



**European University Association (EUA)
Institutional Evaluation Programme**

UNIVERSITY OF MADEIRA

EUA EVALUATION REPORT

December 2008

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1. Foreword

The EUA Institutional Evaluation Programme was launched fifteen years ago with the aim of preparing universities to meet the emerging needs for external accountability by an increased capacity for both strategic thinking and internal quality culture. To date, more than 180 universities from 36 countries have participated in this programme and some have subsequently asked for follow-up visits to monitor progress made.

The goal of the review is to offer to the university an external evaluation by university leaders who have experience of different higher education systems in Europe. This evaluation considers the quality issues and the main actors in the university's daily decision-making process. EUA does not wish to provide the university with a blueprint for its development; rather the review process is consultative and should be seen as a tool to help institutional leaders as they prepare for change.

By reviewing institutions in different countries EUA hopes to disseminate examples of good European practice, as well as international practice, to validate common concepts of strategic thinking, and to elaborate shared ideas on quality that will help member universities to reorient their strategic development while strengthening a quality culture in Europe. During the review the university is helped to examine how it defines its medium and long term aims, to look at the external and internal constraints shaping its development, to discuss strategies that will enhance its quality while taking account of these constraints.

The evaluation of the University of Madeira took place in the context of a system-wide, extensive, independent, voluntary and objective review of Portuguese higher education institutions by EUA, facilitated by the Ministry of Science, Technology and Higher Education (MCTES). About ten institutions were evaluated over the first year, taking into consideration the diversity of the Portuguese Higher Education system. EUA has conducted similar extended evaluations in Portugal (all medical faculties, 2002), Catalonia (all universities, 2003/4), Ireland (all universities, 2005) and Slovakia (2007).

The review takes place in the wider context of Government strategic objectives, including:

- To guarantee a system of higher education fully integrated at European level in terms of quality, levels of participation and employability of graduates
- To protect and improve the quality of teaching and learning, in a way that will foster participation in international networks of higher education and the full recognition of Portuguese higher education institutions and degrees
- To promote a diversified system of higher education in a way that will foster quality at the various types of institutions
- To acknowledge the increasing importance of research, development and innovation for the knowledge society
- To develop quality assurance procedures and processes in line with the best international practice
- To increase the provision of lifelong learning.

The Review Team for the University of Madeira consisted of:

Professor Bent Schmidt-Nielsen, Former Rector, The Royal Veterinary and Agricultural University, Denmark (Chair)

Professor Robin Farquhar, former President, Carleton University, Canada

Professor Mary Ritter, Pro-Rector, Imperial College London, England

Vanja Ivosevic, European Student Union, Croatia

Professor Don McQuillan, Former Chief Executive, Irish Universities Quality Board, Ireland (Secretary)

2. Introduction

The Review process consisted of several phases. The University first produced a Self-Evaluation Report (SER). This was prepared by a Steering Committee of nine people, appointed by the Rector, broadly representative of the university community, and chaired by the vice-rector for academic affairs. From our conversations with staff and students it was difficult to gauge the real extent of participation and consultation across the university in the preparation of the report. In meetings with staff we were told that many were not asked to contribute to the SER, and some biologists claimed they had not seen the document until a few days before the preliminary visit.

The SER gives an honest picture of the present situation in UMa in the areas of teaching, research, student participation, quality assurance etc., and provides an extensive SWOT analysis. Unfortunately there is no mention of a strategic plan based on the SWOT, although reference is made to a plan introduced by the rector a few years ago and substantially carried through.

The timing of the EUA evaluation has been problematic. For the past year, Portuguese universities have been working to a very tight schedule preparing new statutes as required by law. In the case of UMa a special representative Assembly was appointed to carry out this task. Thus our evaluation took place in a period of obvious turbulence and disagreement within the Madeira academic community, and the team wonders why the evaluation took place at such a fraught time. Unfortunately the SER did not prepare us for this situation and the preliminary meeting with the rector during the preliminary visit gave little information. Much time was lost in the early stages of that visit in clarifying misunderstandings and wrong impressions.

Happily, by the time of the main visit, the new statutes had been finalised by UMa and accepted by the Ministry. Within the next three months the university must write the by-laws that will define the detailed application of the statutes. We hope our recommendations will contribute to this procedure.

The Preliminary Visit took place on 7-9 May 2008. This enabled the team to become acquainted with the University, with initial discussions centred in the areas of

- Autonomy
- Strategic Planning
- Research

- Students, Teaching and Learning
- Quality Processes
- Organisation and Governance
- Internationalisation
- Resources
- Capacity for Change

as well as identification of areas for more detailed questioning during the Main Visit.

Subsequently the team requested and received documents on: the rector's vision for UMa during the next five years, the timing of and the reason for the establishment of the thirteen departments, UMa's building plans, the implementation of key steps in the Bologna reforms, the proposed restructuring plans envisaged in the new statutes under discussion at the time of the preliminary visit. We also requested amended versions of appendices XX and XXI to include the number of laboratories assigned to each department and the number of students in each programme. The team is highly appreciative of the efficient work done in the preparation and translation of the requested documents. They were ready in good time for the main visit.

The Main Visit took place on 26-29 October 2008. During the two visits the review team met with the rector, vice-rectors, the self-evaluation steering committee, the special assembly responsible for the new statutes, heads of departments as well as staff and students, directors of research, implementers of Bologna reforms, graduates of the university, the bursar, senior administrators, support staff, the President of the Regional Council and other representatives of regional and local government, external stakeholders and employers of graduates. The team also visited the main university buildings.

The meetings were conducted in a courteous manner, and were always open, helpful and frank. Throughout the University, and in our contact with external partners, the willing engagement with the evaluation team, and the goodwill and strong commitment to the highest standards, were always in evidence.

On the final day of the Main Visit the team presented the oral report indicating the principal conclusions and recommendations to a group selected by the rector. This written report is a full exposition of these conclusions and recommendations.

We would like to acknowledge warmly the co-operation and hospitality we received throughout the two visits. We thank the Rector, Professor Pedro Telhado Pereira, who signed the invitation letter to EUA, the vice-rectors and department heads who actively supported us during our two visits, and all the staff and students, as well as stakeholders from outside the university, for their helpful contribution to our discussions.

We wish especially to thank Professor Antonio Brehm for his efficiency in organising the documentation, liaising with the review team and maintaining our daily schedule. We trust that our joint efforts will provide a sound springboard for the University as it moves into the next phase of its evolution.

3. Constraints and Institutional Norms

3.1 Profile of the University

The University of Madeira was established in 1988, although the island has a long history of higher education at varying levels going back to the Jesuit College set up by royal charter in Funchal in 1569. The early years of the university were turbulent and it was only in 1996 that the university saw the appointment of its first rector after the first “Statutes of the University” had been approved the year before. The university seems to have grown in a fairly haphazard manner “chaired in the first years by a number of chairmen with different visions of what the university should be”, as noted in the SER.

The university now has thirteen departments: Art and Design, Biology, Education, Health Sciences, Physical Education and Sport, English and German Studies, Romanistic Studies, Physics, Management and Economics, Mathematics and Engineering, Psychology and Human Studies, Chemistry, Nursing School. Under the new statutes these departments will be grouped into five Centres of Competence. The University has four Research Centres funded by the National Science Foundation for Science and Technology (FCT):

- Centre of Applied Economic Studies of the Atlantic (CEEApIA)
- Macaronesian Studies Centre (CEM)
- Madeira Chemistry Research Centre (CQM)
- Mathematical Sciences Centre (CCM)

Two other centres await a decision on applications for funding by the FCT: Centre in Education and Centre in Sport and Health Sciences.

The university offers (2007-2008) thirty eight First Cycle degrees and twenty Second Cycle degrees, many already adapted to the Bologna model. The number of undergraduate students is 2844, up from 2512 in 2002-2003. There are 86 PhD students, most of whom are in the above centres. There are 198 teaching staff of whom 114 have PhDs. It is striking that the median age of the staff is in the range 41-45, a most favourable situation compared to many of the older universities around Europe. The ratio of undergraduates to staff is also comparatively favourable at about 14:1.

The University is located in the city of Funchal and is concentrated in two campuses, the City Centre and Penteadá. The first is the College of the Jesuits, next to the City Hall. It dates back to the 16th century, has recently been renovated, and houses the main administrative offices including the rector’s office. It has three lecture rooms, a 150 seat theatre and an exhibition hall. The Campus of Penteadá has a modern building (1998), is 2kms from the centre of Funchal and has a regular bus service. It is part of a complex named the Technological Complex of Penteadá, which includes the Madeira Technological Centre, a multi use conference facility as well as a small medium-sized enterprise incubation centre. The university building is exceptionally well suited to the teaching and research function of UMA: 25 lecture rooms for 1254 students, 4 amphitheatres with 108 seats, 6 small amphitheatres with 56 seats, all equipped with overhead and LCD projection systems and two with videoconference facilities, a large conference room with 300 seats and audiovisual equipment.. There are 70 laboratories for experimental teaching/learning and scientific research.

In 2001 the university acquired a 20,000 square meter property “Quinta de São Roque”, 500 meters from the Penteadá Campus with the hope of building a residence hall for students and

visiting fellows. Unfortunately it is unlikely that funds will be available for this in the near future.

3.2 Autonomy

According to the new national law the university has full academic, cultural, scientific, pedagogic and disciplinary autonomy. It also has autonomy in the management of property, finance and administration.

The EUA supports strong university autonomy. The modern university finds itself in a rapidly changing environment and facing challenges that are by now well known: increased competition for scarce resources, massification of education, economic globalisation with the resulting demands from government and society for more and better trained graduates, especially in the sciences, the need to establish improved research capabilities for assisting/underpinning national competitiveness. Autonomy is a necessary prerequisite for speedily responding to these challenges.

On the other hand it is well recognised in European universities that university autonomy is bound up with accountability to society, and that accountability brings with it the responsibility to drive the required change and improvement. Thus universities must use their autonomy and independence for positive strategic development and involvement with society according to its expectations and needs.

EUA, in its Graz Declaration, states that ‘higher education remains first and foremost a public responsibility so as to maintain core academic and civic values, stimulate overall excellence and enable universities to play their role as essential partners in advancing social, economic and cultural development. Governments must therefore empower institutions and strengthen their essential autonomy by providing stable legal and funding environments. Universities accept accountability and will assume the responsibility of implementing reform in close co-operation with students and stakeholders, improving institutional quality and strategic management capacity.’

These remarks are of particular relevance to the University of Madeira which clearly bears a great responsibility in acting as a driver for the cultural, social and economic development of the island. The team stresses the need for UMa to work in concert with regional and local authorities in developing policies and strategies that strengthen both the university and the fundamental structures of society. We urge the university to keep these ideas in mind when considering its mission statement, strategic plan and the recommendations for improvement contained in this report.

The new statutes give devolved scientific and pedagogic autonomy to the Centres of Competence. This is unusual in modern universities and, if not properly managed, has the potential to create difficulties for the future development of UMa. We will return to this important topic in the next section on governance and organisation.

3.3 Governance and Organisation

The new law, as adapted by UMa, specifies the following structures:

- The **General Council**, which will have 20 members, consisting of 11 elected teachers/researchers, 3 elected students, and 6 external stakeholders co-opted by staff and student members. The Chair is an external member elected by the Council. The Council organises the election of the Rector, approves strategic and budget plans, sets fee levels, approves consolidated financial reports, conducts property transactions. The chair convenes and presides. The Council normally meets four times a year and may invite non-voting members. The rector has no vote;
- The **Rector**, who is the chief executive authority of the university, elected by the General Council for a four-year, renewable, term, and removable by a two-thirds majority. The Rector presents to the General Council for its approval: a draft medium-term strategic plan, draft research and pedagogic policies, proposals for annual work schedules, for budget and fee levels, for property transactions, for the creation and closure of organic entities. He approves the creation and closure of courses, allocates student numbers, is responsible for human resource and financial management, guarantees the good functioning of the University;
- The **Management Committee**, which has a minimum of three and a maximum of five members, is chaired by the Rector and includes one vice-rector and the Head of Administration. Members may be co-opted from any constituency and need to be approved by the General Council. It is charged with administrative and financial management, management of human resources and of the property portfolio.

The new statutes provide a reconfiguration of academic structures. As noted earlier, the thirteen departments will be grouped into five **Centres of Competence** each of which, in accordance with the new statutes, will have scientific and pedagogic autonomy:

- **Science and Engineering** (mathematics and engineering, chemistry, physics)
- **Life Sciences** (biology, health sciences)
- **Social Sciences** (economy and management, physical education and sports, education sciences)
- **Arts and Humanities** (romanic studies, english-german studies, art and design, psychology and human studies)
- **Health Technology** (nursing)

The Centres of Competence will have their own statutes, approved by the Rector, as well as an executive and a representative body consisting of at most 15 members (teachers/researchers at least 60%, the rest students). Each Centre will have a President, Council of Coordinators, Scientific Council, Pedagogic Council and an Assembly.

There will be two transversal units, the **College of Society of Knowledge** and the **College of Polytechnic Studies**, designed to manage and coordinate the first cycle courses and the nursing courses respectively.

Each of the two Colleges will have a President, Pedagogic Board and a Monitoring Commission. The President will be appointed by the General Council on the recommendation of the Rector.

There will be four **Institutes of Innovation**, also transversal units, designed to drive four strategic areas of development:

- **Economy, Regional Development and Tourism**

- **Energy, Environment and Global Climatic Changes**
- **Health**
- **Information and Communication Technologies**

The statutes propose the establishment of a **Senate** with wide representation across the university. The duties will be to give an opinion on academic matters.

With regard to the composition of the General Council the team applauds the inclusion of external stakeholders. This arrangement has many advantages: the wide-ranging autonomy granted to the university is balanced by public and transparent accountability to the society that maintains it; UMa will have a direct line to social and economic developments in the island; the university will have immediate access to regional advice when preparing its strategic plan. However the exclusion of non-teaching staff is a cause for concern. In our opinion they are crucial to the successful daily operation of the university as well as to the effective implementation of future strategies. They could make a valuable contribution to debate in the Council.

The team recommends that the exclusion of non-teaching staff from the General Council should be reconsidered at the earliest opportunity.

With regard to the roles of the Rector and General Council, it seems to the team that the strategic and operational effect of the new structures will be that the Rector becomes the Chief Executive Officer of the university, working very closely with the General Council to lead the university into the next phase of its development. It is clear from the SWOT analysis in the SER, as well as from our many meetings across the university, that there is great awareness of the opportunities and challenges that lie ahead. Driving change in the context of an overarching university strategic plan covering all activities of UMa will be the first and most important of these challenges. Developing the regional role of the university, raising its regional, national and international profile, optimising limited resources and extending the success of external funding, are others. All this will require a united approach and generous collaboration in all sectors of the university. There will have to be an agreement that internal discussion will be used to resolve disagreements and form a consensus, with no recourse to external intervention.

The team has to point out that there are serious risks involved in the creation of a very complex organisational and management structure in a university with only 3,000 students and 198 teaching staff. The law prescribes the General and Management Councils, but the university has created all the rest. Given the number and variety of committees contributing to the decision-making process in the university, the team asks if UMa will be able to respond rapidly enough to the challenges facing the modern university that we outlined previously. The need for consensus in such an extensive consultative procedure may lead to delayed decisions and compromises that are ultimately inimical to the best interests of the university.

In particular the devolution of autonomy from the General Council to the Centres of Competence is either too extreme or poorly defined, leading to overlap of decision-making function, conflict and delays. The Matrix structure, involving as it does powerful committees in the Centres and Colleges, also has the potential to cause conflict and delay.

The team recommends that:

- **The levels of devolved autonomy between the General Council and the Centres of Competence should be clearly defined in the university by-laws and sufficiently limited to enable the General Council to be effective in its overarching governance role;**
- **The nature of the working relationship between the Centres of Competence and the Colleges should be clearly set out in the university by-laws.**

One final point: in the following sections several recommendations will be made involving the establishment of new university-wide functions. We note here that in many universities these functions are carried out by active academics who are held in high esteem by colleagues because of their academic achievements and leadership qualities.

The team recommends that the senior management of the university should set up appropriate reporting arrangements for the new university-wide functions recommended throughout this report.

3.4 Mission, Vision, Strategic Plan

The SER lays out the mission and vision of the university on pages 9-10. In summary: The mission of the University of Madeira is to be a university of international level, achieving excellence through education, learning, research and service to its regional, national and international communities. The University of Madeira is strongly committed to the spirit, determination and sense of purpose of the thriving region of Madeira. UMa is driven by the potential and challenge of the future, and confident about being able to make a meaningful difference to the lives of its students and the Region of Madeira. It goes on to refer briefly to its teaching and research function and its international relations, with special emphasis on the EU and Portuguese speaking countries. While these statements are worthy they could fit any university in Portugal if the word ‘Madeira’ is replaced by another regional name. There is nothing specific to Madeira.

The team recommends that the university should develop vision and mission statements that are specific to UMa and the island of Madeira.

Furthermore the SER contains no precisely formulated aims and objectives to put flesh on the vague aspirations. There is no strategic plan. However the SER does provide a quite comprehensive and frank SWOT analysis that could help to plot a realistic way forward. In this context, the SER notes in the SWOT that “the main threat may derive from an absence of long term objectives for the university as an educational and research centre”.

The university should look again in a critical and analytic way at where it wants to go in the years ahead, how it envisions its future in the regional, national and international contexts. How does a small, new, underfunded university fulfill its crucial teaching and development role in the local region? How best to work with the local community and the regional government? How does it prioritise and focus on a small number of sustainable research areas?

Strategic planning has been described as ‘the continuous and collective exercise of foresight in the integrated process of taking informed decisions affecting the future’. It is essential that the

university understand what is involved in the preparation of a strategic plan. A strategic plan is not a wish list, a mere collection of desirable outcomes with no indication as to how these outcomes can be achieved, nor is it a compilation of departmental plans. On the contrary, the process of developing an effective strategic plan is complex and intensive. We suggest that three basic questions be kept in mind: Where is the university positioned now? Where does the university want to go? How does the university get there?

The first question has been answered to a great extent in the SWOT analysis as set down in the SER. We suggest that UMa should re-examine, in the light of the EUA evaluation experience, the vision, aims and objectives, strengths and weaknesses of the university, as well as the opportunities and threats it confronts. However it is important to emphasise that planning is a continuous process. Thus the plan itself and the SWOT on which it is based must be updated on an ongoing basis. This requires solid data to support conclusions and to position the university to meet new developments.

The team recommends that UMa should establish a capability for the collection of data on all its activities.

The second question addresses the vision and mission of the university, and the detailed objectives to be achieved, say in the period in the period 2009-2013, based on the SWOT analysis. We note again that the vision and mission statements in the SER are rather bland and could apply to many other institutions. We urge the university to give its close attention to formulating statements that more clearly reflect UMa's aspirations at department, centre of competence, university, national and international level.

The third question requires a detailed presentation of the steps to be taken in achieving the objectives. Good organisation and agreed procedures are essential. The objectives should be prioritised, and each objective should be stated in a clear and unambiguous way. An action plan for the successful achievement of each objective should be established, responsibility for completion assigned, and allocation of required resources agreed. Each objective should have a time frame for completion and precise indicators of success should be set down beforehand

The team recommends that the university should establish a University Steering Committee with responsibility for preparing a Strategic Plan for the years 2009-2013. The Committee should be chaired by the rector.

A sense of ownership of the strategic plan throughout the university is essential to the success of the process. This could be achieved using a fairly common methodology. In the first instance each of the centres of competence might prepare an agreed plan based on contributions from the individual departments. These plans could then be confronted with the university's vision and aims, and harmonised by the University Steering Committee to produce an overarching strategic plan for the whole university. The plan should be discussed widely, and then finalised and approved by the competent governance bodies.

This is a complex and difficult task involving as it does repeated top-down and bottom-up debate within the university. Inevitably there will be competing agendas, and tension between the various elements of the university. No university finds it easy to arrive at the type of institution-

wide consensus that is required if such a process is to have an effective and fruitful outcome. University leaders will play a vital role in bringing doubters along and in creating the conviction that the task is worth the effort. This process will be particularly difficult in an institution where sub-units may jealously guard their autonomy in teaching and learning.

3.5 Quality Assurance

The new law states that regular self-assessment is mandatory in Portuguese universities, while the Government strategic objectives noted in the Foreword of this report require universities to develop quality assurance procedures and processes in line with the best international practice. The SER is frank and honest about the dearth of internal QA arrangements and failure to develop a quality culture in UMa: “At present the university lacks any kind of regular assessment of internal quality control”. Elsewhere it states that “internal quality procedures have been adopted for educational programmes since 2001/2002. However these quality processes, which include data gathering and evaluation processes concerning teaching and research activities, still have not been able to create a true quality culture in UMa”.

The quality of higher education has emerged as a key element in the establishment of the European Higher Education Area, and in driving national progress and competitiveness. Thus quality assurance is one of the main action items of the Bologna Process. In the Berlin and Bergen Communiqués the European Ministers of Higher Education committed themselves to supporting further development of quality assurance at institutional, national and European level, and stressed the need to develop mutually shared criteria and methodologies on quality assurance.

They also stressed that the primary responsibility for quality assurance in higher education lies with each institution itself and this provides the basis for real accountability of the academic system within the national quality framework. They agreed that the national quality assurance systems should include evaluation of programmes or institutions that would involve internal assessment, external review, participation of students and the publication of results.

EUA proposes a coherent QA policy for Europe, based on the belief that institutional autonomy creates and requires responsibility, that universities are responsible for developing internal quality cultures and that progress at European level involving all stakeholders is a necessary next step. With the active contribution of students, universities must monitor and evaluate all their activities, including study programmes, research productivity, innovativeness, competitiveness, management, funding systems and services.

The procedures must promote academic and organisational quality, respect institutional autonomy, develop internal quality cultures, be cost effective, include evaluation of the QA agencies, minimise bureaucracy and cost, and avoid over regulation. External quality assurance procedures should focus on checking through institutional audit that internal monitoring has been effectively done.

For EUA, as for the Ministers of Education, the key elements in a QA process are:

- self-assessment by the unit being evaluated
- review and site visit by peers including external peers
- publication of the peer review report

- effective follow-up on recommendations for improvement
- minimal bureaucracy
- quality improvement
- involvement of students and other stakeholders.

We refer to two publications:

‘EUA’s Quality Assurance Policy in the Context of the Bergen Communiqué’,
‘Standards and Guidelines for Quality Assurance in the European Higher Education Area’
(ENQA Report).

The team recommends that the university should establish overarching internal quality assurance procedures, and a high level Standing Committee to ensure comparability between the Pedagogical Councils of the Centres of Competence.

In this connection we note that excellent QA systems, consistent with the EUA approach, have been developed in several countries around Europe so UMa should not waste time re-inventing the wheel. Nevertheless, establishing such an internal system of quality assurance takes time and commitment, and there may be an initial reluctance on the part of some staff to face the challenge of change or even to accept that change is necessary. Dialogue between all members of the university community is central to creating good will, if not total and enthusiastic acceptance. It should be stressed that the goal is to create a quality culture in all activities of the university through continuous improvement, and not to apportion blame for perceived shortcomings. Again the role of the university leadership is crucial in driving the process and in facilitating the missionary work necessary to convert the doubters. To ensure coherence and harmonisation across the university, the guidelines and operational procedures for this important work should be agreed at university level and a central unit established to organise and oversee the details of the procedures.

The team recommends that the university should establish a Quality Office to oversee the operational procedures for quality assurance.

Other procedures affect the quality of performance at UMa. These include the appointment of new staff, the quality and number of the entering students and the related issue of their formation and motivation during their years in the university. While the student to staff ratio in the university is relatively low by standards elsewhere the failure and drop-out rates in most programmes are unacceptably high. This is a serious problem for the university as a whole and steps should be taken to tackle it at university rather than department level. We were told that many entering students are poorly prepared, especially in science subjects and languages. Bridging courses and special tutoring are widely used elsewhere to alleviate this problem. Given the good student to staff ratio in UMa, and the move from a teaching to a learning environment inherent in the Bologna reforms, the increased teaching burden should not be an issue.

The procedures for appointing professors appear to be quite open and transparent and totally in the hands of the university. It is essential that this important element of autonomy is maintained and that procedures are scrupulously applied. However, the SER notes that “the geographical location of Madeira Island, in the middle of the Atlantic, makes it difficult to hire PhDs, especially when recruitment is oriented to teaching-staff from top European and US institutions.”

This is a serious quality issue for UMA, affecting as it does the future development of the university, the quality of the degrees on offer, and thus the formation of the young men and women on whom the prosperity and economic success of the island so vitally depend. It would seem therefore that UMA will depend to some extent on its own graduates to sustain its research and teaching effort. This re-enforces the importance of first class quality processes in the academic affairs of the university.

3.6 Finances.

The university budget is controlled centrally. The rector, advised by the Administrator and by the pro-rector for Finance and Accounting, decides annually how to allocate funding within the university. All expenditures must be processed by the Financing and Accounting Office and authorised by the Administrator. A small share of the budget is kept by the Office of the Rector, and a small amount (300,000 Euro in 2008) is distributed among the departments (in future the Centres of Competence?) depending on their student numbers and the degree cost factors. While this central management of finances might seem to offset to some extent the independence of the Centres and departments, most of the revenue is accounted for by recurring expenses so in practice the rector has little room for manoeuvre.

The total revenue of the university in 2007 was 15,750,000 Euro. Of this, 9,640,000 came from the state, 2,560,000 from student fees and 1,160,000 from research projects, and the rest from a variety of specified sources. The corresponding figures for 2006 were 15,720,000, 10,160,000, 1,990,000 and 1,710,000 respectively.

The level of state funding depends on a variety of parameters, including undergraduate student numbers, degree cost factors, the ratio of PhD staff to all staff, and the 'success rate' of each degree measured by the ratio of graduates to enrolled students. The SER notes that the latter two, introduced a few years ago and used in assessing the state contribution in 2007, penalised a young university like UMA: it is difficult to attract PhDs of the right calibre to Madeira because of its geographic remoteness, and some UMA courses had not yet produced graduates at the time. Nevertheless, small universities still face special difficulties because of the national funding mechanisms. For example the national policy of not funding degrees that offer fewer than twenty places each year is a severe burden. This makes it impossible to guarantee the sustainability of some degrees over a reasonable number of years. It also makes it impossible to offer specialised courses that are crucial to the development of the island but attract small numbers of students. Specialised Mathematics courses is a case in point. The SER also points out that in the period 2004 to 2007, among public universities in Portugal, UMA registered the largest per cent increase in the number of students (17.62%) but also the largest per cent reduction in state funding per student (15.63%).

In other countries there are governments that provide additional compensation in their funding formulas for the special financial needs of small and/or isolated universities. We urge UMA to make a case to the government for increased funding.

Of course, problems arising from under-funding will not be solved only by income generation. It is also necessary to make optimal use of existing resources and to make every effort to seek ways of reducing expenditure and to increase the cost/benefit ratio. In this context the team draws the university's attention to the possible duplication of effort across the Centres of Competence in

areas of administration, as well as some academic related activities like information systems and the teaching of common core courses, such as, for example, biochemistry.

Many universities have formed a University Fund Raising Committee to seek funding in a systematic fashion. These committees are often highly successful in attracting money to the university, and especially in obtaining support for special projects. Here the good will already established by UMA in the wider community could be important in attracting prominent people of influence to serve on such a committee. This activity will also help to strengthen the external image and awareness of the university.

The team recommends that the university should develop a fund-raising strategy to increase resources from external non-governmental sources for its academic activities.

4. Capacity for Institutional Change

4.1. Teaching and Learning: Study Programmes, Student Care

UMa is to be congratulated on the introduction of the reforms advocated by the Bologna Process. ECTS has been introduced, and the SER notes that “in the academic year 2007/2008 all degrees offered by the university were adapted to the 3-5 model. Students who enrolled for the first time that year did so under curricula adapted to Bologna. All students already in the university changed from the old to the new curricula under transition plans elaborated for each degree”. It notes the “adoption of a teaching-learning methodology which promoted the transition from the system based on transmission of knowledge to a system based on the development of skills”.

Excluded from the above model were the professional training courses of Medicine (Basic Cycle), Nursing, Childhood Education, and Social Service. For degrees in Engineering and Mathematics a flexible system was created allowing students to enter a bloc for a common first year, being free to choose their degree by the end of the first Year.

The SER is frank in discussing the opposition to these innovations among some teaching staff and students. This is not unusual, and has occurred right across Europe. The university will, of course, continue its missionary work in converting the doubters. Indeed there is no choice in this matter since adoption of the Bologna reforms is required by law.

Teaching and learning at UMa, and student care, should form a key element of the strategic plan. The plan should be clear on the goals to be achieved and the action plans necessary to realise the goals. This work should proceed in tandem with the speedy development of an overall quality assurance process, with the active co-operation of the students.

Even with the great progress achieved by the university there are serious university issues that need urgent attention:

In trying to keep up with market trends the SER indicates that UMa is offering too many degree courses;

Sustainability of programmes is made problematic by the government decision not to finance degrees that offer fewer than twenty vacancies;

There is tension between teaching to the local needs for technical training on the one hand, and scientific research on the other;

UMa has highly qualified staff in areas of low student demand, and other areas struggling with the need to hire new staff due to large student demand.

Clearly the university has to tackle head on the question faced by all small universities: since we cannot be excellent at everything which areas do we concentrate on in order to maximise our effectiveness? For UMa this question is complicated, not only by shifting market trends, but also by the central role it must play in advancing the well-being and economic development of Madeira. As outsiders the team cannot offer useful advice in this matter, but would urge the university to collaborate with the local authorities and planning experts as part of the strategic planning exercise.

There are several inter-related issues that need a speedy intervention:

1. Some departments have unacceptably high dropout rates. Some areas (nursing, education) have a high completion rate, while others (engineering, IT) have not. There are of course a variety of reasons for this. Nevertheless, other universities have faced these problems and UMa must find a solution. It has a responsibility and duty of pastoral care to its students. Apart from the human aspect there is a waste of very scarce resources.

The team recommends that the university should address as a matter of urgency the high failure and low completion rates.

2. There appears to be much apathy among students and some of the staff. Students do not answer student questionnaires, nor are they pushed by staff to do so. Students, as well as staff, failed to attend the former Pedagogic Board on a regular basis. Attendance by the Degree Directors over the last two years varied from 13% to 100%, and by students from 6% to 88%. This apathy needs to be addressed in terms of causes and possible remedies. In the case of students it may be tied to secondary school structures and curricula, in which case the university should become involved with the secondary schools in a spirit of partnership and mutual cooperation. It may simply require more one-to-one involvement by teaching staff with students.

3. As we noted in the section on quality assurance there is an extremely low response rate to student questionnaires, and according to students we spoke to there is often no feed-back from the teacher. Thus students find it difficult to have their views heard and discussed, resulting in a profound lack of motivation.

While these tensions are not unique to UMa they do point to the need for an urgent re-assessment of the university's approach to the whole area of teaching and learning.

There is a need to adopt a new mindset, now common in many universities, with a real move from a teaching oriented system of instruction to an emphasis on student learning. UMa has taken the first formal step in this direction, but the SER notes opposition in some quarters. The reasonable teacher to student ratio should help to facilitate the process. Formal lectures should be reduced and augmented by well organised and supervised small self-study and group-study assignments, by tutorials, workshops and an increase in project work. This approach will bring a closer scholarly relationship between teachers and students.

Of immediate importance is the introduction of a formal system of student questionnaires for the assessment of courses and teaching, with feedback to students that is timely. It is crucial that this process should be formative and directed at improving the quality of teaching and learning and must never become a blame game. This can lead to a continuing dialogue between teachers and students, an important element in developing a climate where real improvement can take place.

The team recommends that the university should organise at once a systematic and routine procedure for the evaluation by students of teaching and courses. Feedback to students on the outcomes of these evaluations should be timely, and follow-up procedures agreed.

Staff development is central to the points considered here. We stress that it is of the utmost importance that training in teaching and modern presentation should be available to the teaching staff. This is particularly true of teachers who have been working in the non-university sector and come to teaching later in their careers. The new emphasis on learning will highlight the necessity to provide guidance to staff members in new methodologies, in modern methods of communication, and in mutually beneficial interaction with students. The introduction of an effective sabbatical system for staff, allied with an exchange programme with foreign scholars, will be helpful here and provide useful benchmarking on international practice. This will require a structured approach, good organisation, and systematic funding.

The team recommends that the university should establish a special unit with responsibility for staff development and training, including new and experimental ways of teaching and learning.

Modularisation of courses is a development which, if used to full advantage, can have a profound effect in many areas of university life. Of course the introduction of modularised courses is well advanced in some areas of the university and we urge UMA to proceed with the full implementation of this course structure. Modularisation will influence many of the developments planned by the university. At postgraduate level it will simplify the structuring and organisation of interdisciplinary studies for both the students and the university, and indeed may point the way to new combinations of subjects for interdisciplinary and multidisciplinary work.

At undergraduate level it opens up the possibility of a more effective use of resources by identifying or indeed creating courses which could be regarded as basic or core courses for all or many students in the same or different centres. At the same time we emphasise that in order to make the most effective use of modularisation professors should be given great leeway in creating programmes with structures that differ from pre-set norms, especially programmes that raise the national and international profile of the university. The only criterion should be that of excellence.

Modularisation will also contribute to transparency in the university's dealings with students, and in particular to student mobility since visiting students will be enabled to easily construct a study programme, while the implementation of ECTS will be simplified. Student handbooks should be produced that include a description of the content of each module taught in each semester in each course, properly organised with prerequisite modules clearly indicated. The handbook should contain an explanation of the overall aims, learning outcomes and purpose of

the courses on offer, benchmarks for student learning and achievements each year, clear guidelines on written and project work, principles on marking and feedback to students. Many universities now include a set of Student Rights and Responsibilities in their handbooks, and examples of these are easily found on the Internet.

Increasing the provision of lifelong learning is one of the government's strategic objectives. UMa has already taken several steps in this direction, and the team congratulates the university on these important developments:

All departments opened vacancies in their degree programmes for students over 23 years old, considering in the admission criteria their previous professional experience;

In 2006/2007 UMa opened the Senior University, offering programmes to people over 55 years old. The initiative was a success and in 2007/2008 the programme reopened to admit a second group of students, of which there are now 50;

The university was responsible for "Complementos de Formação", a programme which gave secondary school teachers with insufficient formation the opportunity to complete their degrees. Moreover the various departments have developed activities to promote continuous formation, especially in the teacher training area, special education, pedagogical supervision, school administration, e-learning, psychological support and social services.

However the SER notes that regular lifelong education programmes have yet to be developed. It seems that local companies and employers are reluctant to invest in lifelong education. Nevertheless we urge the university to continue and if possible extend their excellent work in an area that is central to the continuing development of the island. Piecemeal credit accumulation over time is an approach adopted elsewhere, facilitated by the adoption of modularised courses.

We would like to suggest that student care extends to the life of the students beyond graduation. The University should consider a systematic process for tracking its graduates and creating a database on what they do, where they go, their opinion on teaching and courses, and so on. This would be mutually beneficial since it would maintain the link between the graduates and the university and at the same time provide valuable information for curricular reform and care of undergraduates.

The team recommends that the university should form a University Alumni Association to maintain and strengthen contact with its graduates.

This process of maintaining effective close contact with graduates embeds the University further in the community, and in turn will be helpful to new graduates in finding employment.

4.2 Research

Research and development are core activities of the university and thus the strategic plan should contain a clear statement of UMa's goals in this important area and the action plans to achieve them.

Research is carried out in a number of Research Centres that have a total of 86 PhD researchers. Four of these Centres have already been mentioned and are funded by the FCT:

CCM (Mathematical Sciences), CEM (Centre for Macaronesian Studies), CQM (Madeira Chemistry Research Centre), CEEAplA (Centre for Studies of Applied Economy of the Atlantic). The latter is a joint partnership with the University of the Azores which hosts the Centre.

Two Centres are awaiting a decision on Funding by the FCT: Centre of Educational Sciences, and Centre in Sport and Health Sciences

There are six other Centres without a regular structure or budget, funded by research projects and by joint activities with national and foreign institutions.

UMa researchers are also associated with Centres in other parts of Portugal.

According to information on the UMa website UMa had 102 publications in research journals in 2007, with 40 UMa researchers listed among the authors. Over the years 2005-2007 there was a total of 271 articles with only 26 UMa researchers listed among the authors of 216 of these. Thus the research activity is not insignificant for a small, young university, but it seems to be carried out by a relatively small number of people.

Since 2,000 many R&D projects have been developed in UMa, several with partners in Europe, e.g. Germany, UK, Switzerland, and partners in North Africa, e.g. Morocco, Tunisia. About 30% of these projects have been submitted since 2005, with a total budget of about 3.5 million Euros.

The SER notes that “one of the difficulties felt by the University of Madeira regarding the assessment of research being performed by its academic community was the lack of information about what was being published. Obtaining that information from the researchers, on a regular basis, was not an easy task.” The team found this statement quite astonishing and totally outside their experience of working in research universities around the world. This attitude is to be deplored since it makes planning strategically on a university scale a virtual impossibility.

Since the mission of UMa is to be a university of international level a strong international research profile in its chosen specialised areas must be a key objective.

The team recommends that the university should:

- **Establish a research database**
- **Provide support for staff in applying for external sources of funding (e.g. FP7)**
- **Join with other universities in applying for large EU and other research grants.**

4.3 Internationalisation, Bologna Process

For a young university UMa deserves praise for its achievements so far in its international work, and we encourage further development in this area. In addition to the international projects already noted in the section on research the university has established fruitful protocols with Portuguese speaking universities, especially from Brazil and Cape Verde, involving cooperation with Professors and students on joint Masters and PhD degrees. At present 31 doctoral and 21 Masters students from Brazil are enrolled in the programme and some of their Brazilian professors are members of Madeira’s Research and Development Centre in Education. UMa has also developed a joint Masters programme, “Human-Computer Interaction”, with Carnegie

Mellon and joint PhD degrees are being prepared with several European universities, including the University of Thessaloniki, Greece, in the Humanities area, the University of Kyvaskyla's Nanoscience Centre, Finland, and the University of Laguna, Spain, in nanochemistry/nanomaterials.

In the Bologna Process three action items have been emphasised for the creation of the European Higher Education Area (EHEA). Quality assurance is the first of these and we have discussed the creation of a robust QA system in UMa earlier in this report. The second is the adoption of a degree structure on two main cycles. The university is to be congratulated on having this system already in place. The third is the mobility of students and teachers. In this regard the Ministers state that 'mobility of students and academic and administrative staff is the basis for establishing a European Higher Education Area'.

From the information provided by the SER and from our meetings with staff and students the team feels that much has yet to be done to improve on the international mobility of staff and students. In the years 2002/2008, under Erasmus programmes, a total of 85 Madeira students went out (38 in academic year 2007/2008, up from 9 in 2002/2003), and 119 came in. During this period the total funding for the Erasmus programme more than doubled. The SER points out that a barrier to outward mobility is a local traditional culture based on a strong link to the home place and family, while the lack of student dormitories and high travel costs may account for the low inward mobility. To stimulate interest in Erasmus, and to encourage students to avail of the programme, some universities have set up a Student Erasmus Club, where students who have been abroad meet to exchange experiences and to highlight for others the attractions of studying in another country.

The team recommends that the university should continue the good cooperation between staff and students in developing Bologna, and develop further mobility programmes for students to enhance their international experience.

4.4 The University and the Region

The mission statement of the university speaks of UMa's ability 'to make a meaningful difference to the lives of its students and the region of Madeira' and again of its 'interaction with the Madeira Region'. The inclusion of six representatives of Madeira society in the General Council is crucial here, and we have already referred to this key development in the section on governance and organisation. In our meeting with the President of the Local Council a recurring theme was the central role to be played by the university in the economic progress of the island.

The team recommends that the university should develop a mechanism for constructive dialogue with regional government.

The SER refers to the university's contacts with schools, the organisation of seminars open to the general public, its hosting of exhibitions and conferences, the organisation of the Senior University referred to earlier. In our meetings with employers, graduates, representatives of society and local government, we were told of useful but limited interaction with some

departments of the university. The need for more interaction, but interaction organised in a systematic way and at university level, was repeatedly emphasised.

The team recommends that the university should deepen its collaboration with external partners by, for example,

- **Establishing a forum for discussion with local employers;**
- **Closer articulation between student training and capabilities, and the needs of employers in the region.**

The SER notes that “UMa graduates have less employment problems than graduates coming from other universities in the country”, but nevertheless it may be of interest to note that many universities have set up a Careers Office. The remit of this office usually includes the following: establishing contact between students and industry for the exchange of information on posts available and graduates qualified to take up the posts, helping students to prepare for interviews, inviting employers to speak to groups of senior students on employer expectations, arranging interviews, and building up a database on its activities. This is another effective way to embed the University in the working life of the community and maintain contact with graduates and employers.

The team recommends that the university should establish a Careers Office.

5. Conclusion

Throughout this report we have recommended the establishment of several new functions at UMa, and we are conscious of the fact that it would be unfeasible and unpalatable to divert the University's severely limited resources to many of these areas which may be viewed as extensions of institutional management. Nevertheless, they represent serious needs that require attention in the near future. One approach that has been successfully pursued elsewhere would be to assign some of the proposed new responsibilities to appropriately qualified existing staff members, through partial secondments (releasing them from certain "regular" duties in order to take on such leadership roles on a part-time basis). This will require a comprehensive understanding of teaching staff's role that includes such important non-teaching assignments as research and development, community service, professional contributions, and participation in administrative leadership activities among the tasks that faculty members can legitimately be expected to perform.

Such an approach will significantly facilitate the institution's ability to respond to the numerous serious challenges it now faces as rare and wonderful opportunities to pursue substantial improvement that should be grasped and exploited to their full potential, an attitudinal orientation that we encountered in several of those whom we met -- and which we hope will spread throughout the UMa community.

Envoi

We would like to acknowledge warmly once again the co-operation and hospitality we received throughout the two visits. We thank the rector, who signed the invitation letter to the EUA, the vice-rectors and department heads who actively supported us during our two visits, and all the staff and students, as well as stakeholders from outside the university, for their helpful contribution to our discussions

It was a pleasure to be in Madeira to discuss with students and staff the future directions of the University. At this time of profound and far-reaching change in higher education the University is to be congratulated for its frank and open examination of its ability to meet the challenges and opportunities that lie ahead. In all our meetings we were struck by the strong determination to see UMA achieve its full potential. We hope that the university finds our comments and suggestions helpful, and we wish the university well for the next stage of its development.

Summary of recommendations

The team recommends that the exclusion of non-teaching staff from the General Council should be reconsidered at the earliest opportunity.

The levels of devolved autonomy between the General Council and the Centres of Competence should be clearly defined in the university by-laws and sufficiently limited to enable the General Council to be effective in its overarching governance role.

The nature of the working relationship between the Centres of Competence and the Colleges should be clearly set out in the university by-laws

The senior management of the university should set up appropriate reporting arrangements for the new university-wide functions recommended throughout this report.

The university should develop vision and mission statements that are specific to UMa and the island of Madeira.

The university should establish a capability for the collection of data on all its activities.

The university should establish a University Steering Committee with responsibility for preparing a Strategic Plan for the years 2009-2013. The Committee should be chaired by the rector.

The university should establish overarching internal quality assurance procedures, and a high level Standing Committee to ensure comparability between the Pedagogical Councils of the Centres of Competence.

The university should establish a Quality Office to oversee the operational procedures for quality assurance.

The university should develop a fund-raising strategy to increase resources from external non-governmental sources for its academic activities.

The university should address as a matter of urgency the high failure and low completion rates.

The university should organise at once a systematic and routine procedure for the evaluation by students of teaching and courses. Feedback to students on the outcomes of these evaluations should be timely, and follow-up procedures agreed.

The university should establish a special unit with responsibility for staff development and training, including new and experimental ways of teaching and learning.

The university should form a University Alumni Association to maintain and strengthen contact with its graduates.

The university should:

- **Establish a research database**
- **Provide support for staff in applying for external sources of funding (e.g. FP7)**
- **Join with other universities in applying for large EU and other research grants.**

The university should continue the good cooperation between staff and students in developing Bologna, and develop further mobility programmes for students to enhance their international experience.

The university should develop a mechanism for constructive dialogue with regional government.

The university should deepen its collaboration with external partners by, for example,

- **Establishing a forum for discussion with local employers;**
- **Closer articulation between student training and capabilities, and the needs of employers in the region.**

The university should establish a Careers Office.