

POLYTECHNIC INSTITUTE OF TOMAR

EVALUATION REPORT

June 2010

Team :
Carles Solà, chair
Hannele Niemi
Gheorghe Popa
Anita Liice
Don McQuillan, coordinator

Table of Contents

1. INTRODUCTION.....	3
1.1 Institutional Evaluation Programme.....	3
1.2 The Polytechnic Institute of Tomar and the National Context	3
1.3 The Self-Evaluation Process	5
1.4 The Evaluation Team	5
2. CONSTRAINTS AND INSTITUTIONAL NORMS	6
2.1 Profile of the Institute.....	6
2.2 Autonomy	6
2.3 Governance and Organisation.....	7
2.4 Mission, Vision, Strategic Planning.....	9
2.5 Quality Assurance.....	11
2.6 Finances	13
3. CAPACITY FOR INSTITUTIONAL CHANGE	15
3.1 Teaching and Learning: Study Programmes, Student Care.....	15
3.2 Research.....	17
3.3 Internationalisation, Bologna Process.....	18
3.4 IPT and the Region.....	19
4. CONCLUSION.....	21

1. INTRODUCTION

This report is the result of the evaluation of the Polytechnic Institute of Tomar (IPT). The evaluation took place over two visits.

1.1 Institutional Evaluation Programme

The Institutional Evaluation Programme (IEP) is an independent membership service of the European University Association (EUA) that offers evaluations to support the participating institutions in the continuing development of their strategic management and internal quality culture.

The distinctive features of the Institutional Evaluation Programme are:

- A strong emphasis on the self-evaluation phase
- A European and international perspective
- A peer-review approach
- A support to improvement

The focus of the IEP is the institution as a whole and not the individual study programmes or units. It focuses upon:

- Decision-making processes and institutional structures and effectiveness of strategic management
- Relevance of internal quality processes and the degree to which their outcomes are used in decision making and strategic management as well as perceived gaps in these internal mechanisms.

The evaluation is guided by four key questions, which are based on a 'fitness for (and of) purpose' approach:

- What is the institution trying to do?
- How is the institution trying to do it?
- How does it know it works?
- How does the institution change in order to improve?

1.2 The Polytechnic Institute of Tomar and the National Context

IPT is located in the Medio T jo region of Portugal, between Lisbon and Coimbra. It has three schools, two in Tomar and one in Abrantes: the Higher School of Management of Tomar, the Higher School of Technology of Tomar, and the Higher School of Technology of Abrantes. In addition IPT has several Centres that have been created in partnership with municipalities, one of which is the Centre for Polytechnic Studies at Torres Novas (CEPTON). Thus the principal area of influence of IPT is the triangle formed by Tomar, Abrantes and Torres Novas.

The basic strategic policy of IPT has not changed since its creation on 1 January 1977. The Self-Evaluation Report (SER) notes that from its origins the institute has been characterized by a combination

of programmes rooted in the regional economic reality (Engineering and Management), and innovative, and internationally-targeted programmes (Art and Archaeology and Graphic Arts).

IPT has a strategic policy programme for the years 2007-2013 with specified strategic goals focused on three major areas:

- Reformulation of the organisational model and repositioning in the context of core educational supply;
- Responsiveness towards the outside;
- Expansion of the region of influence and broadening of its educational supply.

The IEP evaluation of the Institute coincides with a period of major change in Portuguese higher education. New legislation has been enacted requiring new statutes that affect governance, management and pedagogical structures in every higher education institution. A new National Agency for Evaluation and Accreditation has been established as well as a new Career Statute of the Academic Staff of Polytechnic Higher Education. Add to this the decrease in the demand for higher education as a result of demographic decline, and budget cuts due to the present worldwide global recession.

The new IPT statutes were approved in a special representative Statutory Assembly, endorsed by the minister and published on 30 April 2009. IPT now has full academic, cultural, scientific, pedagogic and disciplinary autonomy. It also has autonomy in the management of property, finance and administration. In addition the three schools have autonomy in their pedagogic, scientific and cultural policies.

The evaluation takes place in the context of a system-wide, extensive, independent, voluntary and objective review of Portuguese higher education institutions by IEP, facilitated by the Ministry of Science, Technology and Higher Education (MCTES). IEP 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.

1.3 The Self-Evaluation Process

The self-evaluation process was organized and managed by a Self-Evaluation Coordinating Committee established by the IPT President. The committee contained ten members drawn from faculty, staff and students. Although the final draft of the self-evaluation report was agreed after wide consultation across all sectors of the institution it appears that the level of engagement of the academic community with the process was low. In addition, according to the SER, the self-assessment process revealed some difficulties in obtaining quantitative and qualitative data concerning the institution's activity, due in part to the fact that IPT had not been subject to evaluation processes between 2005 and 2009 and therefore there was no systematic data collection.

1.4 The Evaluation Team

The self-evaluation report, together with the appendices, was sent to the evaluation team in good time. The visits of the evaluation team to IPT took place on 15-16 October, 2009 and 12-13-14 April, 2010. In between the visits the team requested and received some additional documentation.

The evaluation team consisted of:

- Professor Carles Solà, former Rector, Autonomous University of Barcelona, Spain
- Professor Hannele Niemi, former Vice-Rector, University of Helsinki, Finland
- Professor Gheorghe Popa, former Rector, Alexandru Ioan Cuza University of Iasi, Romania
- Ms Anita Liice, European Student Union, Latvia
- Professor Don McQuillan, former Chief Executive, Irish Universities Quality Board, Ireland.

Professor Bert Hoogewijs was originally a member of the team and participated in the preliminary visit. He subsequently withdrew from the team and his place was taken by Professor Niemi.

We would like to acknowledge warmly the co-operation and hospitality we received throughout the two visits. We thank the President, Dr António Pires da Silva, who signed the invitation letter to EUA, the vice-president Eugénio Almedia and other leaders who actively supported us, and all the staff and students, as well as stakeholders from outside the institution, for their helpful contribution to the discussions. We wish especially to thank Dr Valentim Nunes for his efficiency in organising the documentation, liaising with the team and maintaining our daily schedule. Finally Herminia Sol was an excellent translator and Catarina Morgado was always there to point us in the right direction. We trust that our joint efforts will provide a sound springboard for IPT as it moves into the next phase of its evolution.

2. CONSTRAINTS AND INSTITUTIONAL NORMS

2.1 Profile of the Institute

The Polytechnic Institute of Tomar began operations in October 1982 in an old building in downtown Tomar. In 1990 a new campus was opened in the eastern part of the city and it is here that two of the Institute's three schools are located: the Higher School of Management of Tomar (ESGT) and the Higher School of Technology of Tomar (ESTT). The campus has ample teaching and laboratory space and accommodates the institution's facilities: library, bookshop, copying service, residence halls, etc. There are also sports fields as well as green and leisure spaces. In 1999 the Higher School of Technology of Abrantes (ESTA) was established. At the moment ESTA operates in an old building in the centre of Abrantes with student residence halls nearby. However new spacious premises are already under construction in the new part of the city.

IPT has established several Centres, or Training Units, in partnership with municipalities:

- Centres for Polytechnic Studies at Torres Novas, Golegã, Sertã and Mação
- Study Centre for Specialised Training at Ferreira do Zêzere
- Earth and Memory Institute in Mação

ESGT offers management programmes in the areas of Business, Tourism, Human Resources, Health, Banking, Services, Auditing, Taxation and Public Administration.

ESTT offers programmes in Arts and Engineering. Arts include Conservation and Restoration, Archaeology, Plastic Arts, Photography and Graphic Arts. Engineering includes Chemistry and Biochemistry, Environment, Civil and Electrotechnical Engineering, and Informatics.

ESTA offers programmes that include Communication, Documentary Cinema, Information Technologies, Design and Mechanical Engineering.

Currently IPT offers 23 programmes at bachelor's level, 7 at master's level and 3 at postgraduate level, as well as 16 technological post-secondary programmes (CET). There are 3,728 students in 1st and 2nd cycle and CET programmes. Of these 1,239 are in ESGT, 1,734 in ESTT and 755 in ESTA.

The institute has established the important 'M23 scheme' whereby students are admitted who are over 23 years old. In academic year 2008-2009 a total of 133 students were admitted under this scheme, representing 13% of all entering students that year.

There are 251 faculty members, 66 in ESGT, 130 in ESTT and 55 in ESTA.

This gives an overall student to staff ratio of 15:1 which compares favourably with ratios in most institutions

2.2 Autonomy

According to the new national law the IPT 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 autonomy for higher education institutions which to-day find

themselves 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 that autonomy is bound up with accountability to society, and that accountability brings with it the responsibility to drive the required change and improvement. Thus HEIs must use their autonomy and independence for positive strategic development and involvement with society according to its expectations and needs.

In its Graz Declaration, EUA 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 Polytechnic Institute of Tomar which bears a great responsibility in acting as a driver for the cultural, social and economic development of its region. The team stresses the need for IPT to work in concert with regional and local authorities in developing policies and strategies that strengthen both the institution and the fundamental structures of society. We urge the institute 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 Schools and Research Units. This is unusual and if not properly managed has the potential to create difficulties for the future development of IPT. We will return to this important topic in the next section on governance and organisation.

2.3 Governance and Organisation

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

The **General Council**, which will have 21 members, consisting of 11 elected teachers/researchers, 3 elected students, one representative of the employees 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 President, approves strategic and budget plans, sets fee levels, approves consolidated financial reports, and conducts property transactions. The chair convenes and presides. The Council normally meets four times a year and may invite non-voting members. The president has no vote.

The **President**, who is the chief executive authority of the institution, elected by the General Council for

a four-year, renewable, term, and removable by a two-thirds majority. The President 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, and guarantees the good functioning of the institution. The president appoints a vice-president, and an administrator in charge of administrative and financial affairs, both by secondment.

The **Administrative Council**, which consists of the president, vice-president and administrator. The Council's responsibility is to promote actions and take decisions in administrative and financial related matters.

The schools, in addition to scientific and pedagogical autonomy, enjoy management autonomy.

There is an office for Social Services (SAS) that enjoys both financial and administrative autonomy. SAS have legal status and "ensure school social functions". They develop social action according to law and support cultural, sport and other activities favouring higher education access and successful completion of studies by the students.

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 polytechnic is balanced by public and transparent accountability to the society that maintains it; IPT will have a direct line to social and economic developments in the region; the institute will have immediate access to regional advice when preparing its strategic plan. The team also applauds the inclusion of a representative of the employees, who are crucial to the successful daily operation of the polytechnic as well as to the effective implementation of future strategies. They will make a valuable contribution to debate in the Council.

With regard to the roles of the President and General Council, it seems to the team that the strategic and operational effect of the new structures will be that the President becomes the Chief Executive Officer of IPT, working very closely with the General Council to lead the polytechnic 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 institute, that there is great awareness of the opportunities and challenges that lie ahead. Driving change in the context of an overarching institutional strategic plan covering all activities of IPT will be the first and most important of these challenges. Further developing the regional role of the institution, 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 institute.

There are many committees at school and institutional level that manage, organize and advise on all facets of IPT's activities. A glance at the organisational charts on pages 25-29 of the SER is instructive. The team wonders if such complexity is needed in an institution with fewer than 4,000 students and 251 teaching staff. Given the number and variety of committees contributing to the decision making process in the institute, the team asks if IPT will be able to respond rapidly enough to the challenges facing modern higher education institutions 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 institute.

The historic development of IPT has created a situation where great independence is devolved to the schools, with a corresponding diminution of power at the centre. This can lead to a 'fortress faculty' mentality where the schools become academically and administratively isolated from one another. This danger was highlighted during our discussions in Abrantes where several academic staff noted the sometimes long bureaucratic delays in communications between the central administration and ESTA. Again the team feels that this situation may lead to problems when the polytechnic needs to respond rapidly to new situations and challenges.

In particular the devolution of autonomy from the General Council to the Schools and Research Units is either too extreme or poorly defined, leading to overlap of decision-making function, conflict and delays. In addition the matrix structure of Schools and Research Units has the potential for conflict and delay.

The team recommends that:

- **The levels of devolved autonomy between IPT and the Schools and Research Units should be clearly defined by the institute in its by-laws**
- **The nature of the working relationship between the Schools and the Research Units should be clearly set out by the institute in its by-laws.**

2.4 Mission, Vision, Strategic Planning

In Portuguese law the mission of polytechnic institutions is "the creation, transfer and dissemination of professional knowledge by combining teaching, learning, applied research and experimental development". This is a succinct and precise statement of the role of polytechnic institutions, not only in Portugal, but everywhere.

The SER adds that IPT aims to produce resources and human capital to meet the needs of the global knowledge society and participate in the production and development of scientific and technological knowledge. This is a worthy statement. But the team feels it is too generic, that it could be applied to any polytechnic institution anywhere in the world. It does not reflect the special situation of IPT in its region of influence, its responsibilities to the society around it and its vision for the future.

The team recommends that IPT should develop vision and mission statements that are specific to IPT and the region it serves.

The SER sets out six strategic goals to be achieved in the coming years. They are based on the "IPT Development Plan", prepared by external professional consultants, which sets out a general framework for the future evolution of the institution. However the institute has not yet developed a strategic plan designed to achieve them. Indeed the lack of a strategic plan is listed as a weakness of IPT in the SWOT analysis.

Thus the creation of a realistic strategic plan is crucial to further development. IPT must look in a critical and analytic way at where precisely it wants to go in the short to medium term, how it envisions its future in the regional, national and international contexts. How does a small, new, under funded institution 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 institution understands 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 IPT positioned now?
- Where does IPT want to go?
- How does IPT 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 IPT should re-examine, in the light of the IEP evaluation experience, its vision, aims and objectives, strengths and weaknesses, 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 polytechnic to meet new developments.

The team recommends that IPT should establish a capability for the collection of data to support ongoing strategic planning.

The second question addresses the vision and mission of IPT, and the detailed objectives to be achieved, say in the period 2010/2014, based on the six strategic goals and the SWOT analysis. We again urge IPT to give close attention to formulating vision and mission statements that more clearly reflect its aspirations at departmental, school, institutional, local, 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 IPT President should establish and chair an institutional Steering Committee with responsibility for preparing a detailed action plan based on the six strategic goals.

A sense of ownership of the plan throughout the institute is essential to the success of the process. This could be achieved using a fairly common methodology. In the first instance each of the schools might prepare an agreed plan based on contributions from the individual departments. These plans could then

be confronted with the polytechnic's vision and aims, and harmonised by the Steering Committee to produce an overarching plan for the whole institution. 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 IPT. Inevitably there will be competing agendas, and tension between the various elements of the institution. It is never 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. Leaders will play a vital role in bringing doubters along and in creating the conviction that the task is worth the effort. This process may be particularly difficult in an institution like IPT where sub-units may jealously guard their autonomy in teaching and learning.

2.5 Quality Assurance

The new law states that regular self-assessment is mandatory in Portuguese universities, while the Government strategic objectives noted in section 1.2 require universities to develop quality assurance procedures and processes in line with the best international practice. The SER notes that IPT established a Quality Evaluation Office that started its activities in February 2008, and outlines the various quality measures currently in operation, including the use of questionnaires to staff and students. The team congratulates IPT on these important initiatives. However the SER admits that "the outcomes of this process are managed in a somewhat casuistic way", and sums up by saying that "although there are some internal procedures intended to improve teaching and learning processes, this is not obvious to, or shared by, the academic community."

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 higher education institutions are responsible for developing internal quality cultures. With the active contribution of students, HEIs 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, 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’,

‘European Standards and Guidelines for Quality Assurance in the European Higher Education Area’ (ENQA publication), commonly referred to as ESG.

The team recommends that IPT should

- **Establish overarching internal quality assurance procedures, and a high level Standing Committee to ensure implementation across the institution**
- **Establish a Quality Office to oversee the operational procedures.**

In this connection we note that excellent QA systems, consistent with the EUA approach, have been developed in several countries around Europe so IPT 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 institutional 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 through continuous improvement, and not to apportion blame for perceived shortcomings. Again the role of the IPT leadership is crucial in driving the process and in facilitating the missionary work necessary to convert the doubters.

It is of the utmost importance to relate the process of quality assurance with the institute’s strategic planning process. The ongoing year-by-year internal evaluation of all its activities will provide IPT with tested and dependable micro information on how the institute is working, information which will be invaluable in helping to modify and adapt the strategic plan.

Other procedures affect the quality of performance at IPT. 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 student years.

Interest in studying at IPT shows a healthy trend, with the number of students applying to enter IPT increasing from 2195 in 2005/2006 to 3170 in 2007/2008. The students are predominantly from the region but several come from farther afield. The great majority of the students we spoke with are happy with their decision to attend IPT and enthusiastic about their teachers. They agreed that the teachers are approachable and easy to talk to. Most of the students we met spoke very good English. On the

other hand there are several quality issues related to the teaching and learning environment, such as the high failure rate in some courses, and these will be discussed in the appropriate section.

The procedures for appointing professors appear to be quite open and transparent and totally in the hands of the institution. It is essential that this important element of autonomy be maintained and that procedures are scrupulously applied. The age distribution of academic staff augurs well for the future of IPT: the SER states that "about 45% is aged between 30 and 39, and 34% between 40 and 50". These figures are remarkable when compared to the age distribution of academic staff in most European higher education institutions today. However, while the number of PhD holders in the Institute is growing and currently stands at 14% of all faculties; it is below the number required by law. According to the SER at least 15% of all teachers and researchers should hold a PhD and at least 35% should hold a specialist degree, while for each 30 students there should be "a minimum of one professor with PhD or one specialist degree holder". IPT is well on the way to meeting these conditions: currently 74 faculty members are enrolled in doctoral programmes in various universities, and 62 are expected to complete the degree within the next three years. The team congratulates IPT on this dynamic approach to meeting the legal requirements and, of course, improving the quality of teaching and research.

The team recommends that IPT should continue its commendable efforts to increase the number of academic staff with doctoral degrees.

2.6 Finances

The IPT budget is controlled centrally. The internal distribution of the budget is decided in a meeting between the President and School Directors and is adjusted according to a variety of parameters including student numbers and programme characteristics. Although the Schools have no financial autonomy they do have a certain limited autonomy to produce revenue which is then formally managed from the centre. The School Directors may authorize operating expenses up to 500 Euro. Higher expenses must be authorized by the President.

The total budget of the institute in 2008 was 15.05 million Euro. Of this, 10.1 million came from the state, 3.1 million from student fees, and the rest from various sources including research projects. The corresponding figures for 2006 were 13.6 million and 1.9 million respectively.

The SER points out that in 2008 overall staff expenses amounted to about 9.6 million. Further pressure on funding comes from the fact that IPT now has to bear the 11% of the General Retirement Fund for civil servants.

The SAS budget is determined by the competent ministry and managed autonomously by its board.

The SER notes that the capacity to produce its own resources is limited. In this context it may be worth noting that 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. The team draws the institute's attention to the

possible duplication of effort across the two Schools on the Tomar campus in areas of administration, as well as some academic related activities like information systems and the teaching of common core courses.

Many institutions have formed a Fund Raising Committee to seek funding in a systematic fashion. These committees are often highly successful in attracting money, and especially in obtaining support for special projects. Here the good will already established by IPT 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 IPT.

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

3. CAPACITY FOR INSTITUTIONAL CHANGE

3.1 Teaching and Learning: Study Programmes, Student Care

IPT is to be congratulated on the introduction of the reforms advocated by the Bologna Process. Indeed the institute has obtained the quality label for best practices in the use of the ECTS system (ECTS label) and the quality label for the Diploma Supplement (DS). All degrees offered by the institute have been adapted to the 3-5 model. Appendix X to the SER lists the local, national and international prizes and honours accorded to students of the institute. This success attests to the standard and quality of student work achieved by IPT in a very short time. The goal now should be to consolidate and improve on this excellent beginning.

Teaching and learning at IPT, as well as 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 already achieved in a very short period, IPT, in common with all small under funded higher educational institutions, faces some critical questions, for example:

In trying to keep up with market trends is IPT offering too many degree courses, or is it hampered by the limited number of programmes allotted to it by the government? Is sustainability of programmes made problematic by the government decision not to finance courses with small numbers of students? Is there tension between teaching to the local needs for technical training on the one hand, and scientific research on the other?

Students in Abrantes raised the first two issues. It seems that some were unable to take an advertised course, either because there weren't enough students interested in the course or because no teacher was available to teach it. Some would like to have taken courses that were not on offer. The third arose in discussions with researchers, especially those engaged in working for a PhD, who felt they did not have enough time for their research due to teaching commitments.

Clearly IPT has to tackle head on the question faced by all small polytechnic institutes: since we cannot be excellent at everything, which areas do we concentrate on in order to maximise our effectiveness? For IPT this question is complicated, not only by shifting market trends, but also by the central role it must play in advancing the wellbeing and economic development of its region of influence. As outsiders the team cannot offer useful advice in this matter, but would urge the institute to strengthen its collaboration 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. As noted in the section on quality assurance there is a high failure rate in some courses. IPT is well aware that 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. There is low attendance at theoretical courses, and this may be contributing to the failure rates. Entering students are often poorly prepared in Mathematics and Physics, and while many teachers offer remedial classes attendance is not compulsory. There is a low response rate to student

questionnaires, and according to students we spoke to, there is often no feedback from the teacher. Thus students find it difficult to have their views heard and discussed, resulting in a lack of motivation.

Of course these issues are not unique to IPT. However they do point to the need for an urgent re-assessment of the institute's approach to the whole area of teaching and learning. The SER notes that IPT is aware of this need to adopt a new mindset, now common in many institutions, with a real move from a teaching oriented system of instruction to an emphasis on student learning. IPT has already taken the first steps in this direction, and the SER outlines several innovative approaches that have already been undertaken. However in our discussions with students it was clear that these innovations had not been introduced in a systematic fashion across the institute. By way of example some students told us that they never had tutorial sessions.

IPT knows what has to be done. 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. The SER notes that the unfavourable student to staff ratio at IPT makes it difficult to adopt this approach.

Of immediate importance is the introduction of a formal system of student questionnaires across the institute 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. It must never become summative, a blame game. Such a system, if efficiently and routinely implemented, 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 IPT should:

- **take immediate steps to address the high failure rates in some course**
- **increase and if necessary require attendance at the theoretical courses**
- **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, as is the case in IPT. 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 national and 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 IPT 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 academic life. Of course the introduction of modularised courses is well advanced in some areas of the institution and we urge IPT to proceed with the full implementation of this course structure. Modularisation will influence many of the developments planned by the institute. At all levels it will simplify the structuring and organization of interdisciplinary studies for both the students and the institute, and indeed may point the way to new combinations of subjects for interdisciplinary and multidisciplinary work. 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 schools.

Modularisation will also contribute to transparency in the institution'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. IPT has already taken several steps in this direction and more are planned. For example, executive training courses, such as short courses in accountancy and taxation, are on offer that provide professional enhancement and accreditation. We urge the institute to continue and if possible extend this excellent work, central to the ongoing development of the region. 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 polytechnic 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 Institute and at the same time provide valuable information for curricular reform and care of undergraduates.

The team recommends that IPT should form an Alumni Association to maintain and strengthen contact with its graduates.

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

3.2 Research

Research and development are core activities of a polytechnic institute. This is explicitly recognized in IPT's fourth strategic goal: 'strengthen IPT's insertion in the national higher education network for

Research and Development'. However the SER notes that at present research activity is weak. It cites several reasons for this: lack of a centralised internal policy for research, and lack of incentives for R&D throughout the polytechnic sector. In addition the loss of critical mass to other institutions is a serious obstacle to establishing research units since much of the research by IPT staff is done in collaboration with teams located in other institutions. Nevertheless the team was impressed by the long list of recent publications by staff, several in first class journals, a commendable achievement in a young institution. Groups of faculty members are integrated in 18 applied research laboratories in areas that "are crucial for the strategic development of the local region"; there are 15 research units loosely organized by individuals or groups of faculty members; and of course there is the research activity conducted in the context of individual PhD work.

If IPT is to achieve its strategic goal in the area of R&D it is crucial that the strategic plan should contain a clear statement of the institute's precise objectives in this important area and the action plans to achieve them. A process of focusing on specific research areas should start now, with young staff encouraged to pursue PhD degrees in these areas. A first step is to know the present position as precisely as possible and to support those already involved in research and development projects. Appropriate support and back-up should be available.

The team recommends that IPT should

- **Establish a research data base**
- **Develop an institutional research strategy that includes focus areas of research**
- **Establish a system of support for teachers working for a PhD**
- **Establish a Research Office**

3.3 Internationalisation, Bologna Process

For a young institution IPT is to be congratulated on its achievements so far in its international work, and we encourage further development in this area. There is a very professional International Relations Office that coordinates a wide variety of important activities. The institute has established partnerships with institutions in Portuguese-speaking countries such as Brazil and Cape Verde, and in Europe with Rovira i Virgili de Tarragona and the National Art Museum in Catalonia, the Institute of Archaeology in University College London and the Musée d'Histoire naturelle de Paris. The latter is in the framework of Erasmus Mundus Masters in Quaternary and Prehistory which involves students from several countries. The SER notes that "in this domain IPT has been granted the Golden Award by the European Commission for the quality of its intensive courses in archaeology and cultural heritage management".

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 IPT earlier in this report. The second is the adoption of a degree structure on two main cycles. The institution 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'.

In academic year 2007/2008 in the framework of the Erasmus Programme 35 IPT students went out and 17 foreign students came in. The corresponding numbers for 2005/2006 were 16 and 13 respectively. So far only a reduced number of staff have availed of the programme. These relatively low student figures are perhaps not surprising for a young institution that must of necessity focus attention on more basic bread and butter issues. To stimulate interest in Erasmus, and to encourage students to avail of the programme, some institutions 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 fact that IPT has already obtained the ECTS and DS labels should act as a further stimulant.

The 5th strategic goal of IPT is to “expand and intensify the institution’s intervention in Europe and in the world through internationalization of its products and activities’. Key objectives to achieve this goal are described on page 9. They include:

- Intensify international mobility and employability of its students
- Intensify mobility and training of its faculty members
- Foster cultural interchange and research at international level
- Increase recruitment of foreign students
- Reinforce the role of the International Relations Office (GRI).

These objectives will remain a mere wish list unless the strategic plan contains precise and realistic steps to progress them in the period 2010/2014, with measurable indicators of success. The GRI should play a central role here with the full support of the IPT leadership.

The team recommends that IPT, working through the International Relations Office, begin at once the drafting of the section of the strategic plan dealing with progressing the 5th strategic goal.

3.4 IPT and the Region

IPT’s influence in the region it serves cannot be overemphasized. This was a central theme in our meetings with all sections of the institute and with local political, cultural and business leaders. The crucial role it plays in the economic progress of the Tomar-Abrantes-Torres Novas triangle and beyond was particularly stressed in discussions with business people. In this context the inclusion of six representatives of the community in the General Council is of immense importance, and we have already referred to this key development in the section on governance and organisation.

IPT aims at strengthening and expanding local partnerships “so as to maintain a long-lasting product supply that fits local needs (educational supply, applied research and service provision”), enhancing the dissemination of knowledge/technology and promoting entrepreneurship in its region of influence”. To consolidate and reinforce interaction with local industrial and institutional structures IPT has created a Consultative Committee with the participation of regional industrial and business leaders. This is an important development and the team commends IPT on this initiative.

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

- **Ongoing development and expansion of the work of the Consultative Committee**
- **Closer articulation between student training and capabilities, and the needs of employers in the region**

IPT has an Employment Office to facilitate the employment of graduates. The team feels that the work of this office would be greatly enhanced by expanding its remit in line with that in other institutions. This 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 IPT in the working life of the community and maintain contact with graduates and employers.

The team recommends that IPT should expand and strengthen the remit of the Employment Office.

4. CONCLUSION

We would like to acknowledge warmly once again the co-operation and hospitality we received throughout the two visits. We thank the president, António Pires da Silva, who signed the invitation letter to the IEP, the vice-president, Eugénio Almeida and the school directors who actively supported us during our two visits, and all the staff and students, as well as stakeholders from outside the institution, for their helpful contribution to our discussions. It was a pleasure to discuss the future directions of the Institute. At this time of profound and far-reaching change in higher education IPT 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 IPT achieve its full potential. We hope that the Institute finds our comments and suggestions helpful, and we wish it well for the next stage of its development.