



KEEPING *L-UNIVERSITÀ* ON COURSE

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Professor of Chemistry and
Rector, University of Malta

MARCH 2021

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Contents

Executive summary	4
1 Introduction – thanks and acknowledgements	7
2 The mission of the University	8
3 My role in promoting UM’s mission	9
4 Performance and outcomes during the period 2016 – 2021	10
4.1 Learning and teaching and the student experience	10
4.2 Lessons in learning and teaching from the COVID-19 pandemic	23
4.3 Research at UM	24
4.4 Knowledge transfer and entrepreneurship	28
4.5 Internationalisation	31
4.6 Commitment to sustainability	32
4.7 Service to Malta’s school education system – MATSEC certification	32
4.8 Outreach	34
4.9 Physical development of the University Campuses	35
4.10 Lands acquired from Government by University	38
4.11 The University’s artworks	38
4.12 The Junior College	38
4.13 University as a major employer	41
5 The next five years	44
6 <i>‘Il quddiem b’kuraġġ</i>	48



EXECUTIVE SUMMARY

During the last five years *L-Università ta' Malta* (UM) went from strength to strength as it saw the fulfillment of the several objectives which I had set at the start of my Rectorate. Indeed, we went beyond a number of them despite the fact that pandemic struck in 2020 presenting us with unfamiliar, serious and ongoing challenges which require hard decisions and a steady hand on the rudder.

I promised to place UM within the group of the best 1000 Universities from a total of about 30 000 in the world by the time I finish my first term of office: we managed to do that three years ago and today, we're in the group 601 – 800 of World Universities (Times Higher Education): we succeeded to do this because we continued to improve our research effort without abandoning our commitment to teaching quality, the internationalisation of the University and our outreach mission that constantly seeks ways and means to help and assist State institutions and local communities in their needs.

In five years, the number of researchers employed by UM on funded projects doubled from 100 to 200, including a sizeable community of post-doctoral scholars; the number of PhDs awarded in the period 2015 – 2020 rose to 189, an increase of 69% over the previous 5 year period; and our research discoveries are drawing increasing attention from major industrial operators who are ready to invest effort and money in working with the University to commercialise our inventions and innovations. To give our research students a better and more holistic experience, we launched and firmly established the Doctoral School, an apex moment for the University that will leave lasting and positive benefits to guarantee deep entrenchment of serious research and innovation at *L-Università*.

Another highpoint was the launch of the Office for Professional Development which affirms our commitment to quality teaching. The introduction, through the new Collective Agreement, of the Tenure Track process amidst other measures was intended to better ensure that new recruits to academic positions are expected to commit their best efforts to both the research mission and care of the University's most precious resource, namely students.

Learning and teaching must remain high on our agenda which is why we

- continued to improve the student to staff ratio (to a value that is equal or better than best of breed Universities);
- introduced the much-needed English programme to improve communication skills;
- changed the General Regulations to help students in difficulty survive and graduate successfully and this without prejudice to our high standards;
- introduced positive support to student athletes at both the University and the Junior College because we believe that sports is a core and not peripheral educational function;
- modified our entry requirements to ensure that talented students with special needs are not left behind because of their condition;
- retained or improved our students' graduation rate to the highest value in the EU;
- improved our access to adult learners through adoption of the process of Recognition of Prior Learning, a novel practice at UM;
- are committed to work closely with Government to help in the upskilling and reskilling of the workforce through training and certification using micro-credentials as one means towards that end.

The above actions will be consolidated and developed according to evolving needs and situations. Our future vision requires that we continue to strive to make the University more attractive to both local students, and crucially, international students drawn from a variety of places. Without students neither the teaching mission nor research can thrive. To draw more students to our lecture rooms, we need to reflect on our admission criteria and to consider providing bridging programmes and other measures intended to increase the flux of learners from the post-secondary sector and to improve the learning environment of adult learners so that more will be encouraged to join and survive courses at UM. Both initiatives will require enhanced use of internet technology that can support blended learning and where necessary online learning.

Internationalization remained another firm commitment of UM and a crowning moment was our successful participation in the European Commission's project towards the creation of University Alliances to consolidate higher education in Europe. UM collaborated with five partner universities that are all present in coastal regions of Europe to create SEA-EU, the University of the Sea, one of 17 alliances which were funded in the first call.

SEA-EU has ambitious prospects of achievement which we shall see through in the coming years.

To care for the total welfare of our students and staff, we invested in an excellently manned and motivated Health and Wellness Centre which was of crucial help in dealing with some of the myriad problems caused by the pandemic. We intend to continue to support and extend the services of this Centre even through enhanced collaborative efforts with other national services.

We are committed to see to completion the multimillion euro buildings and physical development projects currently progressing or nearing completion on campus and we are proud to have agreed with Government on the acquisition by perpetual lease of 60,000 m² of lands for the University.

A priority for the next Rector will be that of bringing to a satisfactory completion all our building projects including the Gozo Centre, the Sports and Performing Arts Centre and the new University Administration Complex in the building acquired for the purpose. Other projects that come to mind are a new Centre for Matsec operations and a large Conference and Multipurpose Centre that befits a modern university.

The guiding principles shall remain the same, namely, commitment to providing a quality education that puts students at the centre of learning; continual dialogue with students and their representatives and further inclusion of students in University governance and decision-taking; support for more and better research and innovation; sustained commitment to turn research results into enterprise; and keeping the University in contact with society and working for society. Our Strategic Plan will serve as compass for the years ahead.



1. Introduction – thanks and acknowledgements

I took over leadership of *L-Università ta' Malta* (UM) almost five years ago and the then decision to run for the post came about as a result of the spurring by colleagues to consider said role. I had been serving as Pro-Rector for Academic Affairs in the previous administration for ten years (2006 -2016) and prior to that, as Dean of the Faculty of Science and Head of Department of Chemistry for eleven years. So, in 2016, when Council decided to let me take the lead of the University, I felt reasonably confident that I was ready for the role.

During the past five years as Rector, I tried to execute the role as best as I could, keeping to the fore the following principles: firm dedication and commitment towards upholding academic excellence and institutional integrity; a personal work ethic that valorizes diligence and slog and going the extra mile when necessary; adoption of the values of fairness and humaneness as integrating concepts in decision-taking; and, above all, tolerance and perseverance.

My work during this period was rendered possible by five Pro-Rectors who graciously accepted to carry the load with me who were (in no particular order): Professor Joseph Cacciottolo (Academic Affairs); Professor Carmen Sammut (Students and Staff Affairs and Outreach); Professor Saviour Zammit (Research and Knowledge Transfer); Professor Godfrey Baldacchino (International Development and Quality Assurance) and Professor

Tanya Sammut Bonnici (Strategic Planning and Enterprise). These persons deserve my most sincere thanks and appreciation. Without their help, the job would have been impossible.

Deep gratitude is also due to the various Deans of Faculties and Directors of Institutes, Schools and Centres who journeyed with us during the last five years, providing essential and wise academic leadership in their respective areas of responsibility and sharing their knowledge and sagacious insights during Senate and other important meetings.

Thanks go to the twelve Administrative Directors and their staff and the numerous employees who work on the main campus at Tal-Qroqq, the Valletta Campus, the Gozo Campus, the Marsaxlokk Campus and at the Junior College as well as the hundreds of staff members who give part-time service to the University.

And of course I need to acknowledge the cooperation I found from our students, including leaders from *Kunsill Studenti Universitarji* and others who put their names forward to sit on the several University boards and committees and who advocate on behalf of their colleagues. The student voice in University governance continued to develop during the last five years and this augurs well for the future wellbeing of the institution.

2. The mission of the University

In 2019, the University celebrated the 250th anniversary of its re-foundation by Grandmaster Pinto, a solemn and portentous event which we marked with a number of initiatives, amongst which, the minting of commemorative coins and a special issuance of postal stamps and the publication, by Malta University Press, of the book titled *The University of Malta: Legacies and Bearings* edited by Keith Sciberras et al.

The University is understandably proud of its long legacy: in fact, its history extends further backwards in time and beyond the two hundred and fifty years of the last celebrated anniversary. The foundation stone of the Valletta Campus was laid on 4 September 1595 to host the Jesuit College, UM's precursor institution founded three years earlier by Pope Clement VIII.

Our University is among the older ones in the world and has always played an important role in the development of Malta as a culturally-distinct community, well before the country achieved nation-status. Arguably, the country could not have achieved nation status without the University's contribution. Today, UM continues to occupy an important position both for the economic development of the nation and its socio-cultural sophistication and evolution. The University must remain closely involved and participative in the development of national wealth and wellbeing. The Government has recently announced its plans for a new Employment Policy to address challenges which the country faces, including the up-skilling and re-skilling of the workforce and meeting the demands for high-skilled workers which certain industries such as engineering and finance require. The University must and shall engage fully in this national exercise as an important and very relevant stakeholder. It cannot be otherwise. Our mission statement today, in 2021, remains the one proposed during my first term of office and is congruent with this commitment. Let me reproduce it here for the record:

“to serve the aspirations of the people of these Islands through locally and globally significant research and provision of higher education of quality in the arts, sciences and the humanities as required for Malta’s economic, social and cultural development, via the scholarship of discovery, teaching and service to the community. These functions shall be delivered in a sustainable manner that is responsive to this country’s present and emergent needs.”



3. My role in promoting UM's mission

The decision to offer my services as Rector for another period was not foreseen in my original plan of five years ago. I was under no illusion that the work which I felt needed doing would be completed in 5 years: obviously, a Rector's work is never finished since it evolves with and responds to the changing fates, opportunities and challenges society has to face constantly and including occasional tumultuous upheavals which erupt from time to time.

I am probably the most "mature" (ancient) Rector to have served this old University. I had anticipated that the erosive effect of advancing age and the punishing work demanded of the Office of Rector would preclude me from going beyond one term. However, a personal tussle with a serious cancer in 2019 and the several formidable battles that we had to fight against the problems created by the novel coronavirus during 2020 seemed to have had the opposite effect. The devastating consequences of COVID-19 on the work and life of our students and University community, which effects are still being felt, have hardened my resolve to stay the course and see through the progress on the projects and institutional aspirations of Malta's premier centre of higher learning.

I have discussed informally my intention to be considered again for the rectorship initially with my family and later with my colleague Pro-Rectors and several Deans and other senior officers of the University and have been heartened by their response. I have now been honoured by the support expressed by a number of Council members and have accepted their nomination for the Rectorship with satisfaction.

In this document, I propose to take a look back to analyse the principal outcomes of my current term in office: how well have we fared as a University and whether we have achieved the desired aims and objectives prospected in 2016. The achievements will be highlighted and reasons for the shortfalls will be identified where possible with a view to reconsider any future corrective actions.

This vision statement will also, of course, outline the steps projected for the coming term of office of the next Rectorate. This time around, however, the Rector whoever they may be, will have their job made easier thanks to a Strategic Plan drawn up during 2018-19 for the purpose of guiding the University forward in its mission. Spearheaded by the Pro-Rector for strategy, the Plan took over ten months to produce and represents the distillate from 7 fora and 49 working groups focusing on eight cohorts of stakeholders ranging from students, academics, administrative and technical staff of the University to civil society, enterprise, government and pre-university education providers. The **Strategic Plan 2020-2025**¹ must certainly continue to inform my vision for the next five years even though, of course, any plan both in the short or long term, has to respond quickly to unpredicted developments to allow challenges to be turned into opportunities according to an overarching strategy of flexible and agile adaptation.

¹ https://www.um.edu.mt/_data/assets/pdf_file/0006/439692/UMStrategicPlan2020-2025.pdf

4. Performance and outcomes during the period 2016-2021

I will briefly review the different outcomes achieved during my Rectorate classified according to the principal functions of the University, namely, learning and teaching, research and knowledge transfer, and outreach including performance in the mission of entrepreneurship expected of a 21st century University. We will also consider the Junior College of the University, an important institution with a different but precious mission.

The state of play of physical development on and beyond the Tal-Qroqq campus will be outlined as well as the acquisition of title to lands by the University. UM's record as a major employer will also be reviewed including improvements in administrative practices intended to ensure responsible and more transparent use of public funds and collective agreements signed with the unions through which were introduced measures intended to enhance the quality of service provided while maintaining equity and fairness to our staff.

4.1 Learning and teaching and the student experience

The University's total number of programmes of study continued to grow from 839 to 895 during the last five years; the increase was due to a growth in masters programmes as the undergraduate offerings actually levelled off and now stand at around 310 which is a sustainable outcome. The master's courses tend to reflect specific new developments that are either following economic change in Malta or even leading and helping such change forward. This activity is at the heart of the University spirit which has to be quickly responsive to a country's socio-economic needs. Growth in master's courses is occasioned by the fact that while new courses are almost continuously coming on stream, student interest in the older programmes wanes very slowly and faculties tend to be reluctant to remove programmes from the Course Directory even when these attract fewer than 5 students. For such courses, however, the spend is closely controlled and these are generally not allowed to involve extra teaching staff other than full timers whose salaries represent already committed cost. That being said, when these small number master courses are delivering knowledge and skills which are considered to be strategically important for the country, we continue to support them in any way as necessary.

During the period 2016 -2021, total student numbers at UM levelled off to approximately 11,300 as shown Table 1. The Table breaks down the data into five different categories of students, namely undergraduate (Ug) – local; Ug - international; postgraduate (Pg) - local; Pg - international; and doctoral students which include mainly those on PhD programmes and a much smaller number following professional (Level 8) doctorates². PhD students merit separate consideration and are discussed later.

Table 1 shows interesting trends in the different categories of students. The levelling off of the total local student population (Ug + Pg) is likely mainly a result of demographics although loss of students to the vocational colleges and private higher education providers may contribute in a minor manner. Although the population of the Maltese islands has increased dramatically in recent years due to a sizeable immigrant workforce, the offspring of these families are likely not yet of university-age and their effect on UM will be felt in a few years' time.

Academic Year	2016-17	2017-18	2018-19	2019-20	2020-21
Undergraduate Students, Local	7848	7729	7755	7049	7174
Undergraduate Students, International	585	581	599	560	617
Postgraduate Students, Local	2202	2198	2267	2452	2651
Postgraduate Students, International	319	386	374	389	425
Local Students, total	10050	9927	10022	9501	9825
International students, total	904	967	973	949	1042
Total Students (excluding doctorals)	10954	10894	10995	10450	10867
Grand total including doctoral students	11358	11323	11421	10929	11305

Table 1. UM student statistics 2016 - 2021. (Postgraduate student numbers in this Table exclude doctoral candidates, except where shown otherwise. Doctoral students are discussed later.)

Table 2 shows the number of students awarded the Matriculation Certificate in the period 2016 to 2020 as well as the number of 18 year old candidates within this group.

Year	Total students awarded MC	Total of 18 y old students awarded MC	% 18 y old cohort within the total
2016	1706	1266	28.2
2017	1667	1282	29.8
2018	1562	1248	29.3
2019	1454	1135	29.4
2020	1288	1011	26.6

Table 2. Students obtaining the Matriculation Certificate (MC) during 2016 - 20.

² Note: the degree in Medicine and Surgery (MD) from this University is a Level 7 degree.

In this period, between 27 to 30% of the 18 year old cohort of students managed to obtain their full Matriculation Certificate and these 1000 - 1300 persons could therefore proceed directly to a University education. Another approximately 300 – 400 persons per year manage to obtain their Matriculation at a later age through continued effort.

Table 2 shows a decline of students awarded the Matriculation Certificate of about 24.5% over this 5 year period and this is not due to a lowering of student abilities (which would be unnatural and a hugely serious concern!) but a fall in student numbers. At the Junior College, a principal feeder to the Matriculation Certificate, student numbers have fallen by 19% during this period and although the drop is not as large as that involved in the number of matriculated students, it is clearly a main contributing factor. It is possible that the further loss to the MC of approximately 5% of students is due to an increasing number of students in the secondary schools who are opting for vocational education. Student numbers at MCAST have reportedly increased significantly over this period and this is indeed salutary and in the national interest since Malta needs more students to follow vocational education in addition to those in academic formation.

On the basis of the (limited) data in Table 1, one may foresee the following trends in UM student numbers for the years to come:

- (a) the total local student population will stabilise and possibly decline, at least for a period to rise again, somewhat, in response to the coming of university age of the offspring of immigrant settlers;
- (b) although fewer local students will be joining University for undergraduate courses (at least for a period), there will be a sustained increase in participation of students in postgraduate courses;
- (c) international students will remain a slowly growing presence, but they appear more interested in postgraduate courses than in first degrees.

In light of the above, it becomes clear that we need to give heightened attention to international students if we want the University to continue to enhance its research performance. Paying international students bolster the University finances but even non-paying European students provide human resources especially needed for postgraduate and doctoral research. And of course, the educational benefits to our local students occasioned by the company and customs of international students are without question. The UM campus is enriched as it become more internationalized and cosmopolitan.

To support further our international applicants, we have strengthened the International School for Foundation Studies. Using the new recently signed Collective Agreement, we created special posts for tutors working in this School whose mission is focussed entirely on teaching young students deriving from different (non-European) educational settings (e.g. Russia, China, Middle East) and helping them engage successfully with our undergraduate programmes later on. Among other things, the Foundation School emphasises English language teaching but also addresses other lacunae as are necessary for progress in the degree courses. Because we worked hard and against all odds, the pandemic didn't manage to seriously depress the number of our international students but we still need to continue to grow this number, currently standing at 9 % of the student population, including by easing our admission bureaucracy through a 'one-stop-shop' arrangement that will help such students get more personalised attention and a letter of acceptance in a shorter time. We have already taken steps in this direction.



Graduation and retention rates

Once admitted to the University, how do students fare in their studies? The graduation rate measures how many fresher students leave with a first degree within four years of starting their studies (in a 3 year programme). Graduation rates (for 2018-19 as an example) varied depending on the Faculty or Institute but percentages ranged from 75 to 100 % in programmes involving very small numbers of students; for courses attracting large numbers, graduation rates were (in %) 89.2 (Arts), 97 (Built Environment); 94.3 (FEMA, Laws), 98.1 (Medicine and Surgery) and these rates varied little from one year to another in the last five years.

The retention rate measures the percentage of first year undergraduate students who continue the course during the next year: this is taken as another measure of whether or not the learning and teaching environment supports the students in their work. In 2018-19, for courses with large numbers, retention rates were (in %) 72.2 (Arts), 89.9 (Built Environment), 78.3 (FEMA), 71.1 (Laws) and 86.3 (Medicine and Surgery). For science and engineering students, the retention rate was lowest, varying from 58 to 74% during a five year period although the graduation rate for the same period ranged from 81 to 97 %.

Graduation and retention rates are study success indicators and should clearly be of interest to students and their families as well as the University Council who oversees the work of the institution. In 2015, the European Commission published a report³ about graduation rates in universities of European countries and the data show values varying from 20 to 50%. For the USA, according to the National Centre for Education Statistics, the situation appears to be somewhat better in that the average graduation rate for first degrees is 62%⁴ with top scorers (80 - 90%) being universities with a stringent student acceptance rate of about 25%. In light of the foregoing, it is fair to conclude that UM students are truly committed to their studies and do find the support necessary to manage the undertaking typical of the best universities worldwide.

Students to staff ratio

Globally, this metric is taken as a measure of how well looked after students are in a university: the smaller the metric, the more engaged the tutors are supposed to be with their students and the more interactive and supportive the learning and teaching environment. During the period under review, recruitment of new resident academic staff (in terms of full-time equivalents, FTEs) increased by 3.7% while the student population declined so that the students to academic staff ratio improved from 12.0 in 2016 to 11.0 in 2020. The Times Higher Education (THE) world university rankings in terms of students-to-staff ratio shows that the first hundred universities in 2021 had ratios ranging from 0.9 to 8.0⁵; the average value of this ratio for the first 800 universities is about 16.5⁶. So, in terms of this metric, UM is doing far better than the average of these 800 institutions which comprise the top 3% of world universities. Indeed, in terms of this metric, our University ranks within the best ten in the UK, including Oxford (10.3), University College London (10.4), Cambridge (11.0), Imperial College London (11.3) and King's College London (12.0).⁷ My expectation therefore is that our students are as well looked after by their tutors as those in best-of-breed universities worldwide. Hence, student satisfaction with their learning and teaching should be excellent. But how do we know if it is?

³ http://publications.europa.eu/resource/cellar/12be15b0-0dce-11e6-ba9a-01aa75ed71a1.0001.01/DOC_1
(Source accessed on 28-2-2021)

⁴ <https://nces.ed.gov/fastfacts/display.asp?id=40> (Source accessed 28-2-2021)

⁵ <https://www.timeshighereducation.com/student/best-universities/top-universities-best-student-staff-ratio>
(Source accessed on 20-2-2021)

⁶ <https://www.timeshighereducation.com/cn/student/news/top-100-universities-best-student-staff-ratio>
(Source accessed on 20-2-2021)

⁷ <https://www.university-list.net/uk/rank/univ-8089.htm> (Source accessed on 20-2-2021).

The comparison is based on data for 2018 for both UM and UK universities.

Student feedback

It is major challenge for us at the moment to obtain reliable evidence that the quality of our teaching and academic support is indeed high and commensurate with the students-to-staff ratio. To sustain this ratio obviously requires a heavy investment in taxpayer money and human resources. The best and only monitors of the quality of our teaching and academic services are, of course, the students themselves who consume these services. Every semester, we ask students to relay this knowledge through their feedback, provided online in a standard form which we have recently simplified to encourage better participation.

This notwithstanding, participation in feedback on individual study units which we had introduced in 2008 is poor and continually deteriorating (currently the response rate stands at 9%, down from 28% in 2016 and 40% in 2008) and we definitely need to find ways to improve this performance considerably.

In 2014, we had introduced a new type of feedback where we ask students about their experience not on a set of single and separate study units at a time when they would have just finished taking them but rather of an entire degree programme at exit time. Students appear to be less reticent at this stage and give better feedback, as Table 3 shows.

Undergraduate Programmes				Postgraduate Programmes			
Academic Year	Eligible Students	Number of Responses	Percentage Response	Academic Year	Eligible Students	Number of Responses	Percentage Response
2013/14	2121	506	23.86%	2013/14	971	261	26.88%
2014/15	2340	908	38.80%	2014/15	842	325	38.60%
2015/16	2521	800	31.73%	2015/16	808	254	31.44%
2016/17	3090	996	32.23%	2016/17	993	292	29.41%
2017/18	2981	647	21.70%	2017/18	1344	647	21.95%
2018/19	2943	565	19.20%	2018/19	1410	272	19.29%
2019/20	2668	645	24.18%	2019/20	1158	347	29.97%

Table 3. Results of end of programme surveys for undergraduate and postgraduate courses.

In this questionnaire, to the question *Were you satisfied with your experience of this programme?* 75 to 80% of undergraduates completing their programme during the period 2015/16 – 2019/20 (about 600 responses) answered “agree/strongly agree” which same answer was given by 80 to 82% of postgraduate students (about 220 responses). To the question *Do you feel the course prepared you well for your future career?* 54 to 62% of the undergraduates (about 230 responses) answered “agree/strongly agree” while positive replies for postgraduates (about 220 responses) came from 67 to 72% of students (about 230 responses).

International students who have studied with us appear to have liked their experience at UM fairly to quite well. On the website Studyportals for master’s studies, UM is rated as 4 stars (5 maximum) in terms of their study and living experience⁸.

⁸ <https://www.mastersportal.com/rankings-reviews/362/university-of-malta.html> (Site accessed 25-2-2021)

Employability of UM's students

Our students do not experience difficulty in finding employment shortly after graduation; indeed in certain cases, they are already in some kind of engagement with an employer before graduation.

In 2019, according to Eurostat⁹, Malta's recent graduate employment rate was the highest in the EU, at 93.1%, a statistic towards which UM is the major contributor.

In 2015, a study was conducted by Jobsplus¹⁰ to investigate the employability of students in higher education on the basis of an "employability index" which attempts to establish whether the jobs students get after graduation match their educational attainment. Mismatches can be "horizontal", where an individual is employed in work that matches their level of education but not the field of education (qualified/sector mismatch); or "vertical" where an individual is employed in an area matching their studies but not their level of education, that is, overqualified/sector match.

The results for UM students for 2013, which were similar to those for 2012, are shown in Figure 1 (taken from the cited Jobsplus study).

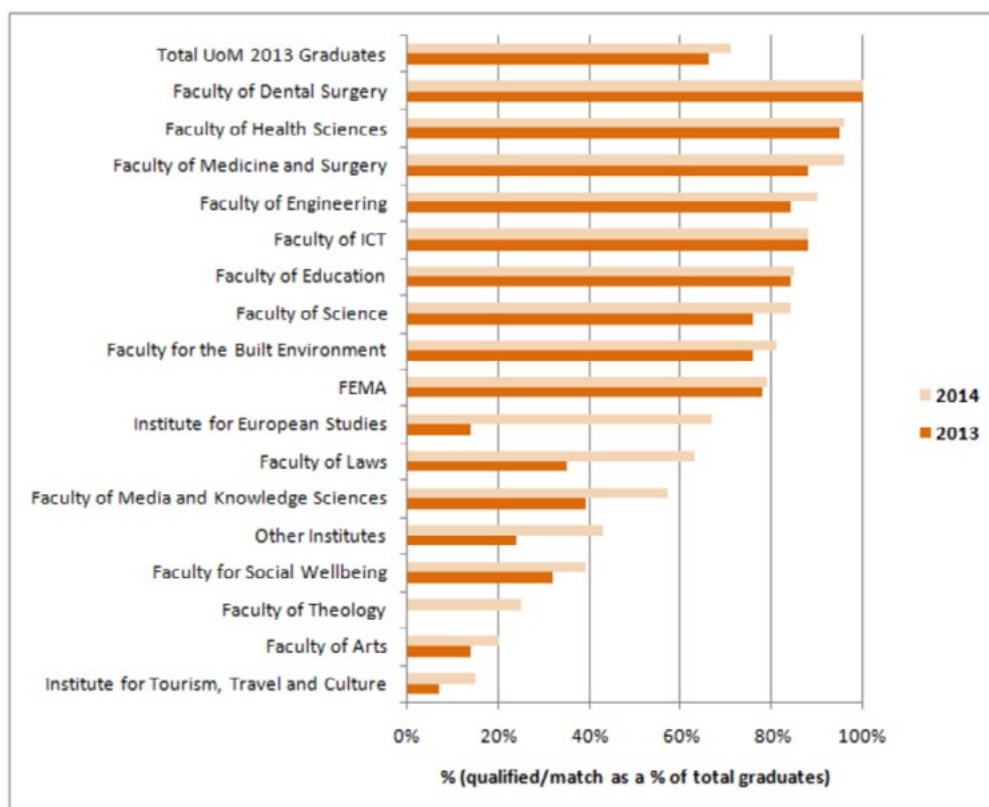


Figure 1. The fraction of UM students having a "qualified/sector match" as a percentage of total graduates in 2013.

⁹ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Employment_rates_of_recent_graduates (accessed on 5-3-2021)

¹⁰ <https://jobsplus.gov.mt/resources/publication-statistics-mt-mt-en-gb/publications/research-publications/employability-index-report> (Site accessed 25-2-2021)

Overall, about 70% of UM graduates find jobs which match their qualification within one year of their graduation and the study showed that this is actually 13% higher than for graduates with a vocational degree. Despite the claim repeated often about the superiority of vocational education for employment, the results of this study showed that UM actually provides students with education that generally fits well with the demands of the job market.

Changes in University Regulations

We introduced significant reforms to our undergraduate regulations intended to give all students a better chance to complete their studies, especially those who for one reason or another are struggling with their coursework. We introduced the concept of an **extension year** which allows students who went through a bad year resulting in several failed study-units to take the extension year during which period they would repeat only those units in which they flunked rather than all units of the failed year. We also reformed our postgraduate (including doctoral) regulations with a view to improve the outcomes for our students.

Improving communication skills

For many years, we had noticed a preoccupying downward trend in the ability of our students to communicate competently using the English language. It did not make sense to continue to ignore this problem when its effects were impacting the overall quality of our tertiary education. Moreover, one report after another by operators in the economic sectors were continuing to complain about the problem of finding employees who can communicate well. For these reasons, we introduced within the Centre for English Language Proficiency the **English Communicative Aptitude** programme designed for freshers who exhibited a weak command of English. During the period under review, this programme has already helped a total of over 9000 students improve their communication skills without imperilling in any way their standing and progression prospects in their course of study. Every year, the Centre helps an additional 1000 students with their English communication skills: that is almost 1 in 3 of every matriculated qualified student arriving from post-secondary education needs this kind of help which is unfortunately a matter of concern. I am convinced that this programme is not just helping these students cope with their university studies but will serve them in their longer term needs and for a better life.

Recognition of Prior Learning

In my vision statement for the period under review, I had mentioned the need to attract more adult learners to our campuses especially through the process of Recognition of Prior Learning (RPL). RPL aims at evaluating and giving formal credit to learning outcomes acquired by applicants either from other institutions, or their place of work, or even through experience. The system allows non-traditional learners to access customized programmes designed to make up for any identified gaps in their knowledge that could hinder them from progressing with profit through a University course. Senate has indeed approved RPL in 2017 and while several learners have already profited, I feel we can do more with RPL, going forward, especially to address the needs for upskilling and re-skilling of certain technically-qualified employees in particular industries.

Adult learners

The University has a long tradition of supporting a robust evening programme for adult learners. It is to be noted that, internationally, relatively few universities provide such a service to the community. This year we celebrated 40 years of the Centre for Labour Studies which Centre is unique in that it organises and runs only evening courses designed specifically for strengthening the University's link with working individuals and employers and promoting social dialogue and labour policy in general. A wide range of new courses for adult learners were initiated across faculties.

Table 4 shows student participation on evening programmes.

Students	2016-17	2017-18	2018-19	2019-20	2020-21
Registered	879	920	1110	627	964
Withdrawn	258	252	388	162	162

Table 4. Student statistics for the evening programmes.

Two considerations emerge: roughly about 1 in 10 students who register for courses at UM are evening students or adult learners. But, of these, a worrying fraction (5 to 8%) withdraw before year end. This suggests that these students may be finding it difficult to cope with their studies after a day of work and with family commitments left behind. It points towards the need to improve the learning conditions for these brave individuals and I think blended learning is a solution: the students will not need to come to the campus for two or more evenings every week but part of the teaching could be delivered remotely via online platforms so that these adults would be able to manage their life – (work + learning) balance even better.

We service adult learners in other ways besides that of providing and facilitating access to full diploma or degree courses.

The University organises and delivers a large number of short courses on a wide range of subjects within our **Programme for the Liberal Arts and Sciences (PLAS)**. More than one short course (or study-unit) can be acquired via this programme and they can be aggregated, at the learner's pace, so that over time, the qualifications can lead to diploma or degree awards if the learner is so inclined. The University has also used this programme to organise short training courses for organisations that require their staff to be up-skilled towards specific professional needs. In effect, at UM, we have already developed and exploited the concept which, in Europe is still rather novel and goes by the name of micro-credentials, these being mini-qualifications which demonstrate and certify knowledge, skills, and/or experience in a given subject area or competency. Internationally, **micro-credentials** are being touted as the next major disruptive force for the economy and, going forward, UM will continue to participate fully in this action and not necessarily through its PLAS programme.

Sports at the University

I am a firm believer that sports and physical education are part and parcel of the educational formation of students and deserve centre stage; I am equally of the view that sports and physical activity are not

sufficiently appreciated as forming part of a healthy lifestyle. The University can and must improve its commitment to further objectives aimed at raising sports awareness on campus for both staff and students alike.

The principal stakeholder and champion of sports on campus is the Institute for Physical Education and Sports (IPES). In 2016, this Institute helped launch **UM's Strategy for Sports and Physical Activity 2016 – 2021** whose vision was and remains that of making sports and physical activity a central component of the student experience and to encourage the entire University community to be active for life. The strategy has five pillars: participation and wellbeing; performance sport; volunteering and development of personal skills; community outreach; and development of sports facilities.

Considerable progress has been made in connection with all but one of the five pillars (*vide infra*) as the following highlights illustrate:

Participation and wellbeing

New elective units in Squash and Badminton were introduced for students in faculties where optional units are offered. Other sports/physical activities are offered through the Degree Plus programme including martial arts, circuit training, box fitness, *rowing*, pilates, *tai chi* and parasport. Football tournaments, volleyball, yoga, aerobics etc. were organised by IPES and the Malta University Sports Club, among others.

Performance sports

During the last five years, many UM students and staff represented Malta in various international tournaments. To assist students in these activities and allow them to excel in both their studies and sports commitments, we introduced the University Student Support Programme as described separately below. In 2020, we also introduced the services of a sports psychologist.

Development of personal skills

Via the Sports Leadership Programme sports students are trained in skills intended to enhance their personal and professional development to further increase their employability.

Community outreach

Sports students hold various events in the community, including those in collaboration with local councils, day care centres and other venues. IPES uses student placements to give support to many sport organisations including the Malta Olympic Committee.

Development of facilities

Unfortunately not much headway has been made in our plan for the construction of the Sports and Performing Arts Centre to house IPES and the School of Performing Arts together with the much needed upgrade of the football pitch, athletic running track and spectator stand, which project is still languishing as it waits for a planning permit. Our application was submitted in 2018 and approved by the Planning Authority (PA) in November 2019 with the condition that work on the football pitch and athletics track cannot commence before we have a PA permit for an underground car park which the PA itself insisted we include in the project. Plans for the car park were promptly submitted as an addition to the application in 2018, but the University was requested to submit a separate application, which it did in September 2019. Since that date, UM was repeatedly (and sequentially) asked to submit studies and reports regarding various environmental impacts of the car park facility and the latest of these reports is currently being generated. Meanwhile this key project, now also a Government budgetary measure, is at a standstill.



I would like to think that the next Rector will be able to push this project towards fruition because sports at the University deserves better. A major attractant for students (especially international) is a visible and first class sports amenity and the current situation is impinging negatively on our ability to improve student enrolment.

Supporting student-athletes: It is noteworthy to report that Senate had agreed with my recommendation to allow UM student-athletes to attend to sporting events abroad even when these coincided with assessment sessions: these students are now being examined during special sessions held at a later date. We also agreed to appoint mentors to sporting students who would assist them negotiate issues related to the academic calendar with their home faculty so that the students' training needs would also be catered for. These developments have improved the quality of the total university experience for these individuals and allowed them to preserve their full commitment to sports. We have an obligation to give full and meaningful support to our athletes and sports men and women so that physical education becomes truly part of the holistic formation of these students. Malta needs all of its best sporting talent to remain on board and UM must do its part towards the national effort.

Students in University governance:

I am a firm believer that students comprise an essential part of the body of a University and are not just external clients serviced by it. It then becomes essential that students participate as fully as possible in the governance of the institution. For this reason, we have placed students on all decision-taking boards (except examination boards) but including, for the first time, the Admissions Board. I sincerely hope that the student representation on Council will become stronger through appropriate legislative changes. Meanwhile, we have introduced a **system of appeals** through which administrative or disciplinary decisions taken against students can be appealed.

Malta University Debating Union:

Since we truly value the opinions and views of our students and want to promote free and unfettered speech on campus tolerant of opposing beliefs, we helped in the setting up of the Malta University Debating Union to promote and encourage the art of debating including through training for that purpose.

Health and Wellness Centre

The quality of the student experience on campus can be seriously damaged and the learning process vitiated if students happen to pass through some personal difficulty or other situation which overwhelms and distracts them away from their studies. Students in difficulty risk mental distress and several such cases were coming to our attention. We needed a system to cater more effectively and expeditiously to these persons and for this purpose set up a new and much better resourced Health and Wellness Centre which also supports staff with their own problems. We created systems and protocols to help our staff deal with personal crises that demand immediate action to avert outcomes that could conduce to suicide ideation or worse. Besides mental health and counselling services, the Centre now also provides services from psychiatrists and experts in sexual health, drug abuse, tobacco cessation and nutrition. The Centre operates from the same building and in close proximity to the **Centre for Traditional Chinese Medicine (TCM)** which we operate in collaboration with the Shanghai University of TCM both for teaching purposes and as a clinic offering TCM services to staff, students and clients from outside the University.

Office for Professional Academic Development (OPAD)

We took positive steps to ensure that the quality of the teaching provision remains high and continues to improve. Teaching pupils in primary or secondary schools in Malta requires a professional qualification which, ironically, the University provides through its Faculty of Education but UM's own lecturers are not required to acquire any such formal credentials. Although for a period we had been providing a limited programme of instruction delivered by contracted tutors from abroad, this service needed to be upgraded and, more importantly, the training needed to be internalised and made to respond to our own specific context. Very early on, we established the OPAD and, through this office, we use onboard human resources (experienced UM lecturers) to deliver a robust training programme to their colleagues. Lecturers cannot be promoted to Senior Lecturers until they graduate from this programme. Although the training is obligatory, participants report very positively on their experience which, besides its training and pedagogic value, causes academics from different departments to mix socially and thus improve collegiality on campus.

OPAD also organises training courses to help lecturers manage and better exploit the University's ample digital educational resources. The training helps teaching staff to create and deliver coursework online and to do so effectively and with quality.



4.2 Lessons in learning and teaching from the COVID-19 pandemic

During the pandemic, thanks to our digital resources and the enthusiasm and diligence of our technical and several of our teaching staff who served as mentors, the academic community rallied together to learn how to use Internet-based platforms to teach remotely while students and vulnerable staff remained in their homes. It was a terrible situation which saw students debarred from campus social life, the library, the laboratories, workshops etc. The situation had improved for a while but is yet far from normal. However, we have managed to keep all courses running except for a very brief interlude of about one week during which time we were tooling up and transitioning from in-person to remote teaching.

In academic year 2020/21, we managed to re-introduce a modest amount of in-person classes, reopened the library and were delivering practical and clinical sessions and conducting laboratory-based and other research having upgraded the physical infrastructure where necessary and introduced and enforced those safety precautions needed to protect from COVID-19. To remain in contact with our international students who were caught up in their country of origin and unable to travel back to Malta, we are currently resorting to wholesale remote teaching of certain programmes, especially those at master's level.

The COVID-19 experience, which could have easily caused our teaching services to degenerate into a debacle, has in fact been successfully managed and will be exploited in order to allow, going forward, our students to have a better learning experience from blended learning and flipped-class teaching that will likely become mainstream provisions in higher education in future.

The forced transition into teaching remotely using digital means may also allow us to experiment fruitfully with the creation of short Massive Open Online Courses (MOOCs) which we haven't yet managed to do despite this being part of my wishful thinking for the first term. MOOCs can be a powerful tool for extending university education towards various publics but especially graduate employees.



4.3 Research at UM

Research is a core mission of a university which UM has succeeded to consolidate significantly during the past five years. In 2016 we set up the **Research Support Services Directorate (RSSD)** which, together with the Project Support Office, has indeed been instrumental in helping our academics compete for, winning and managing the disbursement of EU funds for research. The directorate also helps in other ways, e.g. in the upkeep of physical assets (labs, instrumentation and equipment) and the management of laboratory wastes.

During 2018-2019, UM absorbed €6.6 million on research of which €5.1 million comprised EU money and €300,000 came from philanthropy and corporate support via our **Research, Innovation and Development Trust (RIDT)**. We can continue to expand UM's research agenda given more money and we know this to be true based on the requests for funding which our Research Fund Committee receives annually from academics. This Fund comes from the University's own recurrent expenditure which is far from adequate to satisfy the existing appetite for research. One has to bear in mind that Malta as a European country underperforms seriously in terms of its national research expenditure in comparison with its Gross Domestic Product as an independent recent study has shown¹¹.

We have successfully petitioned Government to provide dedicated research funding to the UM in addition to the normal annual subvention. As from this year, €1.2 million were made available and we have used these to fund a number of high quality research projects which were selected by a competitive process.

We are committed to continue to identify and fund research clusters of excellence and, this year, five clusters shall be set up.

In addition to funds, another aspect needs to be kept in mind if we want to bolster research outcomes at UM, namely, the professional development and wellbeing of our researchers, especially, those working on their PhD's. For this purpose we have launched the Doctoral School which was a key promise in my vision statement of 2016.

Doctoral School

Especially in the various fields of science and technology, academics rely seriously on their doctoral students to push forward and promote their research agenda. The publication record and profile of a university is thus significantly augmented by production from these students and their presence on campus invigorates and potentiates the research outcomes. Indeed, PhD students should be regarded and treated as a special and distinct category, who, differently from bachelor and master students, do not attend university to mainly learn about established knowledge and acquire important skills but to actually create new knowledge and insights. We set up the Doctoral School to cater for the needs of this community especially in relation to their professional development and to ensure that these postgraduates have those skills and competences needed for the employment market. Such needs are not normally catered for by their supervisory team who tends to concentrate on the challenges of the domain specialism and the research results.

The School serves to bring together early-stage researchers and experienced supervisors to share best practices and disseminate and discuss the results of doctoral research. It also runs numerous workshops pertaining mostly but not exclusively to transversal skills, intended to help doctoral candidates develop

¹¹ Directorate-General for research and Innovation, Peer Review – the Maltese Research and Innovation System (Brussels: European Commission, 2019.)

professionally and become more employable. These workshops address a diversity of themes from, for example, the art of debating, how to design a good presentation to methods of data analysis, machine learning and how to manage the practicalities of EU funded projects.

There is very clear evidence which suggests that the University's research and innovation outcomes are improving. This is discussed in the following sections.

UM in global university rankings

A university's place in the global rankings ostensibly takes into account and valorises the quality of all the various different scholarships as evidenced from the teaching and student support, research outcomes, internationalization efforts, outreach, collaboration with industry and so on. In fact, however, it is also very clear from the percentage weightings accorded to the different performances in these areas that the overall result is dominated by the research outcomes (number of publications, impact factors, citations, etc). So that a university that is not generating significant research cannot possibly escalate the rankings.

In 2016, the University was ranked by *Webometrics Ranking of World Universities* which placed it number 1243 globally. We have since climbed to position 839 (2021) which means that **UM is now in the top 3% of the world's universities** (estimated at 30,000) which represents a significant improvement indeed. In Europe, UM places at the 359th place out of 5773 universities.

We are now also being ranked by other prestigious ranking systems, e.g. the *Times Higher Education (THE) Rankings of World Universities* on which UM appears in the band 601 – 800. The THE also provides another international rankings of those thousands of universities found in countries classified by the London Stock Exchange's FTSE Group as "*advanced emerging, secondary emerging or frontier economies*" such as China, Russia, Romania, Poland, Hungary and other Eastern European states, Mexico, India, Peru, Brazil, Malaysia, South Africa, Egypt, Saudi Arabia etc. In these rankings, the same metrics are used as for the World University Rankings, that is, quality of teaching, research, knowledge transfer and international outlook but with different weightings to reflect the development priorities of universities in these economies. In 2021, University of Malta was placed in 177th place.



PhD statistics

Another indicator of the research activity of a university is the number of enrolled doctoral students. In my vision for the first term, I had opined that UM could double its doctoral student population within 5 years: that, sadly, has not happened although there was a modest increase in doctoral students (*vide infra*). Without proper funding of projects and a stipend system to support the researcher so they can pay for their living, a full-time commitment to the PhD is not a realistic proposition. In fact, currently, 61% of our doctoral students are conducting research on a part-time basis which is not ideal for demanding intellectual work which needs intense focusing and minimal distractions.

The University is dedicating a small part of its recurrent annual expenditure, about €0.5 million, on the funding of research of its academics and, as mentioned earlier, this sum is supplemented by a special Government subvention of €1.2 million per annum. The lion's share of research funds derives from competitive EU money thanks to which, the University provides temporary employment to researchers on funded projects. PhD-holders employed as research support officers comprise UM's growing post-doctoral community of researchers.

Employment related to activity in **EU funded project work grew by 100%** between 2016 and 2021 and currently we have a total of 220 researchers several of whom are international staff.

I look forward to the day when all PhD students are supported by a stipend and enjoying privileges typical of employees so that they would be able to dedicate their full time commitment to their studies. Meanwhile and despite that this has not yet materialised, the PhD student community on campus has increased by about 20% from its size in 2016.

Figure 2 plots the number of doctoral degrees awarded in 5 year aggregates during the last 20 years with the trend line extrapolated to the period 2020 – 2025: the graph suggests that, assuming the situation with regards to doctoral education doesn't improve beyond the current status, then 284 PhD degrees are likely to be awarded during the next 5 year period, which is equivalent to about 57 per annum. Clearly, a situation which sees all doctoral candidates receiving a stipend should augment these numbers much further.

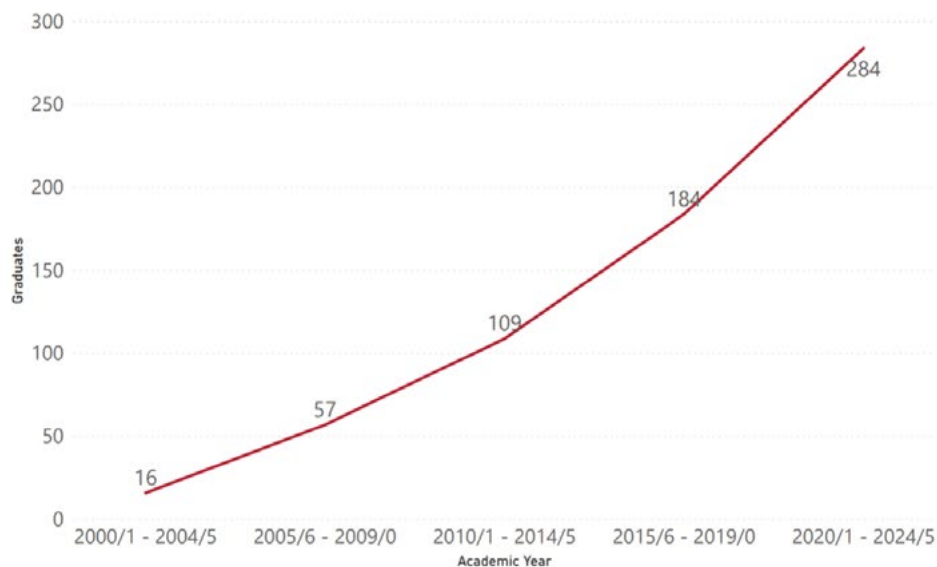


Figure 2. PhD degrees awarded in the period 2000 – 2020 and predicted for period 2020 - 2025.

In 2018, the number of PhD graduates per 1000 population aged 25 to 34 in the EU was about 1.45 for males and 1.34 for females; for Malta, the values respectively were 0.32 and 0.34¹². Although year on year, this statistic has improved, we are clearly still lagging far behind.

Industrial PhDs

Another area where we need to make progress is in the promotion of so-called “Industrial PhDs” where work towards a doctoral thesis is conducted through a collaboration between the University, a company and a funding entity (e.g. Malta Enterprise, MCST) on a project of strategic interest to the company. The supervisory team will include a person designated by the company and the student will be supported financially by both the company and the government agency according to a co-sponsorship agreement. The student will spend time at both the company and the University using facilities as appropriate for the work required and participating in training programmes for specific competences related to the project. Both the student and the company will benefit from these partnerships: the student will have a work contract and a salary of at least 3 years and be tutored by both UM and company personnel thereby acquiring both academic and industrial experience; the company will establish access to University experts in areas of interest and also to scientific instrumentation and technologies that can be applied to address its internal challenges. Moreover, in agreement with the tax authorities, such knowledge transfer partnerships could be given benefits related to their corporate taxes and social security contribution.

Of the 450 persons pursuing doctoral studies today, 17% are international students, which statistic is up from about 10% during the previous 20 years: this suggests that the University of Malta is being perceived as the place where interesting research takes place, which recognition serves to continue to attract foreign intellectual talent, a valuable and much appreciated benefit. In other words, we have managed to develop the University from a provincial, albeit hugely important educational institution, to an international place of higher learning where students come to engage with problems through globally-significant research.

Ethical and socially-responsible research practices

The University is fostering a research culture that places ethics and social responsibility at the centre of this scholarship. UM embraces and promotes the concept of Responsible Research and Innovation (RRI) which would see scientific research and innovation practiced with more societal participation and for societal wellbeing. In 2017, the University adopted a Research Code of Practice¹³ adapted from the European Commission’s “Golden Rules to Ethical Research Conduct” (2013); we reformed significantly the processes of the University Research Ethics Committee and its relationship to the Faculties Ethics Committees thereby streamlining and simplifying the practices involved.

In the same year, we introduced the policy of **Open Access**¹⁴ whereby our researchers are now expected to place their research publications on our Library’s digital Open Access Repository (OAR) in a manner that facilitates dissemination for use by other workers and interested publics. The OAR also showcases better and helps advertise research and innovation at our University. In this initiative, UM is following closely an

¹² <https://rio.jrc.ec.europa.eu/stats/new-doctoral-graduates-thousand-population-aged-25-34> (Source accessed: 28-2-2021)

¹³ https://www.um.edu.mt/_data/assets/pdf_file/0011/338942/ResearchCodeofPractice.pdf (Source accessed: 20-2-2021)

¹⁴ https://www.um.edu.mt/_data/assets/pdf_file/0005/334454/OpenAccessPolicy.pdf (Source accessed: 20-2-2021)

international movement that will lead eventually towards adoption of a new way of communicating the outcomes of scholarly work known as **Open Science** that is possible with IT and desirable in that it makes for a more reliable, transparent and accountable exchange of data and information.

In 2019 we founded the **Centre for Engaged Research** intended to support researchers in embedding RRI in their work so that the research is made more accessible and inclusive. These actions evidence the importance which the University gives not only to its efforts to raise and commit more finances to research and innovation but also to the manner in which it wants its staff and students to perform research, given that one needs to minimize the risks of mismanagement of this potentially powerful and consequential pursuit.

Employing researchers

We are working actively to adopt the principles of the European Commission's **Human Resources Strategy for Researchers (HRS4R)** that promotes fair and transparent recruitment and appraisal procedures for researchers. Implementation of the principles enshrined in the Charter and Code of HRS4R renders institutions more attractive to workers looking for a host for their research project or a new employer, a matter of critical importance to UM, given the dearth of indigenous human resources in this area. We are anticipating that we can adhere to the Charter later on this year and thereby join the 579 research organisations worldwide that have received the "HR Excellence in Research" award which recognises those institutions that have made progress in aligning their human resources policies with the principles of the Charter and Code.

4.4 Knowledge transfer and entrepreneurship

The business of a university today goes beyond teaching, researching and doing outreach. University activity in the 21st century also reaches out into a manifold of other actions which include providing expert consulting services for government agencies and private companies; social enterprise, where the main objective is not making a financial profit but achieving or helping the State or some other relevant stakeholder achieve social goals; as well as investing effort and funds into activities whereby University intellectual property (IP) derived from its research is exploited in commercial ventures intended to help the institution become more independent of state funding. Monies so generated are channeled back into resources for additional research and innovation and the betterment of our education service.

Certain services are delivered by the University's commercial arm, **Malta University Holdings Company (MUHC)**, including, for example the Playschool (to enable our own staff and others balance better their work and family commitments), a very successful Language School (which teaches English as a foreign language to visiting students), the Kappara Hotel and technical expert consulting. For many years, MUHC has run a student accommodation facility at Lija mainly for our international students although this part of its business will shortly be wound down as the Campus Hub Residence and Community complex being built by Vassallo Group comes on stream in October 2021.

The Corporate Research and Knowledge Transfer Directorate helps academics and graduate students convert promising research results and IP into commercial projects either by spinning out an early stage novel outcome from the laboratory into a start-up company or to commercialize a mature development with an industrial partner. Since 2016, the University has filed a total of 39 patents and registered 14 designs in the areas of engineering (22 patents; 12 designs), biotechnology (9 patents), the natural sciences (5 patents), and one patent each in civil engineering, ICT and medicine.

During the period under review, the 9-person team at the Knowledge Transfer directorate worked on a total of 114 projects of which 15 are being very actively pushed towards commercialisation while in another 23 projects, the researchers are advancing the technology further. Two projects have developed into spin-outs. Some examples to illustrate the work done in knowledge transfer follow: (a) Re-Stone, a technology to construct building materials such as paving, cladding, blocks or breeze-block from recycled limestone and pulverised construction waste; (b) MaltaHIP, an innovative hip prosthesis which has been shown to exhibit excellent wear results; (c) TOETVA, a surgical tool that allows minimally invasive surgery of the thyroid gland; (d) Touchflight, an innovation that improves interaction between pilots and avionic systems based on touch and speech technologies; (e) MicroCHP, a combined heat and power system that uses waste heat produced by an electrical generator for heating water or a living space.

Public bodies and the private sector approach the University for collaboration agreements and in 2020 alone, there resulted 38 of these, ten of which with the private sector. Thus from a UM-CityFalcon collaboration, UM received €100k to participate in a project involving data-science-based Natural Language Processing; with the Malta Digital Innovation Authority, an agreement was signed for the development of text and speech processing tools and an AI learning programme (€162k). This Authority also set up a scholarship fund of €100k.

Funding programmes have been set up with the help of the Ministry for the Economy and Industry to sustain proof-of-concept projects for researchers through the TAKEOFF Seed Fund Award (TOSFA) amounting to €500k since 2016. In 2017, the Maritime Seed Award (MarSA) was established with the help of Malta Marittima and has since disbursed a total of €400k to 14 proof-of-concept projects and 13 seed fund awards related to the maritime sector.

In April 2019, UM registered Malta University Investments Portfolio Ltd (MUIP), a limited liability company which is wholly owned by the University set up to manage an investment fund to finance a portfolio of start-up companies emerging from the commercialization of University IP. The first investment by MUIP was in FLASC B.V., a spin-out company based on innovative energy storage technology from the laboratory of Prof. Ing. Tonio Sant and his team in the Department of Mechanical Engineering. This technology was awarded the “Best Innovation Award” at Offshore Energy 2020, an award which recognizes the best innovation across the entire offshore energy market. We are extremely proud of this invention and I am happy to report that FLASC has joined with Subsea 7 S.A. (a leading subsea oil and gas servicing company) to apply for an Innovation Fund to build a full-scale energy storage system based on FLASC’s innovation and using Subsea 7 pipeline bundles as pressure vessels.

MUIP has also recently invested in another spin-out (De Novo Cell Ltd) which has originated from a very important discovery in stem cell research made in the laboratory of Prof Pierre Schembri Wismayer (Department of Anatomy).



4.5 Internationalisation

The presence of international students at the University remains important and in 2021 and despite the pandemic one in every eleven full-time students on campus have come from overseas destinations. Within this cohort, the fraction of international students following postgraduate degrees has actually increased to about 11% while those following undergraduate courses has declined slightly to about 8%. These figures do not include exchange students who number about 350. Erasmus exchanges are normally kept in balance in the sense that the number of outgoing local students to partner Universities is about equal to that of incoming students. Before Brexit, UK universities used to be the preferred destination of about one third of our students on Erasmus. Now that the UK has opted out of this student exchange programme, we need to explore ways and means that could allow some degree of two-way student flows between UM and British universities possibly via bilateral agreements on a tuition fee waiver basis. That being said, students will almost certainly have to consider alternative, possibly less well known, venues in Europe and this will have its own salutary effects on their formation and education: spending time living and learning in a European city with fellow students from the area will enhance our students' appreciation of the rich multifaceted heritage of the continent that is our common home.

A very important achievement in our internationalization effort is our successful participation in a project, funded by the European Commission, involving the creation of a European University Alliance which was dubbed as **SEA-EU – University of the Sea**. This was an important achievement because, in the first call, only 17 alliances were funded in total from hundreds of applicant European universities. Our partners in this “University of the Sea” are Cádiz (lead partner), Western Brittany, Gdansk, Kiel and Split. SEA-EU's driving force is expertise in marine and maritime disciplines and the project will promote teaching, research and community outreach in these and other areas. The project runs over three years which started in November 2019 although all six partners agree to strive to maintain the alliance objectives moving on beyond this period to exploit its potential to the full. We are acting as lead partner of the dissemination and sustainability work package. As main objectives, the alliance strives to increase mutual knowledge and integration between the partner universities thereby supporting European values based on student and staff engagement and creativity. We already have scores of our academics and administrators engaged and working together with our partners in the Alliance on themes as identified in the project proposal¹⁵. Post-pandemic, we look forward to enhanced in-person student and staff exchanges between the partners, the creation and deployment of joint and multiple degrees and other joint initiatives.

4.6 Commitment to sustainability

As a University, we will continue to advocate in favour of sustainability as a way of life and the promotion of actions that counter the effects of global warming and the generation of waste. In 2018, we set up the **Committee for Sustainability at UM (C-SUM)** which is a group headed by Prof. Joseph Micallef dedicated to sustainability actions on campus. A C-SUM website was developed and is now public.

An important measure promoted by C-SUM is the ongoing capillary control of air conditioning systems which last year was expanded to include the Lecture Centre and Students House. Next year, older buildings will be retrofitted with smart energy management systems to bring about an estimated annual reduction of 35 ton

¹⁵ <https://ec.europa.eu/education/sites/default/files/document-library-docs/european-universities-factsheet-sea-eu.pdf>
(Source accessed 28-2-2021)

carbon dioxide. Drinking water fountains have been doubled to twelve now encompassing a much wider spread on campus. Waste separation at source is being practiced since 2020, including at Junior College and non-plastic alternatives for food and drink at activities organised by UM Conferences and Events Unit came into force in 2019. In order to reduce paper usage we introduced the software WISEFLOW which allows students to take examinations online: this software was critical for another reason, namely that of managing the problems of remote assessment occasioned by the pandemic. We are committed to apply sustainability assessment tools in new construction and the upgrading of buildings and infrastructure and the Gozo campus was the first candidate to benefit from this commitment. We are also committed to change the (on lease) University car fleet to hybrid cars. New and revised programmes of studies will include consideration of Sustainable Development Goals wherever practicable.

4.7 Service to Malta's school education system – MATSEC Certification

The University of Malta engages with the Maltese school education system through the excellent work performed by its Faculty of Education that creates and delivers the theoretical learning and practical in-school training required in preparing the teachers and other educators of tomorrow through its professional degrees and by conducting research in the various aspects of pedagogy that benefits educators, young pupils and adult learners of today. The Faculty also supports the Ministry of Education in several ways, *inter alia*, by participating in the origination and formulation of education policy and the provision of services aimed at the continuing professional development of teachers.

A key service which UM renders to national schooling is the system of examinations overseen by the Matriculation and Secondary Education Certificate Examination Board, commonly known as MATSEC Board. The **MATSEC Board** is a University Senate Committee on which sit multiple education stakeholders administered by a formidable team at the **MATSEC Support Unit**. Established exactly 30 years ago, MATSEC¹⁶ involves numerous academics of the University and other educators from schools and colleges and is the pivot institution which ensures that Malta's schools are provided with an independent, robust and reliable assessment and certification system that responds to the needs of the national curriculum at its different levels. MATSEC sets and marks examinations at Secondary Education Certificate (SEC) corresponding to Malta Qualification Framework (MQF) Level 3 and the higher Matriculation Certificate examinations at Level 4. These school examinations have become established and trusted benchmarks in the Maltese education system and are internationally recognised. MATSEC also includes a range of vocational subjects at Level 3 that require assessment of a sizeable coursework component as necessary for these subjects.

In 2016, I had raised my concern that we lose too many students along the way who do not complete their educational journey and join the world of work without any certification of skills and competences. Working closely with the Education Authorities, in 2018 MATSEC Board helped to set up the Secondary Education Applied Certificate (SEAC) within its system. SEAC should help provide credentials (including at Level 2) to young men and women in Malta who would previously have left school without securing any recognised qualifications with concomitant negative effects this failing brings on their future.

¹⁵ In 1991, the MATSEC Board took over the function of the previous University Matriculation Board which also used to set examinations at Ordinary and Advanced level in a limited number of subjects. Records of these examinations reach back to the late 19th century.

In the not so distant past, there was a serious attempt to extricate the school examination system away from the purview of the University of Malta. A Parliamentary Act had already been penned in this sense but never made it to Parliament. I regard myself as a “veteran” of MATSEC having been personally involved in its work since its inception, first as an examiner and chairman of a number of subjects, then also as Pro-Rector and more recently as Rector with ultimate academic responsibility for the Board. I suspect that not many Rectors (*if any at all*) worldwide carry the same grave responsibility which the work of a Board like MATSEC entails and deserves. In a normal year, the myriad problems which can and do afflict the organisation of hundreds of different examinations involving thousands of students are indeed quite challenging. Add to that the additional strains and troubles which the pandemic inflicted on the system last year and may again this year.

A future Rector of UM might well be tempted to seek relief from this considerable load and move to dissolve the bond with the school examination system. I have always been and remain of the firm belief that, given the local educational ecosystem with its strengths and weaknesses, such a step would be a terrible mistake for both our school system, and therefore our treasured students and eventually for the welfare of the University and the country itself.



4.8 Outreach

I had committed to promoting the outreach mission of UM and to make the University more visible and active in our community.

Given that the University of Malta website is such an important interface with the public, we have revamped and modernised the um.edu.mt portal and its many pages, an exercise that required a huge and concerted effort spearheaded by the Marketing, Communications and Alumni Directorate. A **Brand Manual** was produced and this was a first for UM: using it as guidance, we undertook a rebranding exercise including the crest of the University and signage on the various campuses which process is still ongoing given the cost and the size and spread of facilities requiring attention.

The University has an important presence on the **social media**, especially Facebook, and we are trying to organise and streamline this presence in a better way to maximise its impact.

We upgraded significantly the physical facilities at **Campus FM** so that now the station has two studios equipped with digital recording and editing facilities. The radio station run by Malta University Holdings Company is now under new management and the schedule of programmes has been overhauled to improve the appeal to student and general audiences and to include more university students in radio productions. Listenership of Campus FM has increased following these measures.

We have introduced the practice of streaming our most important event of the year, namely, the Graduation Ceremonies as a service to the families of graduating students whose members cannot all be accommodated in the University auditorium or the Jesuit's Church at the Valletta Campus.

The Gozo Centre

We continue to enhance the activities which the University holds in Gozo, cognizant of the fact that the region is, to a degree, isolated somewhat from the main island. We are currently physically developing the Gozo Centre to improve further its resources: it is my intention to exploit this Centre better not only as a facility from which to reach Gozitan students, especially adult learners on day or evening programmes, but also as a teaching location or Conference venue for students or researchers, including the visiting international university community. The Centre also hosts Geoscience staff within the Faculty of Science who service the air monitoring station at Tal-Ġordan. Now, the University has established an Astronomical Observatory on Gozo which is maintained by staff from the Institute for Space Science and Astronomy.

We are currently converting a building leased from the Gozo church into a Dental Clinic which will be used by our Dental Faculty to extend its clinical training practice by providing free services to school children, persons with special needs and senior citizens on the sister island. This will be an important action that will not only increase the visibility of the UM on Gozo but, more critically, provide sorely needed outreach dental service to vulnerable members of the community on the island, similarly to that given by the Faculty to patients at Mater Dei Hospital, the Saint Vincent de Paul Long Term Care facility at Luqa and places around both Malta and Gozo via use of the Dental Mobile Clinic.

Collaboration with other organisations

We have signed scores of memoranda of understanding and entered into numerous agreements with Malta Government departments, Agencies, Foundations and private companies through which our academics

were able to give service to address important institutional or societal needs. Following are a few examples of entities with whom we collaborate in order to illustrate the extent of outreach activities of this type: the Armed Forces of Malta, the Police Force, the Civil Protection Department, the Malta Trust Foundation, the National Bandclub Association, Foundation for Social Welfare Services, the Speaker of the House of Representatives; the Ministry for Gozo etc.

Together with MCAST, we partnered with the Public Service to help set up the Institute for the Public Service (IPS) and to support the work of this institute we created the Adjunct Office for the IPS headed by a Rector's Delegate.

The teaching of adult learners via the delivery of full evening programmes as well as small courses (leading to micro-credentials) is an eminent action of outreach which serves to extend university scholarship more widely in the community. Another aspect of this mission is that directed at senior citizens. Together with the Ministry responsible for active aging, we continue to give support to the work carried out by our **University of the Third Age** (U3A) which delivers service to senior citizens above the age of 60 irrespective of educational background or qualifications. We have increased the number of centres of the U3A to seven, one of which in Gozo, for the better convenience of various communities on the Islands.

The COVID-19 pandemic brought to a sharp focus our commitment towards helping the community in other ways especially in times of need. The University gave up the use of half a building (Gateway) so that the neighbouring Mater Dei Hospital was able to use it in case of need. As I write, this building is being employed as a node for the rolling out of the vaccination programme. Our academic staff and students (mainly from the Faculties of Dentistry and Health Science) have volunteered to help hospital staff reconstitute the medication and administer the vaccines. Other UM staff are helping in the logistics of this operation. As I write, thousands of people have already benefitted from this University outreach. In addition, others from our staff and students have assisted hospital staff in screening tests, contact tracing, the preparation of sanitiser solutions from the raw materials and in other important and critical ways.

I am extremely proud the University of Malta has shown and continues to exhibit such solidarity and camaraderie with frontliners and other health department personnel in this time of pandemic and this may well be our finest example of outreach for a long time to come.

4.9 Physical development of the University Campuses

Work by contractors Vassallo Builders on the residence and community complex, now called the Campus Hub, a public-private partnership project is nearing completion and I am informed that students are expected to be accommodated within this Complex in October 2021. MUHC will move its operations, including the Malta University Language School, into one of the blocks of this Complex. The University will also lease space in this block to house additional lecture rooms needed to replace offsite facilities that are currently being used as temporary (and rather inadequate) premises.

The Ministry of Health is in discussions with Vassallo Builders over the construction of a **new Medical Sciences Building** that will house the Faculties of Medicine and Surgery, Dentistry and Health Sciences in a more spacious structure located between the hospital and the University. The building will be physically



connected to the Hospital and will allow the spaces currently in use by our medical and dental faculties and that of health sciences to be dedicated to additional medical services and wards which the hospital needs direly. Construction of this building is expected to commence shortly.

Meanwhile, construction of the Transdisciplinary Research and Knowledge Engineering (TRAKE) Building project, which started in 2018, is at an advanced stage while the Maths and Physics Building extension is now completed. Construction of the Materials Engineering Lab is now finished and furnishings and equipment are currently being installed so that the building will soon be ready for use. Extensive finishing and services works were also carried out and completed in new premises procured to house the Institute for Digital Gaming.

Unfortunately, due to a series of events over which we had little to no control, work on the massively important and large Sustainable Living Complex (SLC), intended to house the Faculties of the Built Environment and Education and a number of institutes and other entities has not progressed as planned although the excavation work is now complete and construction is just commencing.

Both TRAKE and SLC buildings entail an expense running into several tens of millions of Euro and including a sizeable fraction of European ERDF funds. In order to follow closely and maintain oversight of the progress and vicissitudes that characterise the evolution and materialization of such projects, we have set up the **Steering Committee for Major Infrastructural Projects** which I co-chair together with Pro-Rector Saviour Zammit. This Committee meets frequently and regularly and partly because of this body but mainly thanks to the assiduous work of our dedicated project leaders and procurement and financial personnel, we have managed to spend on time most all funds committed to these major projects despite all the challenges.

Despite our best efforts, however and as explained earlier, the Sports and Performative Arts Complex is still waiting for a permit to build three years from submission of application.

In order to meet the ever increasing need to house the over 2000 employees of the University, a building with a 60-car underground parking was purchased located just outside campus in Mons. C. Zammit St., Msida. Once properly converted and extended upwards by an additional floor, this investment will provide office space and parking facilities for administrative staff and relieve the University of annual rental payments associated with leased offices located in the vicinity of the campus.

A memorial monument and small garden was built next to the University Chapel to commemorate persons who had donated their bodies for medical research. It is notable that UM is among very few universities in Europe that keep and employ human cadavers for teaching and research purposes. The Anatomy Dissection Laboratories were extensively upgraded as were other sites, e.g., the Melitensia area of the Library and the building housing the Mediterranean Academy for Diplomatic Studies.

At the Valletta Campus, restoration works on the internal courtyard and facades were carried out, the Black Box Theatre was totally refurbished as was the Aula Magna and most of the *piano nobile* on the first floor. The Valletta Campus continues to be an important resource for the University. Every year, thanks to the work of the Events and Conferences Unit, it hosts numerous conferences and events ranging from public talks and debates to theatre productions, book launches and many official ceremonies.

4.10 Lands acquired from Government by the University

On the 29th April 2020, I signed a memorandum of understanding with the Chief Executive of the Lands Authority in the presence of Government ministers through which it was agreed that the Authority will pass the title of 60,000 square metres of land to the University. As a result of this decision, UM will have title over lands it already administers in Valletta (our ancestral original campus), Xewkija (the Gozo Campus), Msida (the Junior College campus and separate buildings within its precincts) and Marsaxlokk (the site of the Institute for Sustainable Energy plus a swathe of land adjacent to the Institute). This historic event reverses past happenings when the University lost its properties to Government, e.g. in the 1970s when it ceded the Evans Laboratories in Valletta and more recently, when it lost a vast area of its land in Msida upon which Mater Dei Hospital was partly built.

The land is worth millions of Euro and ownership of the title (on the basis of a perpetual emphyteusis) will increase significantly the University's capital assets and assert its institutional autonomy and sustainability.

4.11 The University's artworks

Mindful of the considerable collections of art works acquired by the University over time during its long history, as well as the need to protect, restore and conserve the architectural jewel which the seventeenth century building of our seat in Valletta represents, I had appointed Prof. Keith Sciberras as my Delegate for the Curation of our Art Works. The facades and courtyard of the Valletta campus have been restored, the Aula Magna revamped and the *Ġibsoteka* designed, conceptualized and installed, amongst other regeneration works. The University's built fabric also includes architecturally important buildings at the main Msida campus, including some of the foremost examples of Modernism in Malta.

In line with other historical universities worldwide, we aim to establish a **University Gallery of Art** with resources dedicated to temporary exhibitions, including by students, for the benefit of the campus community and the public. We shall pursue the ongoing documentation of our collection of artworks together with furthering curatorial care for the conservation, restoration, display and movement of the artworks and one hopes this Gallery will attract further donations adding on to what it has recently secured. The works should become readily accessible resources, also through digital dissemination, for the pursuit of research, education and training both locally and internationally. Our intention eventually is to share our artwork data and resources on the Worldwide Database of University Museums and Collections.

4.12 The Junior College

The Junior College (JC) accepts students from secondary schools and offers a teaching programme intended to prepare them for their Matriculation Certificate: this Certificate remains the main academic portal leading to the degree programmes of the University.

Over the past five years, student numbers at the JC have changed as shown in Table 5.



Year	2016-17	2017-18	2018-19	2019-20	2020-21
Female students	1199	1101	1017	1018	1192
Male students	977	859	738	747	823
Total students	2176	1960	1755	1765	2015

Table 5. Student population at the Junior College during 2016 to 2021.

The trend prior to the year of COVID-19 was similar to that obtaining for the University, i.e. a slow decline that appeared to stabilize at about 1800. The upsurge by 250 students in 2020-21 was almost certainly influenced by the fact that entry requirements for that year were significantly relaxed as a mitigation measure against the effects on students of the pandemic.

Similarly to the effect on University enrolment, the observed decline during the previous 5 years were likely caused by the demographic downward shift and will probably reverse somewhat in the coming years as the children of the immigrant population reach the age of the sixth form.

The College has continued to improve its learning and teaching infrastructure through the following actions: overhaul and renewal of three physics laboratories and adjoining offices; refurbishment of the tennis courts and a 7-a-side synthetic football ground; new common room for staff; extensive upgrading of various areas including refurbishment of the chapel and Youth Hub.

Besides the standard programmes of study offered towards the Matriculation Certificate, the JC also offers other courses such as a study programme for medicine and science oriented students; a programme for students of age 18+; and a programme for students with disability. An evening programme is also being offered.

Facilitating sports at the College:

In parallel with our positive actions in support of sporting students attending University courses described earlier, the Junior College too, took similar steps. In fact, rigid timetabled coursework at the College was known to hamper athletes in their training needs even more seriously than University students and I felt we needed to address this problem without further delay. Thanks to the excellent effort by Mr Paul Xuereb, Junior College Principal, and his team, a *Study Programme for Student Athletes* was designed and offered under two schemes, one aimed at national team athletes and the other for students who completed successfully their compulsory education at the National Sports School. These schemes allow students to continue with their sports training without disturbing their studies in addition to other advantages.



4.13 University as a major employer

The University is Malta's second largest employer (after Government) and it has over 2200 full time employees on its payroll besides another 740 part time and casual workers. The organisation has a recurrent budget of over €120 million and a governance structure that makes managing the institution a complex and challenging prospect.

Faculty academic administration is devolved to Deans and heads of department although we have agreed policies to facilitate the use of common shared resources. Towards this end, we have recently procured a Room Scheduling software to help manage lecture room allocation and time-tables.

In order to improve the quality of our services and to enhance operational reliability and consistency, among other things, we have introduced the practice of generating Standard Operating Procedures (SOPs) which are detailed written instructions about how to perform certain tasks effectively and safely. SOPs are controlled documents which are uploaded on to the University website and periodically reviewed and updated. Currently, the list of SOPs counts over 500 and the number is growing.

An important and critical step was the creation of an **Internal Audit Function** at the University. The purpose was to provide Council, Rector and other senior management with an objective assessment of the adequacy and effectiveness of management's internal control systems. The Internal Audit Function is currently and temporarily being assisted by a large and experienced commercial audit firm to help bootstrap its operations and procedures. The Internal Auditor reports to another newly appointed structure, namely, the **Audit and Risk Committee**, which consists of a group of non-executive specialists (not in the employ of the University) who are selected for their business knowledge and expertise, which Committee reports to Council via the Secretary and Rector. While the annual external audit will of course continue with its work to review the financial accounts as required by national legislation, the internal audit is concerned with all aspects of the University's operations including strategic planning, personnel management, procurement and finance among others.

The effects of the internal audit function are being felt and are steadily improving management outcomes as the institution gradually moves in lockstep with this development.

Industrial relations

During the course of these last five years, we have negotiated a Collective Agreement for administrative, technical and industrial staff with UHM-Voice of the Worker and, very recently, another agreement with UMASA for academics at the University¹⁷.

The main highlights of the agreement for academic staff which covers the period to December 2023 include:

- (a) introduction of a Tenure Track process for academic recruits designed to ensure that newly appointed staff are inducted properly into the work ethic and practices of the University before they are given tenure from Council, *i.e.*, their appointment is confirmed indefinitely to retiring age;
- (b) reduction of the period for completion of the PhD by assistant lecturers to 4 years from 8, which effectively means that recruitment at assistant lecturer level would require the person to be already actively pursuing a doctoral programme;

¹⁷ Negotiations over a Collective Agreement for teaching staff at the Junior College are ongoing as I write.

- (c) introduction of a new and separate grade of teaching associate/senior teaching associate to help in the running of programmes of study that involve preparatory level to diploma level teaching;
- (d) creation of two separate Promotion Boards, one for promotion to lecturer and senior lecturer grades and the other to deal with professorial appointments;
- (e) introduction of stepwise progression up the various promotion grades; and
- (f) laying greater emphasis on the research obligation including the need for sustained publications and supervision of student research.

A Collective Agreement for administrative, technical and industrial staff which covered the period January 2017 – December 2021 was also concluded and involved a complete reorganisation of grades to make them more attractive internally and better reflect labour market forces. New grades were introduced to reflect the diversity of the organisation, e.g. dental support staff, *periti*, scientific officers. We also introduced systems to facilitate more effective management, including flexible hours, transfer of vacation leave and computer-based clocking in and clocking out procedures. In this collective agreement, we also introduced measures designed to attract and retain high quality human resources that would be better equipped to match the changing needs of the University, particularly in IT services and management level positions.



Managing the pandemic

The pandemic, currently in its “third wave”, must have tested the leadership qualities of anyone in that position and it certainly did not spare the University. Very early on, we set up an “Emergency Situation Team” which I chaired to help manage the crisis. Management involved a raft of partly simultaneous and partly sequential actions including the writing of the (26 page) University’s health and safety guidelines and ancillary other documents which had to be formally approved by the Superintendent for Health; upgrading and checking the occupancy limits of all our lecturing spaces and having this exercise audited externally for compliance; setting up and manning a number of strategically placed body temperature checking stations; providing an almost round-the-clock telephone service to keep tab of any incursions on campus of potential infection from affected students or staff to allow for remedial counter measures; organising (with help from the Church authorities in Malta and Gozo) quiet areas off campus for those of our students who needed them so they could prepare well for their online examinations; deploying online systems for examining thousands of students; directing similar actions at Junior College and upgrading the IT services there to cope with new demands; and numerous other actions too many to list here.

The biggest problem however was managing the fear and concerns of administrative, industrial and technical staff for having to continue to turn up for work, albeit on a roster and reduced number basis, when the academic staff were largely working from home. The Rector was and continues to be the target of all such discontent but clearly his was the task to find the balance between protection of the health of employees and the continued functioning of the University. It never was and still isn’t possible to conduct all the necessary work totally and entirely from home.

We seem to have struck the right balance and took the correct decisions because during the past 12 months of pandemic, and despite the fact that we employ close to a thousand staff in the administrative grades, we only experienced two cases of cross-infection that happened at the workplace.

All University staff were invited and most accepted to receive the vaccine which was delivered to them on campus from the Gateway building (now a national hub for the roll out). It is my sincere hope that given the currently re-introduced stringent precautions to deal with the more virulent variant, coupled with the fact that staff are now far better protected (and will become even more so when the second dose is given in a few days time), we will, God willing, ride the third wave of this pandemic hopefully without serious problems.

The above is recorded only to serve as a reminder that, no matter what situations may arise demanding strong and decisive leadership, this Rector doesn’t falter or crumple under stress, even when, figuratively speaking, the ceiling appears to be caving in upon one’s head.

5. The next five years

Where should one take the University next in the coming years? In the preceding paragraphs, I have identified future directions in several different places but for the convenience of Council I will summarise here the salient points and add further detail as appear reasonable to me at this stage:

- (a) Learning and teaching must remain high on our agenda which is why we have taken such steps as the introduction of the English programme to improve communication skills, changed the General Regulations to help students in difficulty survive and graduate successfully and this without prejudice to our high standards; modified our entry requirements to ensure that talented students with special needs are not left behind because of their condition; improved access to adult learners through adoption of the process of Recognition of Prior Learning, a novel practice at UM; introduced positive support to student athletes because we believe that sports is a core and not peripheral educational function; and are committed to work closely with Government to help in the upskilling and reskilling of the workforce through training and certification using micro-credentials as one means towards that end.

The vision is to consolidate and develop these actions to evolving needs and situations. We need to continue to strive to make the University more attractive to both local students, and crucially, international students drawn from a variety of places. Without students neither the teaching mission nor research can thrive. To draw more students to our lecture rooms, we need to reflect on our admission criteria and to consider providing bridging programmes and other measures intended to increase the flux of learners from the post-secondary sector and improve the learning environment of adult learners so that more will be encouraged to join and survive courses at UM. Both initiatives will require enhanced use of internet technology that can support blended learning and where necessary online learning.

- (b) I promised to place UM within the group of the best 1000 World Universities and today, we're in the group 601 – 800. We succeeded to do this because we continued to improve our research effort without abandoning our commitment to teaching quality, the internationalisation of the University and our outreach mission. We doubled to 200 our research support officers, increased by 69% the number of PhDs awarded and set up the Doctoral School to guarantee deep entrenchment of serious research and innovation UM.

The vision is to consolidate the work of the Doctoral School, including by providing it with more human resources and finding a proper and fit physical home from where it could develop its work.

(c) Our research discoveries are drawing increasing attention from major industrial operators who are ready to invest effort and money in working with the University to commercialise our inventions and innovations.

The vision is to continue to engage actively in further enterprise related to the commercialization of UM's IP using prudence and diligence in these ventures.

(d) Internationalisation remains another firm commitment of UM and a crowning moment was our successful participation in the European Commission's project towards the creation of University Alliances to consolidate higher education in Europe. UM collaborated with five partner universities that are all present in coastal regions of Europe to create SEA-EU, the University of the Sea, one of 17 alliances which were funded in the first call.

Our vision is to see through the ambitious sub-projects within SEA-EU and especially ensure the objectives of student and staff exchange envisioned by the project are reached and sustained in future.

(e) To care for the total welfare of our students and staff, we invested in an excellently manned and motivated Health and Wellness Centre which was of crucial help in dealing with some of the myriad problems caused by the pandemic.

The vision is to continue to support and extend the services of this Centre even through enhanced collaborative efforts with other national services.

(f) We are committed to see to completion the multimillion euro buildings and physical development projects currently progressing or nearing completion on campus and we are proud to have agreed with Government on the acquisition by perpetual lease of 60,000 m² of lands for the University.

The vision is that of bringing to a satisfactory completion all our building projects including the Gozo Centre, the Sports and Performing Arts Centre and the new University Administration Complex in the building acquired for the purpose. Other future but needed projects are a new Centre for Matsec operations and a large Conference and Multipurpose Centre that befits a modern university.

Besides the improvements and developments as identified here, *I would definitely also feel obliged to remain committed to the programme of actions envisioned in our Strategic Plan for 2020 – 2025.* The massive effort which the University and numerous other stakeholders accomplished together in order to elaborate the Strategic Plan deserves to be respected and brought to fruition as completely and as far as will be possible.

A factor that has additional significant potential for influencing the coming years is, of course, the University of Malta Act which, despite the passage of considerable time, remains in abeyance. We continue to look forward to a legislative document in which the principles which guided most of our work in the latter years as well as the aspirations outlined in the Strategic Plan will be embedded in the Act and more: for example, we hope the new legislation will allow better operational freedom especially in the area of procurement. ***Now that UM has an internal audit function that can only become stronger with time and experience, I suggest that simplifying procurement procedures through the placing of UM on the Directorate of Contracts' Schedule 3 will be most salutary, especially in projects funded by EU money where the time to completion is even more critical.***

The highlights of the Strategic Plan document¹⁸ are reproduced below as Table 6 for the convenience of the reader.

In this Table, I have added a few comments, where relevant, to reflect progress occasioned by the fact that 2020 is already passed and we have already moved on to execute the prospected actions, several of which have been outlined earlier on in this document. To monitor further progress, we have set up a 15-person Steering Committee for Strategic Planning and Implementation which includes 3 students and which meets periodically to review progress and stimulate further actions. This is how we intend to ensure that we achieve the aims we have set for ourselves.

Strategic themes	Enabling strategies	Comment on progress
1. Learning and Teaching	Enhance academic and pastoral support for students; Promote holistic learning and improve the quality of learning spaces; Expand high-quality online learning; Promote work-based learning; Maintain relevance of teaching programmes; Valid assessments that are valid and aid learning; Improve and modernise doctoral programmes; Deliver continuous professional development programme	Significant progress thanks to pandemic; Progress from doctoral school; new PhD regulations in the offing
2. Research and Knowledge Transfer	Promote world-class research; Improve rankings through research and knowledge transfer; Secure sustainable funding for R&D; Expand corporate research and knowledge transfer; Improve dissemination of research output; Undertake responsible research and innovation; Design HR strategy that supports researchers; Apply cluster concepts to stimulate sustainable research	Ongoing Ongoing progress; Ongoing progress; Progressed through open access policy In progress In progress

¹⁸ See reference 1, pages 6 – 7.

3. Societal Factors and Impact	<p>Assist students and staff with disability;</p> <p>Support under-represented and first generation students;</p> <p>Commit to gender and LGBTIQ rights;</p> <p>Ensure access and inclusion of diverse cultures;</p> <p>Expand health promotion and wellbeing services;</p> <p>Engage the campus community;</p> <p>Promote public outreach</p>	<p>In progress</p> <p>In progress</p> <p>In progress</p>
4. Enterprise and Industry Impact	<p>Engage industry in curriculum development;</p> <p>Embed industry knowledge in learning experience;</p> <p>Enhance learning through enterprise projects;</p> <p>Promote interpersonal and collaborative skills;</p> <p>Learning for employment and self-employment;</p> <p>Expand executive education and expertise to industry;</p> <p>Develop enterprise and industry colloquia</p>	
5. National Impact	<p>Promote study and research of cultural heritage;</p> <p>Instil appreciation of Maltese characteristics;</p> <p>Protect and promote Il-Malti and cherish English language;</p> <p>Educate to serve the economy and to enrich the learners;</p> <p>Educate to form competent and effective citizens;</p> <p>Preserve UM's place as the premier higher education institution locally and a unique hub in the Mediterranean;</p> <p>Retain and improve UM's position in the world rankings</p>	<p>Ongoing;</p> <p>Doctoral thesis abstracts in Maltese; UM language policy</p> <p>Rankings improved from top 4 to 3%</p>
6. International Outlook	<p>Strengthen and deepen student internationalisation;</p> <p>Strengthen and deepen staff internationalisation;</p> <p>Disseminate the University's good name;</p> <p>Attract international students;</p> <p>Broaden UM's enriching engagement with the world</p>	<p>Ongoing; Sea-EU</p> <p>Ongoing; Sea-EU</p> <p>Rebranding, enhancing presence on social media</p> <p>Ongoing</p>
7. Sustainability	<p>Develop sustainable land and buildings;</p> <p>Reduce, reuse and recycle waste;</p> <p>Extend energy efficient measures;</p> <p>Conserve water and reduce consumption;</p> <p>Encourage sustainable transport measures;</p> <p>Deliver training and research on sustainability;</p> <p>Promote healthy living practices on campus</p>	<p>Activities of C-SUM</p> <p>Ongoing, e.g. FLASC project</p> <p>Walking routes</p>
8. Services and Administrative Support	<p>Create ecosystem of infrastructure and support;</p> <p>Develop student-centred processes;</p> <p>Expand infrastructure for student welfare;</p> <p>Enhance library resources;</p> <p>Achieve excellence in technology-based services;</p> <p>Invest in people, empower the workforce;</p> <p>Develop internal and external communications;</p> <p>Deliver physical infrastructure;</p> <p>Consolidate the financial framework</p>	<p>One-stop shop for international students</p> <p>Ongoing</p> <p>On the job training</p> <p>Steadily progressing on several fronts</p> <p>Ongoing</p>

Table 6. Strategic themes and enabling strategies according to the Plan for 2020-25.

Clearly, the sudden coronavirus pandemic and its manifold effects have influenced and will continue to affect the life of the University and that of the nation and the world as a whole and we need to adapt accordingly. As time passes and circumstances change, the next Rector will have to evaluate whether the plan can closely continue on its chartered course or veer away due to prevailing circumstances. Thus, it remains to be seen how the world will manage to climb out of the financial abyss in which it has fallen and how this will influence Malta's fortunes. While so far the economic predictions for our country are fairly optimistic, there will, of course remain lingering uncertainties and unknowns that can and likely will impact the next future and our ability to achieve outcomes of progress and development. The University of Malta will be there to assist the nation as best as it can in whatever circumstances will come to be.

6. 'Il quddiem b'kuragg

Inhoss li f'dawn l-aħħar ħames snin, għamilna passi importanti 'l quddiem li komplew saħħew lill-Universita' u li qegħdin iħallu l-frott fis-soċjeta' li żżomm fil-wieċ lil din l-istituzzjoni bit-taxxi li tħallas. Qegħdin inkunu iktar attenti kif nużaw ir-riżorsi finanzjarji u dahħalna mezzi godda biex inkunu nafu fejn hemm bżonn titjib fil-proċeduri tagħna. Nibqgħu ninsistu fuq li nagħtu tagħlim ta' kwalita' lill-istudenti tagħna, inkluż dawk bi bżonnijiet speċjali u dawk haddiema li jiġu minn fuq il-bank tax-xogħol biex isegwu t-tagħlim. Inkomplu nużaw u nsaħħu l-mezzi teknoloġiċi biex inwasslu t-tagħlim iktar 'il bogħod, anke 'il hinn minn xtutna, kif urejna li kapaċi nagħmlu fil-mument ta' prova li qegħdin ngħixu.

Nibqgħu niġru wara l-istudenti barranin u nagħmlu iktar programmi onlajn li bihom nilhqu udjenzi internazzjonali.

Inkomplu nsaħħu r-riċerka u l-innovazzjoni bħala raġuni prinċipali għaliex neżistu: u naraw kif dak kollu li jirriżulta mir-riċerka u li jista' jiġi sfruttat f'servizzi u prodotti godda u sejbiet ta' fejda għas-soċjeta' tagħna jkun hekk sfruttat. L-intrapriża tkompli tibqa' parti integrali u dejjem tikber tal-Universita'.

L-Universita' mmexxija minni tibqa' taqdi l-bżonnijiet nazzjonali b'l-iktar manjiera sostenibbli u trid tkun hi xempju eċċellenti ta' sostenibbiltà f'Malta.



