pursue tertiary education; if implemented well, the reforms should yield this outcome. The MATSEC system may also need to be reviewed as perhaps a streamlined system of appraisal, examination and certification needs to be adopted to cater for both postsecondary vocational schools and sixth-form colleges, as well as for tertiary education

institutions. Ideally, a revised national system of appraisal should not merely be a measure of who has obtained the necessary qualifications to enter sixth-form or University, but, it should be a measure of who has attained the right skills and knowhow to profitably pursue postsecondary or tertiary education, be that vocational or classical in nature.

Second, one needs to continue to encourage adults, who perhaps did not have the right opportunities to pursue tertiary education when they were younger (see Table 4.11), to do so in the course of their career. In this regard, the increase in the range of part-time evening programmes at University is a step in the right direction (see Table 4.12). The proposed launch of a general Bachelors degree in

Table 4.11: Number of UoM students: day and evening

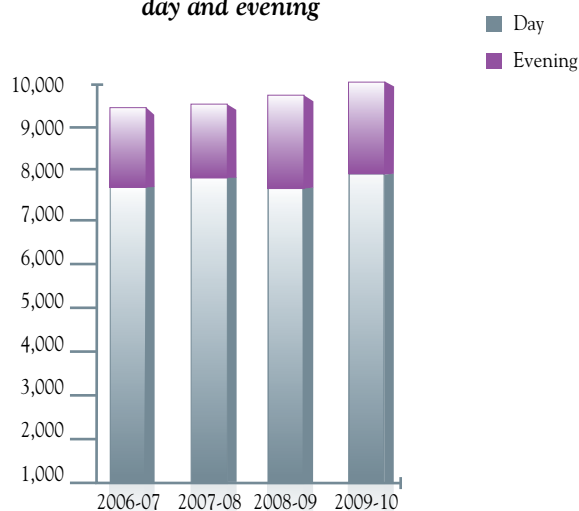


Table 4.10: Number of students by course-type

Students by course-type	2006-07	2007-08	2008-09	2009-10
Undergraduate	7,458	7,626	7,582	7,964
Postgraduate non-Ph.D.	1,973	1,961	2,078	1,998
Ph.D.	71	66	74	65
Total	9,502	9,653	9,734	10,027

Liberal Arts and Sciences at the Junior College will also help in this regard; and

Third, one needs to create seamless pathways between postsecondary vocational programmes into tertiary education programmes. As discussed in the previous section, this is a very sensitive and delicate challenge as it depends on the systems of appraisal and examination adopted by respective institutions.

The number of international students who are registered as University of Malta students has not grown and on average represents circa 6% of the overall student population. There are a number of reasons for this.

First, in view of the space constraints being encountered, the University of Malta does not market itself in EU states as this would be counterproductive and unsustainable with the current system of free tertiary education. Second, the non-EU market is highly competitive and as explained in section 4.1, depends greatly on visa conditions for such students, and on the inclusion of University of Malta qualifications in public-scholarship schemes of the respective states of targeted markets. Finally, in a bid to recover costs, the University of Malta has also revised its fees for non-EU students upwards thus shifting its market positioning.

Table 4.12: Number of new study-programmes offered

New Study-Programmes	2006-07	2007-08	2008-09	2009-10	2010-11
Day	7	12	10	12	39
Evening	13	16	12	18	24
(of which) both Day & Evening	5	9	3	7	4
Total	20	28	22	30	63

Table 4.13: University of Malta Students by Nationality

Students by nationality	2006-07	2007-08	2008-09	2009-10
Maltese	8,911	8,988	9,269	9,514
Other EU	170	295	194	212
Non-EU	421	370	271	301
Total	9,502	9,653	9,734	10,027

Table 4.14: International Students visiting the University of Malta by Nationality

Visiting Students from	2006-07	2007-08	2008-09	2009-10
EU	329	360	368	392
Non-EU	67	51	42	81
Total	396	411	410	473

Table 4.15: Destination of outgoing UoM Exchange Students

Outgoing UoM Students to	2006-07	2007-08	2008-09	2009-10
EU states	123	113	133	173
Non-EU states	12	16	17	11
Total	135	129	150	184

Table 4.16: Source Faculties of outgoing UoM Exchange Students

Outgoing UoM Students	2006-07	2007-08	2008-09	2009-10
Arts	41	18	21	24
Built Environment	9	10	16	25
FEMA	2	3	7	6
Education	5	6	5	4
Engineering	7	10	7	7
ICT	1	6	0	0
Laws	15	15	25	25
Medicine and Surgery	14	9	8	17
Science	4	2	0	3
Theology	0	0	1	0
Dentistry	0	0	0	0
Health Sciences	32	41	43	59
Other Institutes/Centres	5	9	16	11
Total	135	129	150	184

Apart from the international students registered as regular University of Malta students, the University receives a healthy number of exchange students per annum (see Table 4.14). Thus the overall international student population has been hovering around an average of 980 students.

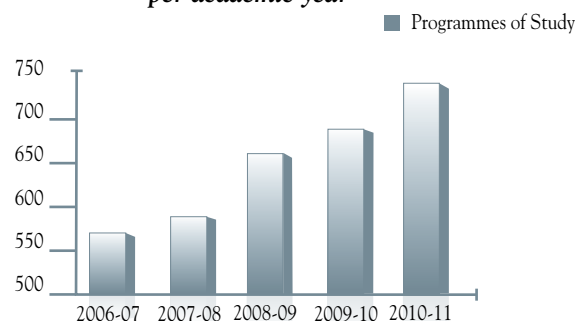
In contrast, the number of University of Malta students who go abroad on exchange is still unsatisfactory (see Table 4.15). At present, the number of Maltese students who go abroad on exchange is less than one-third the rate of international students coming to the University of Malta. The University should continue to spare no effort to encourage its students to go

on exchange as the benefit the students gain - in outlook, character formation, and independent thinking - is invaluable. Table 4.16 highlights the performance of the respective faculties in this regard.

PROGRAMMES

The number of programmes of study running in the respective academic years between 2006-07 and 2009-10 are given in Table 4.17. Admittedly, the 2010-11 figure illustrates the number of programmes offered, as at the time of writing, it is still not clear how many of these will actually open in October 2010.

Table 4.17: Programmes of study running per academic year



The significant increase in programmes of study on offer, undergraduate as well as postgraduate, offered by day or as evening programmes, or as both, reflects the increased output of the University. The new degree programmes launched reflect requests made by Government or industry, as well as the healthy enthusiasm within the faculties, institutes and centres to maximize output given the resources in hand.

Table 4.18: Joint/Dual International Masters Programmes

Title of Programme	Partner Universities	Effective from
European Master in Early Childhood Education and Care	University of Halle Dublin Institute of Technology Oslo University College University of Strathclyde University of Goteborg	October 2007
Erasmus Mundus Master of Science in Human Language Science and Technology	Free University of Bozen-Bolzano University of Nancy 2 Charles University University of Groningen Saarland University	October 2007
Master in the Science of Performative Creativity	University of Rome La Sapienza University of Paris 13 Adam Mickiewicz University	October 2007
Master of Science in Strategic Innovation and Future Creation	University of Teesside Turku School of Economics University of Potsdam	October 2009
Master of Science in Environmental Resources Management	James Madison University, Virginia, USA	October 2009
Master of Arts in Integrated Marketing Communication	San Diego State University, California, USA	October 2009
Master of Arts in Conflict Resolution and Mediterranean Security	George Mason University, Virginia, USA	October 2010



DUAL / JOINT INTERNATIONAL PROGRAMMES

The University of Malta is building strategic alliances with leading international counterparts in a bid to create a portfolio of International Masters Programmes. The successful initiatives launched to date as well as those in the pipeline indicate that such strategic alliances are a crucial ingredient in the future development of this *alma mater*. There are a number of benefits that emerge from such programmes:

First, our academics have the opportunity to interact with international counterparts thus remaining



abreast of international best-practice and other pedagogical approaches. Second, our students have the benefit of being exposed to international perspectives. Third, such degree programmes create the ideal setting for collaborative research initiatives to spawn. Finally, these programmes generate enough revenue to sustain themselves and the growth of academic activity of the University in the respective disciplines. To date, the University of Malta is participating in the joint/dual programmes identified in Table 4.18.

The upper floor of the Valletta Campus is being transformed gradually, into an International Graduate School which will host the international joint/dual programmes mentioned and other prospects that are underway. The vision is to create enough activity at the Valletta campus to restore it to its former stature.

ON-LINE AND DISTANCE LEARNING PROGRAMMES

A project, initiated in 2006, involves the setting up and implementation of a University-wide policy and a support framework for e-learning and possibly other forms of distance learning. The 'Distance and e-Learning Committee', has representatives from various academic, administrative and support departments and advises on all matters related to e-learning at University. IT Services maintains the University Virtual Learning Environment (VLE) platform and supports academic staff and students in using the VLE.

The University has formally adopted Moodle as its e-Learning platform, and academic staff can access the Course Preparation Area of the VLE to prepare areas dedicated to individual study-units. Indeed an increasing number of academics across faculties, institutes, and centres use the VLE to post notes, worksheets, manage tutorials, to interact with students in groups or individually, in real-time or asynchronously. This 'on-line' culture will undoubtedly grow and the use of the VLE will become more sophisticated in time.

Apart from the use of the VLE by individual academics to enhance communication with their students, to date, the University has experience with running three degree programmes which were intended and designed from the onset to be intrinsically distance learning programmes, namely:

Master in Early Childhood Education and Care: as indicated in Table 4.18, this two-year programme was developed by a consortium of six institutions, including the University of Malta which coordinated the course. The programme consisted of a dissertation and eight study-units, six of which were delivered through the VLE, the other two were delivered to all the students who attended lectures at two of the participant universities at

the start of each academic year. Twenty eight students were registered on the course.

Master of Science in Strategic Innovation and Future Creation: as indicated in Table 4.18, this two-year programme was developed by a consortium of four tertiary education institutions including the University of Malta. The programme commenced in October 2009. It comprises 90 credits assigned to taught study-units and 30 credits assigned to the dissertation. The taught study-units are delivered through Moodle. Seventeen students are registered on the course.

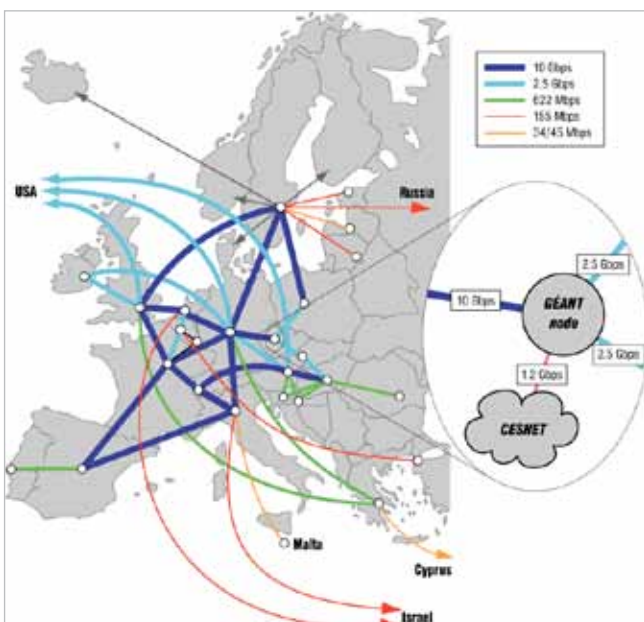
Bachelor of Science (Honours) Health Science: this programme is now under the aegis of the Faculty of Health Sciences and is intended for practising health care professionals who can follow this course in their own time without the need to leave their place of work during daytime to attend lectures. The programme is delivered entirely through Moodle. It consists of study-units to which eighty credits are assigned. It offers flexibility to students who can satisfy all course requirements in 2, 3, or 4 years according to the time they can devote to their studies. The programme was offered for the first time in October 2009 and 55 students were enrolled. It will be offered annually.

One needs to note that e-learning does not necessarily require fancy multimedia, indeed using the most basic features of Moodle go a long way to establish a learning community of academics and students. On the other hand, delivery of a study-unit or indeed of an entire degree programme on-line requires training and a good dose of discipline to create a 'virtual space' which facilitates a structured and yet flexible interaction between academics and students.

Of course, distance learning programmes are not merely created by posting on Moodle notes or other learning sources such as journals, articles,

audio and video clips. Ideally, content and course structure for the delivery of a distance learning programme ought to be developed with the 'online' mode and dynamic in mind. As a broad range of multimedia technologies become popularly available, their use should be encouraged whenever this enhances the learning experience. As bandwidth availability increases and becomes more affordable, sophisticated virtual classroom dynamics can be created to allow students to interact with each other and with their lecturers in environments that emulate reality.

On a different note, the University uses teleconferencing facilities to interconnect a lecture room at the Gozo campus with a studio at the Msida campus. The technology being used however is somewhat dated. Indeed a number of lecture rooms at the Msida campus, the Valletta campus, the Gozo campus, and at Mater Dei, ought to be installed with the right systems to allow the audiences in two or more lecture rooms on different sites to follow a lecture concurrently. Indeed the same systems can be used to have students of the University of Malta join counterparts in other universities in collaborative classroom interaction.




Lectures can be delivered in a studio or one's own office and projected to a number of classrooms remotely, and in time we will have the capacity to podcast lectures to students who can follow them from the comfort of their bedrooms as they are nursing a hangover. No doubt, technology will give us all these options, and certainly these technologies ought to be adopted to some extent. This said, the 'digital' experience online should augment and enhance, not replace, the physical community that makes a university; it ought to extend the reach of such a community, it ought to interconnect it with other like communities.

So yes, we need to encourage and build an infrastructure for online and distance education, but this does not preclude the need to extend the lecture rooms, laboratories, and other physical resources on the various campuses as described in section 4.6.

CONNECTIVITY TO GÉANT

GÉANT is the high-speed European communications network dedicated to research and education which has transformed the way researchers collaborate. Using advanced techniques to overcome limitations of commercial Internet services, GÉANT facilitates research that requires bulk data-transfer of high-definition digital content and interaction in real-time, such as videoconferencing, virtual laboratories, multimedia interactive courses and grid applications.





Since 2006, the University increased its connection to GÉANT from 20Mbps to 1Gbps; and it managed to do this by negotiating very favourable rates, merely doubling its investment per annum to purchase the substantial increase in bandwidth.

In the next five years, the University should aim to have its own dark-fibre connection to GÉANT to be able to support higher bandwidth communication that will be required by local researchers, and to enable dedicated connections between local research groups with counterparts abroad.

HARMONISATION OF REGULATIONS

Building on the excellent work done by the previous rectorship with regards to the harmonization of undergraduate regulations, in 2008, Senate approved General Regulations for University Postgraduate Awards as well as revised Doctor of Philosophy Degree Regulations. In 2009, moreover, the Senate approved harmonized University Assessment Regulations. Therefore the University finally has a harmonized common framework that governs all degree programmes in all faculties, institutes and centres. Though this may sound like a trivial achievement, one must appreciate that converging the various styles and traditions of the various faculties without stifling their character is not easy.

QUALITY AND RESOURCES

In 2006, the Academic Programmes Quality and Resources Unit (APQRU) was set up with the task to analyse each study-unit on offer, to ensure that this is properly described, and to identify which academic resources are required to teach it. The work conducted by APQRU, under the aegis of the Pro-Rector for Academic Affairs, allows

the University to maintain the information about course programmes up to date. The University, moreover, now has a detailed and updated picture of who is teaching what and thus it has become possible for the University to assess the Academic Effort (AE) of each academic vis-à-vis teaching. With this information the University is in a better position to identify where additional resources are required, and in certain cases it had the opportunity to do more with the resources in hand.

In 2007, Senate set up the Programme Validation Unit (PVC) which is a subcommittee of academics who have the task to vet the academic content of degree programmes. Apart from other tasks, APQRU works as an administrative support unit for PVC.

Since the setting up of PVC, each new degree programme launched has been rigorously vetted and subjected to international peer review. In time, all degree programmes will be periodically reviewed to ensure that the study-units they comprise, and the methods of teaching being employed, do in fact deliver the intended learning outcomes as the programmes evolve.

COST-BASED ANALYSIS

As mentioned, one of the very important outcomes of the work conducted by APQRU, in tandem with the respective Faculties, Centres and Institutes, is the 'house cleaning' of degree programmes, which has resulted in reduction, redeployment, rationalization, and recruitment of resources where and as required. Of course, this is an ongoing process of resource management which has improved resource utilization significantly.

Since the resources required for the delivery of the various degree programmes are being rationalized



THE UNIVERSITY HAS ALSO MADE THE SYSTEM OF CHOOSING EXTERNAL EXAMINERS MORE RIGOROUS, AND, AS ALWAYS, IS MAKING EXTRA SURE THAT THE EXTERNAL EXAMINERS CHOSEN ARE OBJECTIVE, ARE OF THE HIGHEST CALIBRE, AND ARE CHANGED EVERY THREE-YEAR CYCLE.

and optimized on an ongoing basis, there is a strong basis for a cost-based analysis of the respective degree programmes. In fact, it would have been pointless to attempt an exercise to determine the cost of running a degree programme when this was being run with less resources than needed, or in cases when the resources employed were not being utilized sufficiently and equitably. Now that a good degree of 'house cleaning' has been undertaken, albeit never complete, an exercise to determine the cost of each degree programme can be embarked upon.

The process of determining the cost of each degree programme requires significant effort, but, it is an important exercise to be completed as this will give a good indication of how much the education of each student on the respective programmes costs. This in turn will provide the University, and Government with a clear view of the recurrent funds required on an ongoing basis to cover the teaching aspect of the University. Undoubtedly, such a cost analysis will also shed light on how best one can deliver a programme, what educational technologies should be deployed, and how to reduce cost without compromising quality.

STUDENT FEEDBACK AND EXTERNAL REVIEWS

In a bid to improve the quality of its degree programmes, the University has launched an ongoing process which solicits anonymous student-feedback. With the system in hand the delivery of

each study-unit is subjected to student feedback at least once every three-year cycle. In certain cases, when deemed necessary, study-units are subjected to feedback annually. The student feedback allows the University to take action with regards to facilities and resources, and provides lecturers with the opportunity to appraise objectively their performance in the light of comments made and feedback provided.

The University has also made the system of choosing external examiners more rigorous, and, as always, is making extra sure that the external examiners chosen are objective, are of the highest calibre, and are changed every three-year cycle.

ACADEMICS

After a deadlock was unblocked in late 2006, the ongoing promotion process of academic staff has continued to operate normally. Since 2006, 62 resident academics were promoted to Lecturer, 75 to Senior Lecturer, 58 to Associate Professor and 17 to Professor.

The ongoing promotion process is crucial to ensure that academics are sufficiently motivated to attain the standards of excellence necessary to reach the highest academic ranks. One cannot pin-down the number of academics in the various ranks and categories with precision as these numbers change practically on a weekly basis as academics retire and others are hired. Indeed,

Table 4.19: Headcount of academics by type and rank - a snapshot in 2010

Resident Academics	2010
Assistant Lecturer	225
Lecturer	131
Senior Lecturer	149
Associate Professor	69
Professor	58
Total	632
Visiting Teaching Staff	2010
Visiting Assistant Lecturer	239
Visiting Lecturer	154
Visiting Senior Lecturer	126
Visiting Associate Professor	8
Visiting Professor	8
Total	535
Junior College Academics	2010
JC Assistant Lecturer	64
JC Lecturer	37
JC Senior Lecturer I	58
JC Senior Lecturer II	37
Total	196

each meeting of Council brings forth new recruits and promotions. As an indicator, however, Table 4.19 illustrates a recent snapshot of the number of academics by type and rank; of course, not all resident academics are full-time, and all visiting teaching staff members are part-time.

It is worth noting that around one-third of resident academics at the University occupy an Assistant Lecturer post and therefore these should all be working towards the completion of a Ph.D.

Looking at matters from a different viewpoint, one can proudly note that the significant investment made by the University is paying off as around two-thirds of its resident academic staff occupy the post of Lecturer or a more senior rank. Both these facts in turn imply that the corpus of academics which possesses a Ph.D. or equivalent research-based doctorate is substantial and is set to grow significantly in the coming years.

Since the collective agreement, the anomalous situation that evolved over many years, regarding the engagement of 'casual' staff, has been largely resolved. This means that after a comprehensive rationalisation of the requirements of each course programme, all visiting staff engaged to lecture for at least one hour a week have been given a formal appointment.

The collective agreement, moreover, has brought a fundamental restructuring to the academic ranks at the Junior College and this to reflect the different mission of the Junior College and the distinct role of academic staff therein. As things progress, the Junior College will increasingly attract and retain academics who see their mission to be the teaching and formation of students at postsecondary level. Though there will always be some who are employed at the Junior College who aspire to join the academic ranks of the University, the Junior College now has a framework to retain excellent talent which sees employment there as a long-term career.

ACADEMIC WORK RESOURCES

Another important development that has improved the working conditions of academics is the introduction of a new system of management of the Academic Work Resources fund. Today, each academic has a debit card which is credited by the University annually based on

the academic's rank and employment status. The academic is then free to use the funds to attend conferences, purchase books, subscribe to scholarly journals, buy equipment, etc. within the parameters of set guidelines; on the proviso that a report of expenditure and receipts are submitted each semester. The bureaucracy in this regard has been streamlined, the University has reduced administrative costs, and academics have gained the freedom to pursue their personal research and scholarship without unnecessary red-tape.

4.3 RESEARCH

To date, the University of Malta has managed to build a healthy environment for personal research, and this despite the fact that it has had to cope with a growing number of students following a growing number of degree programmes.

Ultimately, the main measure of success in this regard is the number, but more importantly the quality, of peer-reviewed publications authored by our academics. In order to valorise the academic effort spent on research, the University is in the process of introducing an inventory of publications which will be updated continuously. In this way, the University will be in a position to appraise the productivity of each academic not only through the academic effort spent on teaching, but, also through the research output manifest in publications. Of course, in a 3rd Generation University, an academic's direct contribution to industry, civil society, and to the economy and community at large should also be valorised and acknowledged.

PROJECT SUPPORT UNIT

As mentioned earlier, in the close run-up and following Malta's accession to the European Union, the University of Malta could tap into various funds to step up its research activity and collaboration with both industry and international counterparts. In early 2007, a support unit for externally-funded projects, called for short the Project Support Unit, was set up as it was clear that the University did not have the adequate administrative support structures to manage the number and increasing complexity of the projects in hand.

This Unit is a cross-functional team of administrators from Finance, Legal Services and the International Office who work together to support academics during the process of compiling a grant proposal, and once accepted, for the duration of the project. The Unit makes sure that the University does not enter into any contractual or financial obligations which it cannot sustain or which are detrimental to its interests, it also makes sure that the University does in fact fulfil all its obligations.

The support offered by this Unit, the availability of more funding programmes both locally and internationally, as well as the impact of the collective agreement which has encouraged academics to dedicate more time to their University career, have resulted in a significant increase in activity in 'externally-funded' research projects (see Table 4.3).

CORPORATE RESEARCH

As mentioned in earlier sections, personal research is crucial to sustain the quality of teaching at tertiary level, but it does not suffice if the University of Malta aspires to become a modern-day 3rd Generation University of significance. In



view of the historical and current context outlined in section 4, the University of Malta must rapidly build a corporate research portfolio in tandem with the outreach mechanisms to contribute directly to sustainable socio-economic development.

There is always a silver lining in every cloud; the fact that, to date, the University has not had the opportunity to build any substantial corporate research programmes, means that whatever we do now can be done from the onset within the context of an outreach strategy, it can be done in a manner that focuses on the needs of our society and our economy. Figure 4.20, illustrates a Corporate Research Framework that the University of Malta can adopt as a reference framework to prioritize its medium to long-term research projects. This Framework identifies six overarching themes under which specific projects or research clusters can be developed in response to identified national socio-economic needs or opportunities, namely:

Figure 4.20: A Corporate Research Framework for the University of Malta

Policy and Identity

Understanding and projecting the Maltese identity and refining the system of public and social policy formulation in Malta:

- as an island and small state;
- vis-à-vis Europe and the Mediterranean region; and
- vis-à-vis Global Governance.

Technologies and Systems to enhance the quality of Services

- Hospitality Services
- Health Services
- Financial Services
- Transportation Services
- Educational Services
- Comm. Services

Technologies and Systems to enhance High Value Manufacturing

- Food
- Precision Engineering
- Software Development
- Pharmaceuticals
- Cosmetics

Technologies and Systems to create a Sustainable Environment

- Water
- Alternative Energy
- Waste Management
- Coastal Management
- Marine
- Agriculture

Fundamental Science and Technology

- Digital Technology and Media
- Biotechnology and Pharmacology
- Earth / Environmental Sciences

Design and Aesthetics

- Artistic and Content Design
- Architectural / Engineering Design
- Product Design

- Policy formulation with an eye to the development of the Maltese Identity;
- Technologies and Systems to enhance the Quality of Services;
- Technologies and Systems to enhance High Value Manufacturing;
- Technologies and Systems to create a Sustainable Environment;
- Fundamental Science and Technology in relevant niche areas; and
- Design and Aesthetics.

The costs involved in building and sustaining research of international calibre in just one of the areas identified in Figure 4.20, suggests that the Government must significantly increase its investment in RTDI at the University and thus come in line with Lisbon targets. Continued failure to do so will come at a hefty price down the line. If our best and brightest sons and daughters don't find fulfillment here then haven't we missed the point? Worse still, what's the point of investing in an intellectual class only to ignore it when it comes to serious policy and technical decisions? Conversely, all academics must realize that their role transcends the classroom, the library, and the labs. What's the point of acquiring expertise

to the point of bursting if one does not seek to apply it directly to innovate, create value, create opportunities or merely to solve problems within the community in hand?

TECHNOLOGY AND KNOWLEDGE TRANSFER OFFICE

In 2009, the University set up a Technology and Knowledge Transfer Office to support collaboration with industry and civil society and also to support academics with the protection and commercialisation of any Intellectual Property (IP) emerging from their research or scholarship. It is still early days, but since its inception, this Office has helped University of Malta academics register four patents, it has worked in tandem with Legal Services to develop an IP policy for the University, and moreover it has established links with its counterpart at University College London (UCL) to benefit from the latter's extensive experience.

The Technology and Knowledge Transfer Office is also responsible to build a portfolio of research, researchers, and a directory of expertise at the University and this with an eye to seeking ways of



leveraging the academic assets of the University towards collaboration with external entities.

This Office, moreover, is collaborating with the Entrepreneurship Unit (E-Unit) set up within the Institute for Sustainable Development to help promote entrepreneurship within the University and more important the setting up of startup business ventures. Once again, still early days, but these are all indispensable building-blocks which will undoubtedly bear fruit in due course.

THE LIBRARY

The University has a decent library which is reasonably well stocked and resourced with text-books for the undergraduate and the taught Masters programmes on offer. When it comes to research at postgraduate and postdoctoral level the library needs to invest much more in many fields particularly in emerging disciplines.

Table 4.7, shows the operational expenditure of the library excluding salaries; most of the expenditure is for books and subscription to electronic resources. In view of the growing range of degree programmes, and the increasing cost of maintaining subscriptions, to simply maintain the current level of scope and depth of resources in the coming years will require an increase of between 10% to 15% per annum in the operational budget of the library. On top of this, if the University upgrades its library assets to sustain postgraduate and postdoctoral research, the overall annual operational costs of the library at current costs should be circa €5 million per annum – more than three times the current level of expenditure! This would mean that the range and depth of subscriptions can increase very significantly, and back issues of important journals are purchased which the library hitherto could not afford.



4.4 EXTERNAL AND OTHER SERVICES

MATSEC

The University has been giving a substantial service to the country through the MATSEC Board. This has designed syllabi and has organised examinations for a very broad range of subjects at SEC, Intermediate as well as Advanced level for many years now.

In the period 2006 to 2010 the MATSEC Board introduced two new subjects, namely SEC Design and Technology and Intermediate level Classical Studies. At present, a panel is discussing the introduction of Drama and Theatre Studies at SEC level and consultations have started about the possibility of offering Intermediate level Physical Education. Interest has also been shown in the introduction of Legal Studies at Intermediate level.

During the past three years, syllabus panels have reviewed and upgraded the following syllabi:

- All foreign language syllabi at SEC level have been brought in line with the provisions of the Common European Framework for Languages. This entailed a lengthy process of obtaining agreement between various panels;
- SEC Accounting, Business Studies, Chemistry, Commerce, Economics, English Language, English Literature, Geography, Social Studies, Computer Studies, Graphical Communication, Mathematics, Physics, Religion, (Maltese is work in progress);
- Advanced-level Computing, English, German, Graphical Communication and Engineering Drawing, Home Economics, Maltese and Religious Knowledge; and
- Intermediate level Computing, English, German, Home Economics, Maltese, Religious Knowledge.

Table 4.21: Number of SEC Candidates

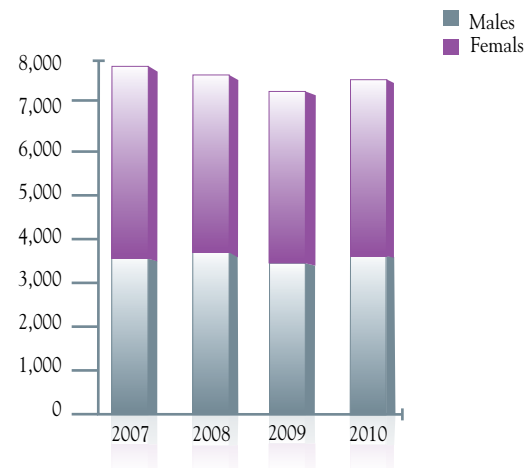
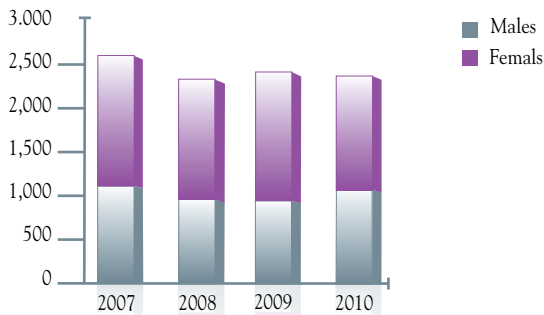


Table 4.21 shows the number of SEC candidates and Table 4.22 shows the number of candidates for the Matriculation Certificate.

When interpreting the figures in Table 4.21 and Table 4.22 respectively, it is important to do so within the demographic and other realities of the country. First, the number of 16 to 18 year olds are decreasing in Malta. Second, more students may be giving up on SEC and the Matriculation Certificate early as they know they have alternative pathways to postsecondary education available which do not require this certification. Third, a couple of local sixth-forms have opted for the International Baccalaureate system and the University of Malta is accepting this certification as an alternative to the Matriculation Certificate.

In 2008, the regulations for Matriculation Certificate examinations have been changed in two respects. First, candidates were permitted to sit Intermediate-level subjects, as well as Advanced-level subjects, as single subjects. Second, the regulations for narrowly failed candidates were reviewed to give such candidates a better opportunity to upgrade their results and to qualify for the Matriculation Certificate.

Table 4.22: Number of Matriculation Certificate Candidates



The fact that the number of students presenting themselves for SEC and Matriculation Certificate has not increased implies that the prospective number of University students in the ‘19 year old and thereabout age bracket’ is not set to increase much. The current reforms in the education system promise to improve numbers down the line – time will tell! At present, with the current fee structure and the number of candidates, the University does not recover the cost of running MATSEC from examination fees.

In view of past experience and the realities in hand, the University must seriously consider whether SEC and Matriculation Certificate in their present form are in fact the most appropriate way of appraising whether a student has reached the necessary qualifications for entry to the University of Malta. Some believe that the two Advanced-level plus 3 Intermediate-level plus Systems of Knowledge recipe currently being administered is in fact deterring prospective students from pursuing a path towards the University. Others believe that the time spent on Systems of Knowledge could be better spent to help students improve their academic writing, their communication skills, and their numeracy (particularly introductory statistics). Others still believe that more ‘hands-on’ subject options on the lines of topics taken up

in *Vocational Education and Training* (VET) can be introduced at Intermediate-level. At the other extreme, there are also advocates of a broader promotion of the International Baccalaureate (IB). Of course, if more schools opt for this system, the financial viability of MATSEC becomes even more precarious.

The decision on how to proceed on this front - to retain Matriculation Certificate as is; to tweak it slightly; to radically restructure it; to extend it to include VET topics; or to gradually replace it with IB - is perhaps one of the most onerous challenges in hand. If a decision is made to retain the Matriculation Certificate in some form then it is high-time for the MATSEC Board to evolve into a National Examination Board working at arms-length from the University. Though the University can continue to provide input into SEC and the Matriculation Certificate, it is important that Government invests in independent teams of appropriately qualified staff who are specialised in examining, or better still appraising, at the respective levels.

MALTA UNIVERSITY HOLDING COMPANY

In the past four years the various companies of the University have been rationalised and restructured to fall under a single holding company – MUHC Ltd. In this restructuring, much of the direct and indirect subsidy which the University used to pass on to the companies has been ironed out and the administration of the companies has been streamlined and rationalised.

Admittedly, the University companies are working against a serious obstacle which hampers their progress somewhat. Any academic of the University who provides a service through MUHC or any of its subsidiaries is expected to pay tax at 35%. Unfortunately, the Government considers the University and all of its companies as a single



MUHC

MALTA UNIVERSITY HOLDING COMPANY



Group. Ironically, if University of Malta employees work on a part-time basis with third-parties, they pay tax at 15% on that additional income. So our academics are at a disadvantage when rendering an additional service through their employer!

This notwithstanding, the University companies should have the potential to create significant revenue streams for the University on the following fronts, amongst others:

The School of Languages: despite the fact that it does not own its own facilities, if managed properly, the School of Languages can leverage the University of Malta brand to attract significant niche business. At present, most of the revenue of the School of Languages comes from the Kuwaiti students which the University of Malta has managed to attract. The School of Languages must continue to diversify its business. The prospect of opening a branch of the School of Languages in another neighbouring country (Sicily, Tunisia, Libya, Turkey) is also worth investigating.

Malta University Consulting (MUC): rather than focusing exclusively on the local market, MUC ought to seek international and EU consultancy jobs which allow it to pay any academics at a premium thus mitigating the tax issue mentioned earlier.

Malta University Residence (MUR): here the University is constrained until 2013 to operate a residence leased under very unfavourable conditions. The residence requires significant maintenance on an ongoing basis making it virtually impossible to operate at a healthy profit. This said, MUR is planning a number of new ventures with very interesting prospects: the construction of a new residence and commercial centre just outside the Msida campus; the running of a boutique hotel in Valletta close to the Valletta campus; the running of a boutique residence in Kappara close to the Msida campus.

Sale of University of Malta branded items: the University of Malta can give MUHC a licence to sell a range of University of Malta branded items – from pens, caps, mugs, to sports and leisurewear, to serious gifts and collectors' items. Admittedly, this venture comes with the risk of 'dead-stock' that is why the choice and quality of products, the choice of distribution channels, and the target market need to be properly researched.

Laboratory Services: here the University of Malta has learnt that it is not easy to offer significant commercial services from labs that are predominantly intended for teaching and research. For this reason, it is clear that any significant

laboratory services that the University decides to provide, ought to be done in laboratories which are specifically set up outside the University.

Apart from the lines-of-business mentioned above, the University is nurturing the context to stimulate the creation of start-ups based on technology and innovation being developed by its academics and students. As mentioned earlier, the setting up of the Technology and Knowledge Transfer Office and the Entrepreneurship Unit are steps in that direction.

4.5 STRUCTURE AND INFRASTRUCTURE

ACADEMIC

Since 2006, the University of Malta has added the Faculty of Information and Communication Technology (FICT) and the Faculty of Health Sciences (FHS) to its portfolio.

The Faculty of Information and Communication Technology includes the following five departments and now employs circa 38 FTEs, of which 57% are resident academics with a status of lecturer and above:

- Computer Information Systems;
- Computer Science;
- Intelligent Computer Systems;
- Communications and Computer Engineering; and
- Microelectronics and Nanoelectronics.

The setting up of this new faculty necessitated a restructuring and significant investment in the *Faculty of Engineering* which now comprises the following departments, and employs circa 42 FTEs, of which circa 63% are resident academics with a status of lecturer and above:

- Electronic Systems Engineering;
- Industrial & Manufacturing Engineering;
- Industrial Electrical Power Conversion;
- Mechanical Engineering;
- Metallurgy & Materials Engineering; and
- Systems & Control Engineering.

Indeed, the Faculty of Engineering is a success story of the University of Malta and over the years it has provided the backbone for our industry. It is important that the right interplay between scholarship, practical problem-solving and innovation is retained and that the excellent collaboration with industry continues to flourish. This faculty is currently still in discussion over the best way to structure its degree programmes and it is important that the departments therein continue to work in synergy in the range and depth of engineering flavours that tomorrow's industry will demand.

The recent upgrading of the Institute of Health Care (IHC) into the *Faculty of Health Sciences*, has required substantial investment. Here there were several complex situations regarding terms of employment or secondment that needed to be resolved with painstaking care, as a substantial number of staff were actually employed by the Department of Health and were at the IHC on secondment. Thus a careful recruitment strategy had to unfold, and many selected staff previously seconded from the Department of Health had to be convinced to start reading a Ph.D., or otherwise return to their substantive post.

The net result is a new faculty with the following ten departments:

- Applied Biomedical Sciences;
- Communication Therapy;
- Food Studies and Environmental Health;
- Health Services Management;
- Midwifery;
- Nursing;

- Occupational Therapy;
- Physiotherapy;
- Podiatry; and
- Radiography.

At present, the faculty employs circa 62 FTEs, of which only 31% are resident academics with a status of lecturer and above. Therefore it is clear that much more investment is required to continue to upgrade the academic profile of the staff therein. Moreover, the demand for graduates in this sector is such that most of the specialties need to scale up the number of undergraduates, thus the number of academics will need to increase in turn.

Apart from the setting up of the two new faculties mentioned, the University has also embarked on a fundamental restructuring of the Faculty of Architecture and Civil Engineering into the new *Faculty for the Built Environment*. Here again, the process of change is well on its way, but requires another five years to come to its full fruition. In academic year 2010-11, this faculty has introduced a new foundation programme for students wishing to work in one of the professions related to architecture, spatial planning and the construction industry at large. In this foundation programme there is the seed of a new School of Visual Art and Design which has become an indispensable ingredient for students not only of architecture, but also of engineering and product design, media, communications, information and communication technology, conservation, graphic art, contemporary and fine art etc. I hope this school will come to be known as the 'school of aesthetics and good taste'.


The Faculty for the Built Environment is no longer solely driven by the quest of its precursor to train a cohort of architects and civil engineers per year; it will gradually unfold a strategy to train urban planners, building services engineers, draftsmen, conservators, architectural historians, as well as architects, civil engineers, and others. This

renaissance cannot take place unless additional talent is recruited, new departments set up, and a new building is constructed to house the recast faculty together with the University's School of Visual Arts and Design. The faculty currently employs circa 23 FTEs, of which circa 53% are resident academics with a status of lecturer and above. The only structural development implemented so far is the setting up of a new Department of Built Heritage.

The Faculty of Dental Surgery is also in the process of extending its scope and function. The launch of the new joint Masters in Orthodontics in partnership with King's College, University of London, is the first in what can become a series of joint masters programmes in various specializations of dentistry. It is envisaged that this faculty builds an additional two departments to better represent the areas of specialization emerging therein. The Faculty currently employs less than 6 FTEs, of which circa 60% are resident academics with a status of lecturer and above. Admittedly, there are a number of dentists who are engaged on a casual basis to teach in clinical sessions; a process is underway to appraise this effort and recognise it formally. The Faculty, moreover, is serviced substantially by academics of the Faculty of Medicine and Surgery particularly in the preclinical years.

The Faculty of Laws has recently shown initial signs of restructuring with the creation of a new Department of Media, Communications and Technology Law. The Faculty had also expressed the wish to set up a Department of Environmental and Resources Law and indeed Senate and Council had approved that this will be done when the existing units covering these disciplines augment their profile.

The challenge in the Faculty of Laws lies in the creation of a culture for scholarly research



which coexists in symbiosis with the practical dimension of legal practice. Many lawyers today do not practise in court, though it is not clear that students of law who wish to do so have enough exposure of the courtroom dynamic, let's say, as may be acquired during training in a moot court. Conversely, a law-firm working in the sphere of financial services has lamented that our law graduates are not appropriately groomed to deal with international clients in that sector. Some academics, moreover, have remarked that more can be done to train tomorrow's legal architects more profoundly and with a more scholarly slant.

Whatever one's opinion may be, it is clear that the Faculty of Laws must cater for a number of requirements, as the world of practice is a world of variety. Many students, moreover, can benefit from a background in legal studies even if they do not have the slightest inclination to become lawyers. When this faculty is ready to conduct a serious and objective appraisal of its performance, one can reasonably expect that this will necessitate a significant investment in fresh talent and a degree of restructuring. The faculty currently employs circa 23 FTEs, of which circa 60% are resident academics with a status of lecturer and above. In this case, however, there are a number of senior resident academics who do not have a Ph.D. or equivalent research-based doctorate.

The Faculty of Arts has seen some very positive developments in the past four years. With additional recruitment, the Art Programme was upgraded into the Department of History of Art. Moreover, the Department of German, the Department of Spanish and the Department of Translation and Interpreting Studies were set up thus augmenting the choice of modern languages within the Faculty. Another very interesting development was the expansion in scope of the Department of Arabic and Near Eastern Studies which has been recast as the Department of

Oriental Studies which now includes the teaching of Classical Hebrew and Chinese under its aegis. Finally, the Departments of Maltese, English, Italian and French have also benefited from the recruitment of additional staff which will make the development of a taught MA in language and literature a feasible prospect. The faculty currently employs circa 68 FTEs, of which just over 79% are resident academics with a status of lecturer and above.

The Faculty of Medicine and Surgery is also undergoing fundamental change. This is driven primarily by a radical change in the structure of the M.D. degree programme which is being transformed into a case-oriented programme which exposes students to the process of diagnosis and cure much earlier in their training. Moreover, the number of students on this programme in 2010-2011 is expected to be nearly double that five years ago.

Although there are still a number of issues to be resolved in this faculty primarily related to the rationalisation of bedside teaching and the management of clinical academic staff, the outlook is very positive particularly if plans to launch a graduate-entry medical programme in partnership with St. George's, University of London get underway. The Faculty also enjoys a strong research tradition in the medical sciences, but admittedly, more can be done by some clinical academics to enhance their research focus. Despite this, the symbiosis between scholarship and practice is being achieved in this faculty and it will undoubtedly be refined with time. The Faculty currently employs circa 57 FTEs, of which 66% are resident academics with a status of lecturer and above. It is worth noting, that some of the more senior clinical academics in this faculty were promoted in the past on the strength of a fellowship of one of the Royal Colleges of practitioners which, until recently, was accepted as a qualification in lieu of a Ph.D.

or equivalent research-based doctorate. This is no longer the case.

Though the *Faculty of Economics, Management and Accountancy (FEMA)* has not undergone fundamental restructuring as yet, one must acknowledge the significant effort made to upgrade the profile of academic staff therein. The Faculty currently employs circa 49 FTEs, of which only 39% are resident academics with a status of lecturer and above. At present just under half of the academic resources in this faculty are resident academics working to complete their Ph.D. Though things have improved significantly, it will take time for a research culture to spread in this faculty as the academics here have a large number of students to cope with and the recruitment of new academics with the right credentials is often challenging; the best are aggressively sought after by industry.

Discussions within this faculty regarding the restructuring and upgrading of its degree programmes are underway.

FEMA has recently given birth to the Institute of Tourism, Travel and Culture which started off as merely a unit, and in the past four years has grown and has acquired the independent stature of an Institute.

The *Faculty of Education* has remained rather stable in the past four years, benefiting from some recruitment of resident academics in some departments, mainly to reduce the number of part-time staff used in areas of importance, and moreover, to cope with capacity in areas where student numbers have grown. The Faculty currently employs circa 71 FTEs, of which circa 63% are resident academics with a status of lecturer and above.

The Faculty was successful in pioneering the University of Malta's participation in joint degree programmes through its participation in the European Master in Early Childhood Education and Care. Whilst continuing with its mission to train tomorrow's teachers, this faculty has also managed to develop a substantial portfolio of research. It is very important that a schism is not created between these two cultures as the strength of this faculty clearly lies in the ability to translate the latest thoughts in educational theory, into pedagogical practice in the classroom.

Perhaps one of the areas which deserves much more investment and which in time may need to grow in stature is the field of Technology-enhanced Educational Systems and e-Learning. Ironically, it is important that this is not merely taught from a technology and gadgets perspective, but it should be taught with a sound sociological, philosophical, and behavioural underpinning.

Admittedly, the morale of this faculty is also conditioned by the acute space restrictions. It is high time for the University of Malta to be granted funds to invest in a new building to house the Faculty of Education. This faculty has the internal capacity and leadership to upgrade and reinvent itself in response to national requirements and contemporary thinking, but, it desperately needs a morale booster. The limited space it operates from is simply not conducive to a renaissance of thought and purpose.

The *Faculty of Theology* has not seen major structural changes in the past four years, but there has been some recruitment to help the Faculty extend the range of degree programmes, particularly at postgraduate level, and to extend its outreach to other faculties. The faculty currently employs circa 17 FTEs, of which 90% are resident academics with a status of lecturer and above.

Finally, though the *Faculty of Science* has remained structurally unchanged, there has been a significant investment to upgrade its academic and research profile. Many of the laboratories of the faculty are being upgraded and equipped thanks to ERDF funds, and a number of emerging areas of research are being nurtured. Like the faculties of Engineering, Health Sciences, Medicine, and ICT, much of the structural and infrastructural investment required in the Faculty of Science will be oriented towards the growth of research groups of excellence. For example, the faculty has recently set up a *Metamaterials Unit* to help nurture a research group in this field. The faculty currently employs circa 43 FTEs, of which circa 82% are resident academics with a status of lecturer and above.

The University of Malta also has a number of interdisciplinary Institutes and Centres in various fields. Since 2006,

- the former *Institute of Forensic Studies* has been renamed and strengthened as the *Institute of Criminology*;
- a *Confucius Institute* was set up in tandem with Xiamen University following an agreement with the Chinese Government;
- the former International Environmental Institute, the Euro-Mediterranean Centre on Insular Coastal Dynamics, and the Institute of Agriculture have joined forces and are now the *Institute of Earth Systems* based at the Msida Campus,
- the *Islands & Small States Institute* has been brought over to the Msida campus;
- the *Institute for Maltese Studies* has been given a new lease of life after many years of dormancy and has launched a Masters in Maltese Studies;
- the *Institute of Public Administration and Management* is now working very closely with the Civil Service and is helping in the

design of tailor-made programmes such as the Higher Diploma in Public Accounting and Finance;

- the *Institute of Sustainable Development* which existed on paper for many years was finally brought to life and includes in it the University's newly established Entrepreneurship Unit (E-Unit);
- the Institute of Energy Technology has been recast and strengthened as the *Institute for Sustainable Energy* and is now offering consultancy services to Government;
- the *Institute of Tourism, Travel and Culture* was launched as mentioned earlier and will continue to build on the programmes launched in this field by its precursor;
- the Institute of Masonry and Construction Research was recast as the Department of Built Heritage within the Faculty for the Built Environment;
- the *Institute of Anglo-Italian Studies* continues to publish the prestigious international Journal of Anglo-Italian Studies while the *Euro-Mediterranean Centre for Educational Research* continues to publish the prestigious Mediterranean Journal for Educational Studies;
- the *Institute of Linguistics* has been progressively strengthening its academic profile and is in the process of designing new programmes of teaching and research in Computational Linguistics amongst other areas;
- the *Institute of Baroque Studies* needs to be strengthened further and perhaps closer links with the Institute of Tourism, Travel and Culture and the Department of History of Art can be forged;
- the *Institute for Physical Education and Sports* continues to champion sports and sports education, although admittedly the sports facilities at the University are in dire need of upgrading;

- the *Edward Debono Institute for the Design and Development of Thinking* has continued to champion creativity and innovation; it has also been successful in taking a leading role in a joint programme leading to Master of Science in Strategic Innovation and Future Creation ; and
- the Mediterranean Institute will be introducing Dance Studies to complement Theatre Studies and Music Studies; it has continued the publication of the prestigious international Journal of Mediterranean Studies; and regularly organizes several cultural activities.

Moreover, since 2006:

- the *European Documentation and Research Centre* has continued to extend and upgrade its programmes in European Studies and has recently been admitted as a member of TEPSA, the Trans European Policy Studies Association;
- the *Centre for Communication Technology* has been instrumental for the prospective introduction of Digital Game Production as a mainstream discipline. As discussed later, it is in the process of rationalizing its activities and adjusting its focus;
- the *European Centre for Gerontology* continues to organize the University of the Third Age;
- the *Centre for Environmental Education and Research* is in the process of creating an operational research base in Fawwara;
- the *Centre for Labour Studies* is collaborating with FEMA in the launch of a new bachelors degree programme in Work and Human Resources Development; and
- the *Centre for Family Studies*, *Centre for Literacy*, and the *European Centre for Educational Resilience & Socio-Emotional Health* were launched.


- Finally, the Mediterranean Academy for Diplomatic Studies has continued to move from strength to strength gaining international recognition as a centre of excellence in the training of diplomats. As mentioned earlier, the launching of the dual International Masters Programme with George Mason University in the field of Conflict Resolution and Mediterranean Security will undoubtedly be another feather in its cap.

ADMINISTRATION

Since 2006, the Senior Management Structure of the University has been strengthened to support the increased activity. Today, the senior administration posts are as follows:

- Secretary of the University
- Registrar
- Director of Finance
- Director of Legal Services
- Director of Human Resources Management and Development
- Director of Procurement
- Director of International and EU Affairs
- Director of Estates and Works
- Director of Corporate Research and Knowledge Transfer
- Director of Communications and Alumni Relations
- Director of IT Services
- Director of Library Services

Concurrently, the University embarked on a number of projects to enhance its administrative systems which were in dire need to be streamlined and automated. The introduction of an Administration Information Management System (AIMS) in tandem with significant upgrading of the Student Information Management System (SIMS) and its Web portal (eSIMS), will now provide the University with



an integrated and seamless platform for student, alumni, human resources, financial, project, and facilities management. Tangibly, this will allow the University to manage its resources more efficiently and more transparently at central administration, within faculties, institutes and centres, down to individual departments and individual projects therein. It is envisaged that much of the administrative hassle involved in budget management, purchase order processing, as well as human resources management will be streamlined and automated.

The introduction of new functionality in SIMS, moreover, has allowed students to search for and register for courses and study-units online, thus students are no longer required to stand in long queues. This sounds trivial but in fact it is a very onerous task when one considers that there are hundreds of course combinations and thousands of study-units which need to be maintained on an ongoing basis.

The Reporting Facilities of SIMS have also been improved thus allowing the Registrar's office to mine student data with ease and to gain important insights. The system of Student Progression and Award Processing, moreover, has also helped to cut down on needless manual bureaucracy. Work is already underway to implement the Research Management Module to allow the progress of M.Phil. and Ph.D students to be monitored closely. The facility that would allow academics to submit marks via a dedicated Web portal is already being piloted, and the Mark Schemes and Study-unit Result Publishing processes are being reviewed and streamlined. The implementation of full Student Scheduling is also underway. All this will improve life for both students as well as academics.

Another important milestone is that both AIMS and SIMS are being implemented at the Junior College as well, thus bringing the administration of the College into the 21st century.


The Website of the University was also given a much needed facelift creating a template for all faculties, institutes and centres, and other administrative functions, to publish information related to the teaching and research programmes, and services they offer. The original site had developed amorphaously over a number of years and needed to be given style as well as structure. The University also started to publish a regular electronic news letter which highlights the main events taking place on campus; this is distributed by email to all members of staff and registered alumni.

The creation of the Project Support Office to help in the management of 'externally-funded' projects; the streamlining of the Academic Work Resources system; the setting up of the Academic Programmes Quality and Resources Unit; the setting up of a Procurement Directorate independent of Finance; as well as the recent setting up of an office to support commercialisation initiatives and protection of the University's Intellectual Property are all major administrative building-blocks that have helped the University manage the increasing range and complexity of its activities.

4.6 ONGOING AND PROSPECTIVE INFRASTRUCTURE PROJECTS

REFURBISHMENT OF LIBRARY

The University has been investing in the refurbishment of the library. The library 'honeycomb' screen had incurred irreparable damage due to weathering and thus had to be replaced with a more modern and durable shading system. The windows will also be replaced gradually ensuring that appropriate glass is used for energy efficiency.



The first floor of the library has been given a thorough facelift creating a space which is more conducive to semi-formal and group learning; in this space, discreet interaction between students is not discouraged. The refurbishment of the upper floor is also underway and the new furniture being installed will also create a learning space which, though somewhat different from that on the first floor, will attract students who wish to settle in to serious research without distraction. The works conducted in 2010 will cost circa €455K, while an additional €682K will be required in 2011 to continue with the refurbishment including the replacement of the air-conditioning system to comply with EU regulations.

When the IT Services building is complete, and IT Services move out, the basement of the library will be transformed into a casual learning environment where students can study, 'chill-out', discuss and interact freely without restriction.

Despite the provision of many library services online, and despite the extended range of online books and journals available, the plan here is to turn the library into the main focal point of the University. The refurbishment done so far has seen a significant growth in the number of students frequenting the library. The increased activity on campus after 'normal' office hours has also necessitated the extension of the opening hours of the library to 8pm during term-time. With the right automation for book borrowing and return, and with the right surveillance systems, gradually the University hopes to be in a position to keep the library open on a 24x7 basis during term-time. Students should find the environment inviting enough to 'camp out' in the library rather than merely attend lectures and return home. The library should be transformed into an 'information commons', a social meeting-place of minds.

SATELLITE LIBRARIES

Some faculties are finding the need to provide later-year undergraduate and postgraduate students with specialised libraries and space where they can conduct research in a peaceful setting. The Medical School and the Faculty of Health Sciences both have access to their newly housed library within Mater Dei Hospital. The extension of the Faculty of Laws which will commence in the coming months will also house a small law library which will be managed as a satellite of the main library. Similarly, it is also planned that part of the extension of the Faculty of Arts building overlooking Car Park 5 (marked CP5 on Figure 4.1) will house a specialised library which will include in it the collection donated by Prof. Ann Williams. Once space restrictions are overcome, other faculties will be encouraged to build specialised libraries under the aegis and direction of the main library.

The University is also in the process of rationalising the holdings of the library of the Valletta Campus and will be commencing work shortly on its refurbishment. Following an agreement with Heritage Malta, moreover, the library of Heritage Malta's Restoration Centre in Bighi will be co-managed as a satellite library of the University of Malta. Finally, the library at the Junior College should be given a good facelift to encourage more students to use its facilities.

ARCHIVES FOR THE MAIN LIBRARY

The University has permits in hand to build archives for the Library under Car Park 2 (marked CP2 on Figure 4.1). This project also includes the construction of an underground car park which will allow the space currently occupied by Car Park 2 to be landscaped and pedestrianised. This project which is estimated to cost circa €5.83 million will provide the space necessary for the Library

to consolidate its archives which are at present dispersed in a number of off-campus warehouses. Moreover, placing the archives underground will reduce the cost of maintaining the holdings at the right temperature; at present the library is the building with the highest energy consumption.

REFURBISHMENT OF THE VALLETTA CAMPUS

As mentioned earlier, the process of reinstating the Valletta campus as the University's primary seat of learning is underway. The refurbishment of the uppermost floor, which is already hosting the International Masters Programmes, will be complete by the first quarter of 2011. This floor will include: two lecture rooms that can accommodate circa 30 students; one lecture room that can accommodate circa 50 students; an auditorium that can accommodate circa 180 students; as well as a number of seminar rooms and administrative offices.

The National Commission for Higher Education will be vacating the mezzanine floor between the first and second floor and these offices will be temporarily occupied by MUHC, which will in turn vacate rooms off the main corridor of the 1st floor which can be used as additional seminar and lecture rooms.



The first floor will continue to be used for conferences, workshops, seminars, summer schools etc. The installation of a panoramic lift in the courtyard will allow the University to attract more business to the facility; the fact that there is no lift at the Valletta Campus has precluded certain agencies from booking the facilities. As mentioned earlier, the Library will be given a facelift, as will the Aula Magna. The Aula Magna also needs to be equipped with state-of-the-art audio-visual technology including a system for simultaneous interpretation.

The ground-floor of the Valletta Campus will be vacated by Heritage Malta by the end of 2010. In 2011, works will commence to refurbish this floor, including the theatre currently managed by MITP. It is envisaged that the ground-floor will be transformed into a facility to house the University of Malta School for the Performing





THE UNIVERSITY IS UPGRADING THE FACILITIES AT THE GOZO CENTRE TO ACCOMMODATE A BETTER LIBRARY AND ADDITIONAL LECTURE ROOMS. MOREOVER, A RESEARCH LABORATORY HAS BEEN CONSTRUCTED AT THE CENTRE TO HOUSE THE RESEARCHERS WORKING IN THE FIELD OF ATMOSPHERIC POLLUTION AND CLIMATE CHANGE LINKED WITH THE TAL-GIORDAN LIGHTHOUSE CLIMATE MONITORING STATION

Photo: Patrick J. Fenech

Arts – including studios for dance, performance rooms for music, and a theatre for theatre studies. There will also be a properly equipped audio-visual studio, and audio-visual technology to support the study of technology-enhanced performance; the studio may be housed in the basement.

Finally, the internal courtyard of the Valletta Campus should ideally be covered with some form of partially-retractable roofing structure. The courtyard is in dire need of repair, but, has the potential of being used as an open space for performance. Indeed, it should not be used as a car park any longer as this use has ruined the cloistered walkway around the courtyard as a serious venue for art exhibitions.

In 2010, the University is investing circa €570K in the refurbishment described above. In 2011, an additional €1.3 million are required, and a further €1million each year in 2012 and 2013 respectively.

BOUTIQUE HOTEL IN VALLETTA

The University has set its eyes on two adjacent buildings which are owned by government just in front of the main entrance to the Valletta Campus on St. Paul's Street. These buildings can be interconnected and turned into a charming boutique hotel which can be run by MUHC as an exclusive University of Malta facility. The

idea here is to collaborate with ITS using the premises as a training ground for young trainees in catering and the hospitality business. Indeed, this hotel can complement the conference activities of the Valletta Campus and will provide the right old-world charm and character in which the University can host visiting professors, scholars, and academics. The hotel, moreover, will have restaurant and catering facilities which can support the conference activity across the road and allow the Valletta Campus to be a serious venue for banquets.

At present, MUHC is compiling a detailed business plan for this venture and if deemed viable will raise the capital necessary through a bank loan.

EXTENSION OF THE GOZO CENTRE

The University is upgrading the facilities at the Gozo Centre to accommodate a better library and additional lecture rooms. Moreover, a research laboratory has been constructed at the Centre to house the researchers working in the field of Atmospheric Pollution and Climate Change linked with the Tal-Giordan Lighthouse climate monitoring station. Apart from circa €500K of investment in climate monitoring equipment co-funded through ERDF, in 2010 the University has invested circa €117K in the construction and refurbishment works described above.

EXTENSION OF THE JUNIOR COLLEGE

The construction of the extension of the Junior College co-financed through ERDF funds is now complete and awaits furniture and equipment which will be installed in the coming months. The new facilities include new seminar and tutorial rooms which will facilitate teaching in small groups. Substantial investment is required, however, to bring the facilities of the College up to the desired standard and to increase operational space.

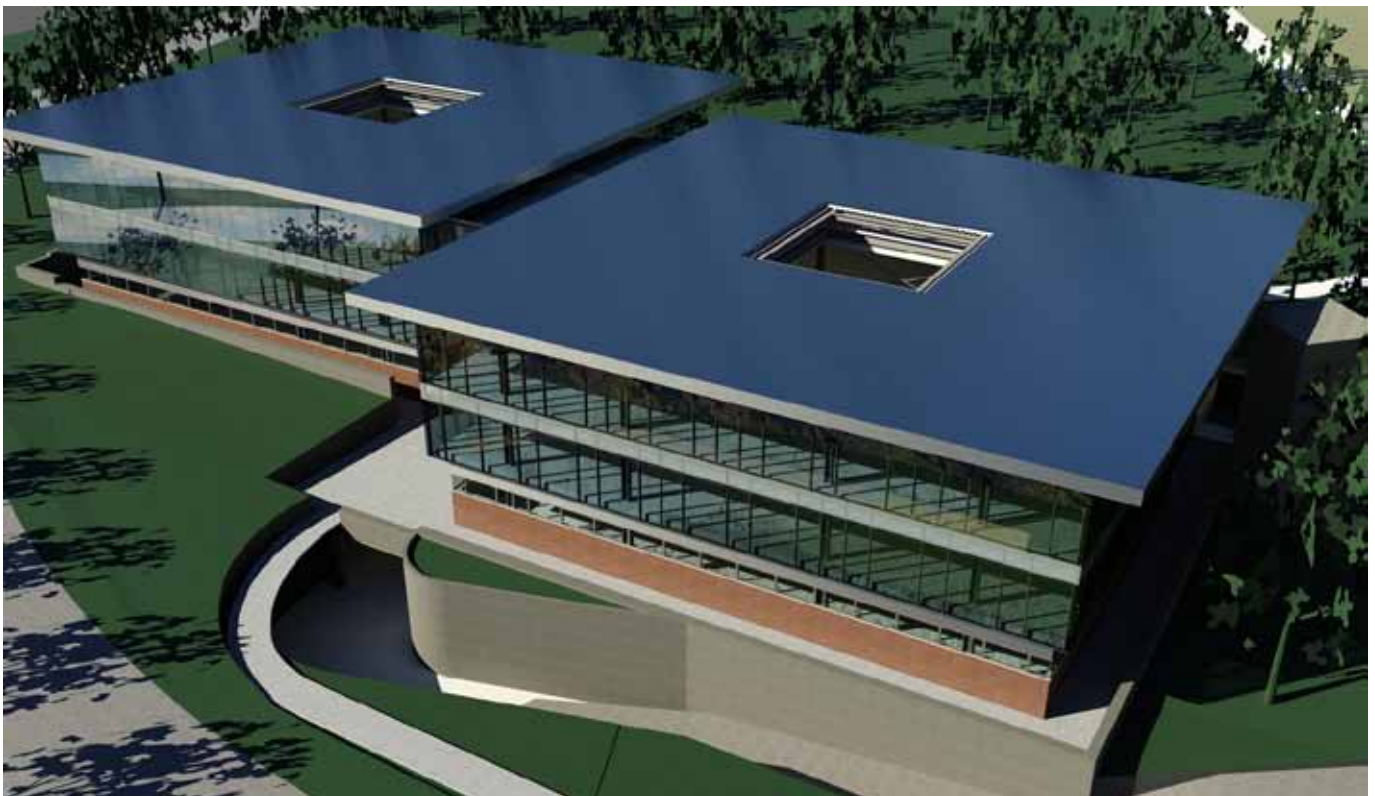
The basement is in dire need of refurbishment and the foyer needs modernisation to allow better utility of space. External fire escapes must be built as the current topology of the building is not ideal if the need for emergency evacuation arises at peak hours. As mentioned earlier the library at the Junior College needs to be refurbished to make it a modern learning environment that attracts students. The external sports facilities need to be done up – quite literally from the


ground up! Windows need to be changed and laboratories need to be upgraded and reequipped. A Playschool must be built. The list of requirements is quite hefty.

In 2010, the University invested circa €146K on upgrading and refurbishment at the Junior College apart from the €1.6million spent on the extension described above. An additional €2 million is required in 2011, €975K in 2012, and €775K in 2013 to see the list of requirements described implemented.

BUILDING OF THE IT SERVICES CENTRE

The construction of the IT Services building is nearing completion and work on the mechanical and electrical installations has started. This investment of nearly €8 million on this facility will have a fundamental impact on academic and student life on campus. This building will include computer laboratories, computer servers, and state-





of-the-art technology to support computer assisted learning, teleconferencing, e-learning, and distance learning. The facilities therein will be available to all students irrespective of their programme of study. The quality of IT support offered to staff will undoubtedly improve dramatically.

Based on this infrastructure the University will be in a position to build a significant portfolio of online distance learning programmes and the IT Services Centre will augment its capacity to provide technical support to academics who wish to create e-learning programmes of study.

CONSTRUCTION OF THE FACULTY OF ICT BUILDING

The construction of the Faculty of ICT building is underway and the main structure is expected to be complete by June 2011. This project has a budget of circa €17.4 million although it is likely to cost more due to variations in cost of material and extension of scope due to unforeseen circumstances during excavation. The building will comprise of a basement for parking, a semi-basement and two floors on a footprint of circa 2000 m² per floor. These new facilities will not only include several undergraduate laboratories to cover the range of specialism of ICT, they will also provide the much needed space for postgraduate and post-doctoral research in this discipline.

When two of the departments of the Faculty of ICT move out, the Faculty of Engineering will have more space to operate from within its building; lack of space has been one of the major bones of contention amongst our Engineering dons.

The building marked 37 in Figure 4.1, which currently houses the remaining three departments of the Faculty of ICT, will be vacated. In the

short term it may be used to alleviate the acute space predicament by housing activities of the Faculty of Science, the Faculty of Engineering, or both. Alternatively, particularly if the permit to build two rather than one floor above the Biomedical Sciences and the Pharmacy buildings is not granted, it may be used to house a number of institutes such as the Institute for Sustainable Development, the Institute of Sustainable Energy, and the Institute of Earth Systems which in turn need to grow. In the longer term, it may be wise to consider demolishing the building marked 37 and the Materials Engineering lab marked 34 in Figure 4.1 and constructing a new building in this space which makes better use of the area available.

ADDITIONAL FLOORS ON BIOMEDICAL SCIENCES / PHARMACY BUILDING

The application for the construction of two floors on top of the Biomedical Sciences and Pharmacy buildings is being considered by MEPA. Indications given thus far are that the construction of one floor will be granted, but, the construction of a second floor is still being considered given the potential adverse impact on the skyline. The construction and finishes of two floors is estimated to cost circa €5.8 million although the construction of just one will cost significantly more than half that much as certain overheads will still need to be covered.

If only one floor is granted then this will be used to consolidate and house the postgraduate and postdoctoral research facilities in the field of biomedical science and technology. If a second floor is granted, then this will be dedicated to the three institutes working on aspects of sustainability, namely the Institute of Sustainable Development which concentrates on the macro perspective, the Institute of Sustainable Energy which in time can extend its portfolio to include water and waste management, and the Institute of Earth Systems.

This project is a crucial ingredient in the unfolding of the corporate research strategy of the University.

EXTENSION OF ENGINEERING LABORATORIES

In a bid to alleviate the space problem of the Faculty of Engineering, and given that the MEPA permit for this is finally in hand, construction of a minor extension to the laboratories on the north face of the building marked 44 in Figure 4.1 will commence immediately. This is envisaged to cost circa €93K.

NEW BUILDING FOR THE FACULTY OF EDUCATION

As discussed earlier, it is high time for the Faculty of Education to have its own building. This faculty still occupies space which was previously allocated to or earmarked for the Faculty of Arts; thus, both faculties have been functioning for many years in less than favourable conditions. The situation has been exacerbated by the recruitment that has taken place recently which has seen these faculties resorting to office sharing, at times, with two or more senior academics having to share a relatively small office. Though the University is trying to cope by leasing office space on West Street close to the old entrance, this is clearly unacceptable and unsustainable in the medium to long term.

The University has submitted an outline permit to build a new building to house the Faculty of Education. The site earmarked for this are the fields between the University chapel and the B'Kara bypass (adjacent to and to the south of the building marked 27 on Figure 4.1). The ballpark estimated cost of the building is €18.5 million and if there is an indication that funds would be made available either through ERDF or through Government subvention then detailed plans and bills of quantities will be compiled in

2011 to commence work in 2012 with an eye to completing the project by 2013.


When the building is complete and the Faculty of Education vacate their existing offices, the Faculty of Arts will finally be in a position to function with ease, and some Institutes and Centres with a close affinity to the Arts can be relocated. At that stage, it may make sense for the Department of Classics and Archaeology, and the Department of Oriental Studies which are currently housed in the building marked 04 in Figure 4.1, to move again into the faculty building. This will also allow the building marked 04 either to be redeployed, or to extend its function as an Archaeology Centre including laboratories, workshops, and storage space for artefacts found in 'excavations-in-progress' to be preserved and exhibited.

POSTGRADUATE LIBRARY AND ADDITIONAL OFFICES FOR THE FACULTY OF ARTS

As mentioned, in a bid to alleviate the space predicament, two additional floors are being built above the secondary data centre to allow the Faculty of Arts some more elbow-room to create a small postgraduate library as described, and to create a few more offices which are needed urgently. This project is expected to cost circa €75K and should be completed and furnished by the end of 2010.

NEW BUILDING FOR THE FACULTY FOR THE BUILT ENVIRONMENT

Adjacent to the new Faculty of Education, the University envisages the construction of the new building for the Faculty for the Built Environment. As discussed earlier, this building will include a School of Art and Design which will allow university undergraduates and graduates of a variety of disciplines to acquire artistic and design skills. As discussed earlier, the University has long



been meaning to develop a Fine Arts programme, moreover, an art and design programme can offer indispensable skills for, amongst others, industrial engineers, mechanical engineers, producers of digital content including graphic artists, game and web developers, communications students aspiring to work in the audio-visual industry, students aspiring to become teachers of Art, as well as architects, landscape and town planners. Undoubtedly, Art classes can also be included under the *DegreePlus* scheme described later.

The current building housing the Faculty for the Built Environment is simply not adequate to house the developments that have commenced. Here again, the University has submitted an outline permit to build a new building; the ballpark estimated cost of the building being €19 million. If there is an indication that funds would be made available either through ERDF or through Government subvention then detailed plans and bills of quantities will be compiled in 2011 to commence work in 2012 with an eye to completing the project by 2013.

There is another compelling reason for constructing this building and this is the reuse of the vacated building - albeit with significant internal alterations - to house a new faculty. The prospect of setting up the thirteenth faculty of the University, namely the Faculty of Applied Social Sciences, has long been discussed informally amongst peers.

The Faculty of Applied Social Sciences, or of whatever name is deemed appropriate, could bring together the following departments, possibly amongst others: Psychology, Counselling, Social Policy and Social Work, Youth and Community Studies, Gerontology, Family Studies, Criminology, Labour Studies, Disability Studies, and Gender Studies. Most of these disciplines are already well represented on campus by a

department, centre, or institute; those that are not yet represented as such, can be set up with relative ease given the expertise already in hand in the respective fields. Sadly, these disciplines which have so much common ground and which can create a very important synergy between them, and an indispensable contribution to the country, have not been working from a common vantage. There is no point in creating this faculty on paper however. Ideally, the academics active in these disciplines come 'under-one-roof' to create an environment conducive of collaboration and mutual understanding. Admittedly, it will take more than a building to create this faculty, the personalities involved must make the effort to bury the past, deal with the task in hand and move forward. Now that's a challenge!

ADDITIONAL FLOOR ON FEMA, LAW AND THEOLOGY

The addition of a floor on the FEMA, Laws and Theology buildings have been long expected and sadly, due to a combination of bureaucratic mishaps, work which should have started this summer will commence late, in the height of the new academic year. This extension including equipment and finishes is estimated to cost €2 million. It will create much needed space for offices, meeting and seminar rooms for the three faculties, and a postgraduate library for the Faculty of Laws. The construction of an additional floor will also create an opportunity to upgrade the air-conditioning systems of these buildings, replacing the dozens of individual units by a centralised one.

ADDITIONAL FLOOR ON THE CCT BUILDINGS

As mentioned earlier, the Centre for Communication Technology (CCT) is in the process of realigning its mission and purpose; a change of name to reflect this is also envisaged. The CCT will continue to strengthen its profile in

film, media and communication studies; in tandem with the Department of English and perhaps with international partners it will strengthen the teaching of storyboarding, creative writing, and journalism; and it will continue to develop library and information management studies. The CCT moreover, is envisaged to take on the portfolio of digital game production under its wings – including game design and storyboarding, graphic design, game evaluation from the perspective of impact on user behaviour and society.

To accommodate the facilities required for training and research in the field Digital Game Production, the CCT requires more space. Therefore, it is envisaged that an additional floor will be constructed on the buildings which house the CCT to date. The cost of this expansion is estimated at circa €1.8 million.

UPGRADING OF THE SPORTS FACILITIES

The sports facilities of the University and the Junior College need serious investment.


At last, the University is about to regain control of the football pitch (marked 51 on Figure 4.1) which was granted to Sliema Wanderers after 4pm as a temporary training ground whilst their facilities were being built in Tigne. The sports pavilion (marked 47 on Figure 4.1) moreover hosts il-Kunsill Malti għall-iSport (KMS) which once again takes control of this facility after 4pm to host various sports clubs which otherwise do not have their own facilities for training. KMS also manage the National Pool (marked 48 on Figure 4.1) which was built on University of Malta land. To be fair, the relationship between the University and KMS has been a reasonably constructive one. This said, given that most University students have lectures and studies throughout the day, the University's ability to extend its own sports programmes or to promote

sport amongst its students is somewhat hampered. Ideally, the University ought to have its own football, basketball and rugby coaches employed to manage University squads which should compete nationally. Sailing and rowing ought to be given more prominence, with University teams competing at the Regatta and other prominent competitions. The University needs new tennis courts, dedicated squash courts accessible to University staff and students throughout the day until late, throughout the year.

At present, the University has stepped up its efforts to evict squatters from the farm-building adjacent to the sports pavilion just below Regional Road (the unnumbered building between 47 and 50 on Figure 4.1). This building can be converted into a clubhouse for staff, and the land immediately around it is an ideal setting for tennis courts, outdoor basketball court, and six-a-side football pitches (area marked 50 and adjacent space on Figure 4.1). It is indeed sad that University of Malta staff do not have any place where to meet and interact in an informal setting.

It is not clear what will be the impact of the construction of the Sports Village at White Rocks on the University. Will the National Pool move to the new Sports Village? If so the University can reclaim the space. Will the KMS move its operational base to White Rocks and will the sports clubs be hosted there? If so the University can finally regain control of its facilities and plan for the future.

A project has been proposed to construct an underground Car Park below the University's football pitch and to reconstruct the pitch and track as both are in a poor state of disrepair. Unless, KMS move out and the space occupied by the National Pool redeployed, a new pavilion needs to be built on the side of the football pitch opposite the National Pool to house University



sports clubs, storage rooms for sports equipment, indoor training rooms, lecture rooms suited for the University sports programmes etc. This work together with the refurbishment of the clubhouse mentioned, together with the construction of tennis courts, a basketball court, and six-a-side football pitches as described is envisaged to cost a ball-park €8 million.

This brings us to the Junior College which already has a state-of-the-art Gym, but which direly needs to have its football ground resurfaced and ancillary sports facilities refurbished. This work is estimated to cost circa €297K. It is envisaged that these additional facilities will incentivise students to remain within the College precinct in between lessons, rather than wasting time 'hanging about' in bars outside the College.

NEW LECTURE TOWER BLOCK

The lecturing facilities at the University are gradually being upgraded, but, much work still needs to be done to modernise all lecture and seminar rooms. The growth in the number of diploma and degree programmes moreover, during the day as well as during the evening, has created a time-tabling strain, and despite the extension of lecturing hours of 'day-courses' beyond 17:00 in a bid to maximize space utility, the University is still encountering serious space constraints.

Contrary to what many people think, the need for lecturing space is not merely a function of the number of students. It is also principally driven by the number of course programmes and subject combinations on offer, and on the choice of teaching method: at one extreme 'lectures for the masses', at the other, small group seminars and tutorials. There are those who argue that with the advent of modern-day digital technologies, the need for more classrooms will be obviated as much teaching can be done on-line. Though I am

a strong advocate for technology-assisted teaching and learning, I believe that unless the University enhances student and academic presence on campus, ideally on a 24x7 basis, it will fail to create the social and scholarly milieu to make University life a unique growing experience for students.

When one analyses the growth in the number of students at the University in the past five years (see Table 4.13), in the context of the declining number of students presenting themselves for the Matriculation Certificate (see Table 4.22), one can erroneously conclude that the number of students at University are likely to grow minimally, if not decline, in the near future. Conversely, if Malta is expected to reach EU and OECD norms, then the number of students who successfully complete the Matriculation Certificate (or some alternative system of appraisal as discussed previously) ought to increase significantly, and consequently the number of students with the choice to pursue tertiary education should also increase. In this context, and irrespective of how the tertiary education landscape evolves in this country, there is no doubt that the University of Malta must prepare to cater for a steady increase in numbers.

If the current educational reforms yield the desired results, if the systems of appraisal at SEC and Matriculation Certificate level are given due attention without the lowering of standards, if the investment programme being proposed for the Junior College and the University is implemented, and despite the projected demographic decline in the number of the 19-year-old age cohort, the number of local students at the University of Malta in the year 2020 can realistically be around 5,000 students more than it is today. On top of this, with state-of-the-art facilities, and with the proposed system which allows the University to charge EU non-resident students as well as non-EU students, the University can step up its marketing drive to attract international students. With the

right facilities in hand, it is not unrealistic for the University to target 2,000 international students by 2020 in addition to exchange students and distance-learning students.

The scenario envisaged above, necessitates the construction of a new lecture-centre at the Msida campus. This can be built on the current footprint of the Science Lecture Theatre which is 1100 m² in size (marked 40 on Figure 4.1). The new lecture block, adjacent to the library and the main quadrangle, can be up to nine stories in height (MEPA-permitting), apart from having an additional two stories of underground car-park, and can be designed to be the 'centre of gravity' of academic campus life. The entrance to the underground car-park of the tower-block can be from the access-road leading to the existing over-ground car-park marked CP4 and can be interconnected with the car-park below the proposed Library archives marked CP2 in Figure 4.1. As an additional safety precaution one can also devise an underground exit to the tower-block car-park that emerges in the access road which currently leads to CP3, thus CP3 as well as CP4 can in time be pedestrianised.

The construction and finishing of the Lecture Tower-Block including work on the underground car-parking facilities described is estimated to cost circa €40 million.

NEW RESIDENCE / COMMERCIAL CENTRE

The University Residence in Lija which is currently leased from third-parties under very unfavourable conditions will simply not meet the requirements of the University going forward. In fact the University is well advised not to renew the lease of these premises on expiry of the current lease in 2013. Ideally, the University residence moves much closer to the Msida campus thus creating a community of resident students who can bring

campus to life with social activity throughout term-time. The same halls of residence can also be used to host international summer students who may be in Malta to learn English, and in the future perhaps English augmented with other disciplines such as ICT, Mediterranean History, Anthropology, History of Art, etc.

The ideal site for a University of Malta residence, which can include a commercial and entertainment centre, and which can accommodate the University of Malta, School of Languages, is the site measuring circa 1 hectare to the west of the building marked 09 on Figure 4.1. The site is currently privately owned, but, given that it has been earmarked by MEPA for development related to the University or Mater Dei, the owner has expressed an interest to sell the land and property therein. Architects engaged by the Malta University Holding Company have indicated that this site is sufficient to create halls of residence including circa 500 rooms, a commercial area which can include banks, a post-office, restaurants, pub/wine bars, a laundry, a nursing station, a minimarket/convenience shop, a pharmacy, retail outlets, offices for student societies, offices and lecturing facilities for the University's International School of Languages, and a playschool, which like many of the other facilities described, will cater for both the University as well as the staff and visitors of Mater Dei Hospital.

This development could also have a multi-storey car-park below, which together with the other car-parks proposed previously, can allow the University not only to pedestrianise CP4, CP3 and CP2 as suggested earlier, but can also eliminate the need for CP5, and more importantly CP1 which can be returned to nature as part of the rehabilitation of Wied Ghollieqa. As both the construction of the new Faculty of the Built Environment and the new Faculty of Education buildings include underground car-parks, and particularly if two



stories of parking space are constructed below the football pitch, Car Park 6 at the entrance to the University can also be eliminated and landscaped into a garden.

Assuming that the Government buys the 1 hectare of land described and passes this on to the University together with some seed capital, in lieu of the circa 4 hectares of land that were taken from the University to build Mater Dei, then the University can develop this site as described. The estimated cost of building this facility is circa €45 million and there is an option for the University to enter into a public-private partnership to mitigate the risk and finance the development. It is important, however, that the University is allowed a strong negotiating position to secure a decent recurrent line-of-revenue from this development.

SCHOOL OF BOTANY AND HORTICULTURE AT ARGOTTI GARDENS

Through the Malta Council for Science and Technology, the University of Malta has presented a proposal to Government, to set up a School of Botany and Horticulture at the Argotti Gardens. It is worth noting that the Argotti gardens, including St. Philip's Garden, and Notre Dame Nursery, had been passed on to the University in 1855, and under the oversight of Prof. Stefano Zerafa, all valuable botanical and medicinal plant collections were brought into this holding. Unfortunately, since 1973, the University's control of this garden

has eroded due to encroachment, and today, the University only occupies a fraction of the garden which is now referred to as Inner Argotti. In the restricted space and facilities of Inner Argotti, the University works against all odds to preserve a valuable collection of indigenous and Mediterranean trees, plants and shrubs. Just opposite Argotti, and at the foot of the Mall, the Education department has a building popularly known as the Education Annex. This can easily be turned into a School of Horticulture in which students of both the University and MCAST can participate in the upkeep of both the garden of the Mall itself as well as of Argotti garden at large, which in turn can be turned into a serious botanical garden. In return, the University can also offer its technical assistance to help in the regeneration of other neighboring gardens in Floriana all the way down to the *Pinetum* in Pieta, and beyond. The overall project can open many spaces on the bastions for the enjoyment of the general public which over the years have fallen into a sad state of disrepair. The University and the Malta Council for Science and Technology are currently working on the design and feasibility of this project.

ECOLOGICAL CONSERVATION RESEARCH CENTRE AT THE XEWKIJA GOZO FARM

The Institute of Earth Systems has had discussions with the Ministry for Gozo on the prospect of transforming the Gozo Farm into an Ecological Conservation Research Centre. This would complement the eco-Gozo concept, providing

it with a research platform on which various initiatives can be launched.

Such a Centre can have nurseries for indigenous trees, vines, and flora. It can attempt to breed various types of indigenous animals attempting to keep blood-lines pure, and moreover, it can help preserve the natural biodiversity of our islands. It can attempt to conduct research in the creation of authentic natural products from produce, giving scientific reason to valorize the *terroir* of the Maltese islands.

This Centre, which can be part of the University of Malta, Gozo Campus, can also provide the best strategies to regenerate woodlands, to conduct sustainable farming practice which does not degrade the natural habitat or damage the biodiversity. Indeed, it can help in the creation of the right scientific context for eco-Gozo to evolve.

4.7 OTHER HIGHLIGHTS

GRADUATION CEREMONIES AND FOUNDATION DAY CONCERT

Since 2006, the University has reinstated pride into its graduation ceremonies, which over the years, for a variety of historical and logistical reasons, had become somewhat mechanistic and on occasions unpleasant due to poor conduct.

All postgraduate degrees are now conferred at the Jesuit Church in Valletta, and with the increasing number of postgraduate graduands, this year the University will have five ceremonies at this venue. All undergraduate qualifications are now conferred at the Sir Temi Zammit Hall at the Msida Campus and since this is somewhat small, nine or ten other graduation ceremonies are organized to accommodate the graduands and their families.

The additional work to organize more ceremonies has paid dividend as the atmosphere in ceremonies catering for smaller numbers is more intimate and good order is more easily maintained.

Perhaps another ingredient in the smooth running of graduation ceremonies is the organization of annual Foundation Day Concert which coincides with the graduation season. This concert,



Photo: Taffigno Studios

dedicated to the graduands and their parents, sets a tone of dignity and celebration in good taste. It gives the opportunity for the University to show its fresh cohort of graduates that it cares, and invites them to become active members in the Alumni Community.

ALUMNI COMMUNITY

The Alumni Community of the University of Malta has only been set up recently through the extension of the portfolio of the Communications Office to cater for alumni relations. Through a number of initiatives and activities organized, the University has been establishing contact with its alumni inviting them to send photos and other memorabilia of their University days, and to provide contact information of other alumni with whom the university has lost touch. In the future, the University hopes to organize regular



Photo: Tuffigno Studios



reunions, but more importantly, plans to call upon alumni, who have gained a wealth of expertise and experience, to contribute to the future growth of the University. In particular, the University is interested in creating a network of its international alumni and of Maltese alumni who have pursued a career abroad.

HONORIS CAUSA DEGREES

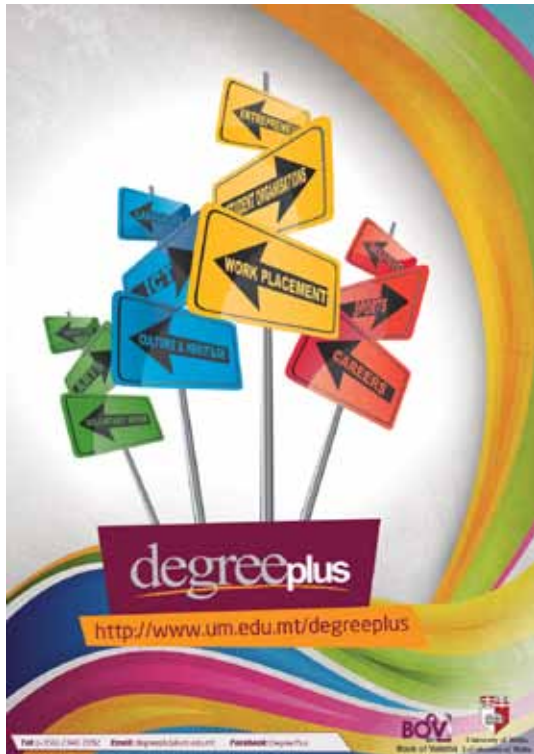
Since 2006, the University of Malta has conferred a number of *Honoris Causa* doctorates to deserving candidates who have excelled in their academic or professional careers and for service rendered to Malta or the international community. These

included the conferment of the degrees of:

- Doctor of Literature to Miguel Angel Moratinos Cuyaube, Foreign Minister of Spain, in May 2007;
- Doctor of Literature to Maestro Roberto Benigni, Actor and Film Director, in April 2008;
- Doctor of Science to Bernard Kouchner, French Minister of Foreign and European Affairs, in February 2009;
- Doctor of Laws to Ban Ki-moon, Secretary General United Nations, in April 2009; and
- Doctor of Laws to Efthimios E. Mitropoulos, Secretary General IMO, in May 2009.



Photo: Tuffigno Studios



These occasions not only confer honour on those bestowed, they increase the visibility and raise the profile of the University of Malta in the international community.

DEGREEPLUS

Another important initiative of this rectorate has been the launch of *DegreePlus*. This is intended to promote the acquisition of experience and skills outside the curriculum of degree programmes, which can come in handy later on in one's personal life or to enhance one's employability.

For example, irrespective of their programme of studies, students are encouraged to follow regular sessions, organized in an informal setting, on entrepreneurship, ICT, to take up or improve their skills in languages, to participate in music activities and other performing arts, to participate in sports, to work with student organizations, to participate in voluntary work, to learn about our culture and heritage, amongst others. Under this scheme, students are assisted in acquiring work placements, are encouraged to go on exchange, and are given career advice including assistance in the run-up to job interviews.

Postgraduates, moreover, are assisted with professional development through the Postgraduate Researcher's Forum which provides them with the opportunity to discuss their research with their peers, and to acquire presentation and research skills.

It is gratifying to note that more than 3000 students have benefitted from some aspect of the *DegreePlus* scheme since its launch in 2007, and the choice of modules available has increased from 42 in 2007-08 to 114 in 2009-10. A significant number of students take up more than one module. Though students do not get any formal ECTS credits for their *DegreePlus* activity, their effort is formally acknowledged in their transcript and the Europass Diploma Supplement.



STUDENT WELFARE AND SUPPORT SERVICES

The appointment of a Pro-Rector dedicated to Student and Institutional Affairs has vastly improved the University's care towards students. For example, in academic year 2009-10 alone, the Pro-Rector took on circa forty cases of student complaints to determine whether the complaints were indeed justified, and if they were, a remedy was sought. Despite the availability of this office as a first port of call, the office of the University Ombudsman received an additional thirty-two complaints by students; this in turn seeks the assistance of the Pro-Rector and the Registrar during its investigations. It is gratifying to note that the University Ombudsman only found grounds to support a complaint on a couple of occasions and in these cases the University has taken on the remedial action possible to rectify the anomalies arising from procedural error.

International students, moreover, are cared for by the Rector's delegate for International Student Wellbeing who works in tandem with the Director and staff of the International and EU Office to make sure that any difficulties encountered by international students – be they academic or other – are tackled immediately. One of the concrete requests which is being considered is the creation of an Interfaith Prayer Room with an ambiance suitable for prayer for students of non-Christian denomination.

ACCESS DISABILITY SUPPORT

The Access Disability Support Committee (ADSC) has compiled fresh and rigorous guidelines to help it manage the numerous applications for special support during examinations. To put things in perspective, in 2009-2010 alone, the ADSC has processed 422 applications for special arrangements during examinations, including 350 for SEC, 40 for the Matriculation Certificate, and

32 at University level. If a National Examination Board takes on the management and evolution of SEC and the Matriculation Certificate as suggested, it should be professionally resourced to handle Access Disability Support as this is likely to become an increasingly onerous task. The effort that the University is presently dedicating to this is simply not sustainable.

Presently the University has 32 students with a disability. In view of the fact that the number of students with disability is increasing, Government must design a scheme to finance the special needs of such students. Disabled students do receive a special 'augmented' stipend but this does not cover the significant needs of students with conditions such as muscular dystrophy, cerebral palsy, blindness and hearing impairments, and others who may need the assistance of a helper. Adequate funds to support such students should follow them from secondary school to Junior College and then on to University. Ideally these funds are channeled directly to the students who can then provide for their own requirements.

COUNSELING SERVICES

The University employs a number of full-time and part-time counselors both at the Msida campus as well as at the Junior College. Though there is need for more counselors to be employed, and this will be done subject to the availability of funds, at present, the University lacks the space necessary to expand this service in the current premises.

INTEGRATED STUDENT SERVICES

If the administrative offices of the miscellaneous student societies, and retail outlets, are relocated to the proposed residence and commercial centre at the entrance of the Msida campus, with the assistance of KSU, the University can transform

University House into a one-stop-shop student services centre including a front desk interface with all the relevant administrative functions of the University, namely the Registrar's Office, the Finance Office, and the International and EU Office. Moreover, apart from recasting the canteen into a modern-day food-hall, and apart from creating a more appropriate senior common area for academics and senior administrators, University House could also accommodate a career advisory services centre and job centre, a counseling services centre, the *DegreePlus* offices, and an office to receive complaints and suggestions.

WOMEN IN SENIOR ACADEMIC AND ADMINISTRATIVE POSTS

In the past four years there have been several senior academic and administrative posts occupied by women, some for the very first time. The University has benefitted from the first woman to occupy the post of Pro-Rector, the current dean of the Faculty of Education was the first woman



*Tessie Camilleri B.Litt.
The University of Malta's first female graduate*



to occupy the post of dean of a faculty, and is now joined by the dean of the newly established Faculty of Health Sciences. The directors of the Institute of Criminology, of the Institute of Linguistics, of the Institute of Anglo-Italian Studies, of the newly established Institute of Sustainable Development, and Institute of Tourism, Travel, and Culture, of the Centre for Family Studies, and of the Edward de Bono Institute for the Design & Development of Thinking are all women. At present, there are moreover fourteen heads of department within faculties who are women. Recently, there have been a number of women who have been promoted to the rank of Associate Professor and Professor. Although the University does not operate a policy of positive discrimination in favour of women, it is clear that with the passage of time more and more outstanding candidates are presenting themselves to occupy the highest ranks of the *alma mater*.

As far as posts in Senior Administration, the University has the first woman Registrar in post, and it had a woman occupying the post of Director of Finance until recently. The posts of Director of Human Resources Management and Development, Director of International and EU Affairs, Director of Communications and Alumni Relations, and the head of secretariat at the Rector's Office are also currently occupied by women.

OTHER HIGHLIGHTS

The University has continued to be very active in hosting international conferences, workshops, and seminars. It has continued to establish international cooperation agreements although admittedly, it has focused its energy on those which materialize into concrete projects, or in the exchange of staff and students. The University has been working closely with other local public entities such as NCHE, MITA, Malta Enterprise, MCST, the Central Bank, to mention a few. For example, the University has collaborated with NCHE in the organization of the annual University-Industry Thematic Forum, it has hosted Science Week organized in tandem with MCST, it is working with MITA on a joint ESF project to boost continuous professional development in the field of ICT, and it is collaborating with the Central Bank on a number of economic studies.

4.8 FUTURE STRATEGIC THRUSTS

There are a number of issues which will hamper the development of the University unless addressed. Perhaps the financing of the University is the biggest challenge of all.

The projects highlighted in the previous section, together with the continued upgrading of the existing plant, and maintenance of the existing equipment is estimated to cost in the region of €175 million; an average of €35 million per annum if viewed on a five-year timeframe. The recurrent expenditure in 2015, moreover, is expected to be circa €94 million, that is slightly less than double that of 2010; requiring an increase of €8 million per annum for the next five years.

As discussed previously, this additional investment will create the capacity for a significant increase in the number of students. By 2015, one can realistically expect the number of students to increase to circa 12,000, with 8% to 10% being international students; the annual rate of growth beyond 2015 should increase if the cohort of prospective students increases, and this can be expected to reach 17,000 students by 2020 excluding exchange and distance-learning students.

The investment as discussed, will also allow the University to deepen as well as broaden its portfolio of programmes; it will allow the much needed renaissance of a number of faculties to improve standards; it will allow the University to strengthen postgraduate studies and postdoctoral research across the board; it will continue to modernise the facilities wherever required; it will allow the University to have more to offer to industry, the economy and to society. It will allow our university to be worthy of its title and stature in the international community.

The investment required, particularly when viewed in the context of other needs within the Education sector, more so in all other sectors of the economy, is staggering. This is why the country cannot afford to duplicate efforts capriciously, as doing so will be tantamount to investing in a double dose of mediocrity!

Though one may choose to delay the debate, or to avoid it, the magnitude of the challenge in hand is clear. Granted, one may choose to stagger the investment over a longer period of time, or to simply do away with aspects of the plan suggested in the previous section. No doubt a tertiary education institution of sorts will still survive. The question is: will the University of Malta be a university our sons and daughters will be proud of?

The question of University financing must be given very serious thought. As mentioned previously, an exercise to determine the cost of educating students in each programme ought to be the basis for some formula funding mechanism. This said, since the University is still catching up on lost time by way of building a proper infrastructure for research, and given that the needs to upgrade and expand the existing infrastructure are significant, the funding formula for the University cannot be based solely on the number of students per course type.

It is clear that the University cannot rely solely on Government to provide the necessary funds. At present the University generates circa 15% of its revenue despite the constraints on student fees. Realistically, maintaining internally generated funds at 15% or better going forward will require significant effort to create new lines-of-revenue. Indeed the University must find ways of leveraging the investment in infrastructure into new revenue-streams wherever possible.

For example, capital projects such as the new University Residence and Commercial Centre as well as the upgraded sports facilities may attract private investment. This said, it is important that if such projects are implemented in some form of public-private partnership, the services they render remain affordable and accessible to staff and students, and moreover, the University is in a bargaining position to secure a significant and stable line-of-revenue.

Other projects such as the refurbishment of the Valletta Campus and the running of a boutique hotel in its vicinity can enhance the University's ability to attract conference business and will allow the University to extend its portfolio of International Masters Programmes.

Projects such as the construction of the Lecture Tower Block, the Faculty of the Built Environment and the Faculty of Education are not intended to generate direct lines of revenue, but to enhance capacity and quality. Indeed these projects are best financed through ERDF funds although it is not clear whether sufficient funds remain in the current tranche of funding to finance these projects.

Despite the fact that many of the projects proposed do not have new revenue generating potential, the overall investment plan proposed will also make the University of Malta more competitive to attract international students, but, at the same time, it will build the capacity to cater for them. With the current space constraints at the University, a strong drive for more international students can be counterproductive.

The capital investment, moreover, will undoubtedly help the University build a stronger relationship with industry. Granted, there is only so much financial assistance one can expect from local industry in its current stage of development. This said, in time, as more indigenous hi-tech companies are set up and as more international companies engage in RTDI activity in Malta, if the University has the right infrastructure then it will be in a better position to raise funds through collaboration with industry.

It is clear that going forward, the University must be allowed to accrue assets. The setting up of the University of Malta, Trust Fund for Research, Development and Innovation and the updating of legislation to allow tax incentives for donors is a crucial step forward. The legal instruments to get the Trust Fund off the ground are all in place and now await the formal appointment of the Trustees to govern the fund. Another fiscal instrument which will help the University tremendously going forward would be VAT exemption on plant and equipment intended for research.

All these initiatives to diversify or preserve the income streams of the University are laudable, but, unless a market-oriented strategy of indirect financing is implemented as described in section 3.1, the University will remain dependent on Government as the principal source of revenue. Unfortunately, many misconstrue an entity which is predominantly publicly-financed as being a 'public entity', and indeed, on that misguided premise, the University's operational autonomy has been gradually eroded. One can understand that public financing necessitates accountability; but there again accountability should not mean that all publicly-funded entities should be managed the same, irrespective of the nature of the work they conduct, and irrespective of their administrative capacity and track record.

For the University of Malta to continue to build on its legacy of excellence, for it to contribute fully to the implementation of Malta's 2020 Vision, then its autonomy also needs to be strengthened: today Government funding comes at the price of cumbersome procurement procedures, bureaucracy and procrastination. Indeed, recent developments in this regard have made matters worse: up until recently the University could process tenders of a value up to €40K internally; now the University must channel all procurement above €6K up to €120K through a procurement committee at ministry level, the rest being handled by the contracts department as per standard practice. Despite everyone's best effort – and be assured much effort is spent – the ritual of 'toing' and 'froing' between departments to get even the simplest of tasks done destroys enthusiasm and invariably delays projects unnecessarily.

Even if the University had to secure financing for all the projects proposed in the previous section, and despite the fact that the University has now set up an efficient Procurement Directorate, the procurement procedure introduced recently is so







cumbersome that it will be impossible to implement such an investment programme within a five-year timeframe. If Government is reluctant to grant the University Schedule 3 status², then based on its sound record in this regard, its substantial workload, and its administrative capacity, at least the University ought to be given the authorisation to process tenders of up to €120K internally. If this is granted, then the University will appoint a Director of Internal Auditing to further strengthen the robustness of its internal procedures.

Finally, aspects of the Education Act must be revised, but, this must not be rushed as getting things wrong can be fatal. It will be futile to change the Education Act unless the financial underpinning of the University is in place to implement any desired reforms. Modern universities cannot be run merely with rules and sticks.

Admittedly, the collective agreement signed with academic staff has strengthened the governing structures of the University and has tangibly

improved the work ethic in most faculties. Though the management of the University can be strengthened further, one needs to be very careful not to impinge on academic freedom, even if some reforms will take a bit longer to implement. The current system is very ‘collegiate’ in nature, allowing peers to influence the appointment of heads and to elect deans. This system works well most of the time, although at times internal faculty politics delays the weeding out of bad practice.

Indeed, as discussed in section 3, any change to the Education Act with regards to the University ought to take place after there is a clearer idea of how the Higher Education and in particular the Tertiary Education scenario is desired to evolve.

It should not be hard for a country that has been blessed with a University which traces its roots over four centuries to understand its intrinsic value, its need for adequate and sustained funding, and its need for autonomy within effective structures of accountability. As I conclude this report, I wonder!

² In terms of Legal Notice 177 of 2005 entitled Public Contract Regulations, as amended by Legal Notice 296 of 2010 entitled Public Procurement Regulations.

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