UNIVERSIDADE DO PORTO

Self-Evaluation Report

Annex III

Summary Report

Institutional Evaluation European University Association

University of Porto Institutional Evaluation

Summary Report

Continuous Improvement Service University of Porto

Table of Contents

ntroduction	3
Part I – The improvement cycle at the University of Porto	4
- What do the Faculties want to do?	
Mission and strategic objectives	4
Opportunities and threats	4
- What are the strengths and weaknesses of the Faculties in view of their objectives?.	5
Operational objectives in each area	
Strengths and weaknesses	6
- How do the Faculties know what they are doing and what is the improvement plan?	7
Monitoring	7
Improvement plan	7
Part II – Analysis of the Self-Evaluation Reports	9
Mission and objectives	9
Opportunities and threats	10
Governance and Management	10
Human Resource Management	11
ICT	12
Teaching/learning	12
Research and Development	13
Services to the Community and Internationalisation	14
Operational objectives	14
Strengths and weaknesses	15
Governance and Management	15
Human Resource Management	16
ICT	17
Teaching/Learning	18
Research and Development	20
Services to the community and Internationalisation	22
Monitoring	23
Improvement plan	24
Governance and Management	24
Human Resource Management	24
ICT	24
Teaching/Learning	25
Research and Development	
Services to the Community and Internationalisation	25
Part III – General Conclusions	26

Introduction

The summary report on the institutional evaluation of the University of Porto is the result of the analysis of both the self-evaluation reports and the external evaluation reports produced under the scope of the institutional evaluation project. The analysis of these reports was based on a qualitative analysis.

The main objective of the self-evaluation, from a standpoint of quality management, was for each Faculty to assess its practices and procedures. In other words, the idea was for each Faculty to assess how its organizational structure and procedures ensure that the standards are met, and whether the processes for improving quality have been established. This was basically an exercise to evaluate the performance of the management system in each Faculty in light of explicit or implicit objectives, so that we can now assess how a culture of quality has been achieved at the U.Porto, as a whole.

Based on self-evaluation guidelines used by all Evaluation Committees (EC), we conducted a cross-level appraisal, focusing on each area separately, taking into consideration the distinct points of view of the various Faculties.

The most critical challenge was perhaps to determine the major guidelines and trends, without overlooking the tremendous diversity present at the University of Porto. As such, the report does not illustrate an "average" of the different views, opinions and stances of the ECs on the respective Faculties, but rather an interpretation of what seems to be the most relevant frailties and strengths and strategies of the U.Porto. We hoped that this document would clarify how the Faculties see the University. Along the document, that view is balanced with the perspective coming from the viewpoint of the central administration at the University – the vision of the University seen through the Rectory team's eyes.

The first section – Part I, The improvement cycle at the University of Porto – is an overall appraisal of the planning (mission, strategic goals, threats, opportunities, strengths and weaknesses), monitoring and improvement processes that the self-evaluation has highlighted. In the second section - Part II, Analysis of the Self-Evaluation Reports - we find more detailed opinions of the ECs on their Faculties, based on the self-evaluation reports. Finally, in the last section - Part III, General Conclusions - we highlight some of the conclusions that may support some initiatives aiming at strengthening the culture and practice of quality at the University of Porto.

The specific areas under scrutiny include nuclear areas - teaching/learning, governance and management and research and development, and cross-level areas – services to the community and internationalisation, management of human resource and ICT.

Part I – The improvement cycle at the University of Porto

- What do the Faculties want to do?

Mission and strategic objectives

The analysis of the self-evaluation reports allowed us to realize that the mission of the Faculties line up with the strategic mission defined for the University: "an education, research and development institution, committed to the comprehensive training of people, with respect for their rights, and to active participation in the advancement of its communities".

Although we can identify explicit and implicit strategic guidelines at the Faculty level, it is not quite clear that they are the result of sharing strategic goals common to all the University, indicating that the organizational cultures associated with the distinct disciplinary fields play a preponderant role in this matter.

In all Faculties, the goals assume a relevant position, although sometimes they are assumed and shared tacitly. Thirteen Faculties reflected the strategic goals of the University, defined by the Rectory team, in their own objectives. Nevertheless, the self-evaluation reports show that the objectives at the Faculty level were explicitly linked to the strategic goals of the University in only five Faculties. Generally speaking, the coordination between the goals of the University and those of the Faculties is not quite clear.

Opportunities and threats

All Faculties reflected on the opportunities and threats. In most of them, this involved focusing on specific areas set against the potential threats and opportunities. This procedure, however, was not mentioned in the self-evaluation guidelines, which referred to the trends and external factors that may enhance or affect the desired objectives.

The reflection was largely focused on the areas of *teaching/learning* and on the *services to the community and internationalisation*. We can then deduce that, in this context, the importance assigned to these areas was higher than the other areas. On the other hand, we realized that the comments on the opportunities relating to the threats were predominant in the self-evaluation reports.

Generally speaking, the *external* EC analysis and the analysis of the self-evaluation reports revealed some frailties in relating the mission and the strategic goals to the threats and opportunities. Indeed, as the Faculties lack explicit strategic goals, in most of them they were unable to identify the trends and the external factors that could enhance or affect such goals. At a later stage, this made it more difficult to define operational objectives and to identify the strengths, weaknesses and improvement actions.

Furthermore, the *external* evaluations revealed that the threats were not always identified as being the result of the external environment, and were usually considered as stemming from the University (from the Rectory or the other Faculties) or even from the Faculty itself (the result of problems related to internal processes). As such, some of the Faculties linked the opportunities to their most positive aspects – typically either to the history of the Faculty or to its performance.

It seems then obvious that the external factors are often confused with aspects inherent to the internal conditions. This finding deserves consideration, as it already suggests a *deficit* of overall strategic reflection, with obvious consequences to the definition of strategic guidelines and to the cohesion of the University.

These limitations make it somewhat difficult for us to provide answers to the following question: "what does the Faculty want to do?", taking into account the opportunities and threats.

The limitations outlined notwithstanding, one of the positive aspects of the exercise involving the analysis of threats and opportunities was that Faculties were able to reflect positively on the areas of study, anticipating problems and answers.

In general, the threats concentrate around budget constraints and on deficient/insufficient laws and national initiatives in terms of higher education policies. In Arts (e.g. history, languages, sociology, philosophy, etc.) and Sciences (e.g. chemistry, physics, biology, etc.), some negative trends – such as the decreasing of students – were also identified.

On the other hand, the apparent reason for some of the most obvious opportunities is that the different Faculties believe that they are able to transform potential threats into opportunities. For example, adjustments made as a consequence of the Bologna process, which is often said to be more of an opportunity rather than a threat.

- What are the strengths and weaknesses of the Faculties in view of their objectives?

Operational objectives in each area

The aim of the self-evaluation process was to evaluate how the strategy to explore the opportunities given, while limiting the threats and based upon its strengths and weaknesses, is imbued at the Faculty level. Therefore, the operational objectives of each area under evaluation should be identified, bearing in mind the threats and opportunities acknowledged previously.

We can see that most Faculties do not follow through on the concept of operational objective. Only seven Faculties connect the concept to multi-annual plans of activity and seem to be, in fact, adopted in the management activities of Faculties. In two Faculties, the establishment of operational objectives is apparently the result of the self-evaluation exercise, and it is not clear whether the objectives are really established at the level of management bodies.

Strengths and weaknesses

Apparently, the study of the mission and the strategic goals superseded the analysis conducted to determine the operational objectives and the strengths and weaknesses. We note that, in many cases, the analysis of the strengths and weaknesses resulted solely in the overall evaluation of the Faculty's performance. This can be seen as possibly denoting some frailties of the Faculties (and, therefore, of the University) in consolidating a strategy leading to clear operational objectives. This accounts for the fact that, at a later stage, the improvement plans show some deficiencies, as the imprecision of the operational objectives limits the ability to monitor the activities and the processes, and makes the definition of improvement actions more difficult.

However, we can also say that this analysis of strengths and weaknesses, which took place during the self-evaluation process and the *external* evaluation, was sound, in that the study thoroughly focused on the performance of each Faculty in the specific areas. In some cases, the *external* evaluation process made a positive contribution to this all-important element, as it explained the aspects referred to in the self-evaluation report and detected some apparent contradictions.

By analysing the strengths and weaknesses in the cross-level and specific areas, we were able to see that the interdependence is huge. Furthermore, the range of factors identified as strengths and weaknesses is considerable, revealing very distinct contexts and asymmetries between Faculties. This awareness calls for an additional effort of meta-coordination.

In spite of the multiple strengths and weaknesses, we can identify common points and dissimilar points (weaknesses in some Faculties are assumed as strengths in others). For example, the fact that some Faculties have pedagogic evaluation structures and mechanisms, or follow-up mechanisms of graduate students in their professional life, opposes the need for it to be feasible in other Faculties.

The institutional evaluation also allowed us to realize that, with the proper adjustments, we can implement cross-level improvement actions. For instance, in the area of *teaching/learning*, the most common weaknesses are linked to the low impact of the pedagogic survey and to the lack of some material resources. By the same token, the most frequently quoted strengths are the proficiency of human resources and the ability to implement the Bologna process (which is seen by many Faculties as an opportunity for a restructuring process).

Despite some insufficiencies in the definition of operational objectives, we can conclude that the self-evaluation process has contributed positively to describing and diagnosing the current situation in each Faculty.

- How do the Faculties know what they are doing and what is the improvement plan?

Monitoring

In most cases, the ECs did not assess in detail how the Faculty performs the monitoring and includes its results. In addition, we realize that, for a significant number of Faculties, the monitoring of some processes designed for quality assurance is not systematized. In these cases, this issue is shown in the self-evaluation reports as a weakness, for instance, in issues relating to the adjustment of the study programmes to the labour market or to the follow-up mechanisms of graduates in their professional life. On the contrary, in other Faculties, the processes and their respective monitoring are consolidated, or under consolidation. For most Faculties, the aim of monitoring is to make full use of the procedures defined in the information system (SIGARRA), even though there are adjustments that need to be adapted to the specificities of each Faculty.

In general, the *governance and management*, the *teaching-learning* (e.g., pedagogic survey) and the *internationalization* areas (e.g., academic mobility) are areas in which monitoring is more effective and stable, although in the case of pedagogic survey, the outcomes are scant probably due to non-existent support structures. In the area of *research and development*, the monitoring process is associated with the national evaluation system conducted by the *Fundação Ciência e Tecnologia* (FCT – Foundation of Science and Technology), and tends to be considered as being beyond the control of the Faculties.

Improvement plan

In the self-evaluation process, the definition of an improvement plan would be one of the most essential steps. However, the *external* evaluations revealed that, in some cases, the self-evaluation exercise was not always steered to designing an improvement plan. Indeed, the discussion of the plan was less than desirable in each Faculty, and perhaps it was not shared and assumed by all governance and management bodies.

In most Faculties, the plan was, apparently, not based on the identification of the operational objectives, which, as we have seen, tend to be diffused in the strategic goals. Consequently, the improvement plan should specify the internal strengths and weaknesses and reflect the external threats and opportunities in a more satisfactory way. In other words, in general, the improvement plan apparently does not take full advantage of the analysis of the strengths and weaknesses. On the other hand, because the operational objectives are often implicit, and are shared tacitly and informally, the ECs were faced with some difficulties in specifying concrete measures and in defining the respective time frames.

Although, for many Faculties, the improvement plan is not supported by the clarification of operational objectives, it is undeniable that the self-evaluation process has made a significant contribution to the prospective reflection on the measures that need to be taken in all specific areas (e.g. nuclear and cross-level). We note that, although there are asymmetries and

heterogeneous organizational cultures, the similarity between the concerns and the improvement plans among Faculties is substantial, namely in the *teaching/learning* area which appears similar, for example, with regard to the teaching methods. This fact can enhance cross-level initiatives, strengthening internal cohesion and the sense of belonging within the University.

Part II - Analysis of the Self-Evaluation Reports

In the previous section, we have presented a summary on the improvement cycle at the University of Porto (underpinning the structure of the institutional evaluation guidelines). As this summary is based on the self-evaluation reports and on the *external* evaluation reports, it does not show the diverse feelings and approaches relating to the issues mentioned, present in the various Faculties. In other words, what the reports point out as a trend, a stance or a truth for the entire University of Porto, may not represent the experiences within each Faculty.

We now identify, in detail, the issues emerging from the self-evaluation reports of the Faculties, based on the self-evaluation guidelines. This section aims at providing examples or showing the opinion of the ECs on their Faculties in more detail.

Mission and objectives

The mission was revised in a systematic way by all Faculties. For most of them, the identification of the mission is consolidated, and does not need further debate.

Nevertheless, in three Faculties the self-evaluation induced a thorough reflection. For example, in one Faculty, the mission is refined with the aim to "uplift the human being through education and culture". In another Faculty, the comments on its mission are that the objectives are attained "through a projection within the local, national and international, social and scientific environment".

In conclusion, the identification of the mission can be considered as an uncontroversial topic, and the Faculties claim to be institutions committed to education, research, development and active participation in the community. We have to remember that the mission of the University of Porto is to be an *education*, research and development institution, committed to the integral training of citizens, respecting their rights and actively involved in the progress of its communities. On this matter, there is agreement between the parts (the Faculties) and the whole (the University).

The contribution of the definition of strategic objectives of the U.Porto was hardly relevant to the strategic reflection within Faculties. In fact, only six Faculties crossed the strategic objectives defined by the Rectory team with their own objectives, systematizing this analysis in relational matrixes. This does not mean, however, that in other Faculties the strategic goals of the U.Porto were taken into consideration to a lesser extent.

In almost all Faculties, the strategic goals were analysed in detail, using as reference the cross-level areas and the nuclear areas suggested in the guidelines. It is interesting to note that the *human resource management* and the *ICT* areas were the least explored in this approach.

In the *teaching/learning* area, the ECs identified a large group of procedures, ranging from the consolidation, diversification and expansion of programme supply to the introduction of

innovative teaching practices, or even the development of systems for the assurance and continuous improvement of quality. Another Faculty identified teacher training as a strategic aspect that needed to be developed, and acknowledged that it still required further commitment to its mission and strategic goals.

In terms of *research and development*, some Faculties pinpointed the increase of their capacity to conduct research work and the quality of its results (based on international standards) as a strategic goal. Others stressed the importance of connecting research with the process of teaching/learning, especially as an instrument required to increase the level of its offer in post-graduate education.

With regard to *services to the community and internationalisation*, some Faculties were concerned with systematizing the dissemination of its image as an active scientific producer. Only a few Faculties had the development of internationalisation as a strategic goal.

In terms of *human resource management*, the strategic guidelines focus on training, particularly the training of non-academic staff.

The strategic options in *ICT* are scant and only a few refer to the need for optimizing resources.

Opportunities and threats

In the self-evaluation guidelines, the ECs were asked to identify the threats and opportunities in the external environment, which could affect or promote the strategic goals of their Faculty. However, in this exercise, the majority of the ECs did not focus on the opportunities and threats that could affect the strategic objectives, but rather on the opportunities and threats that could compromise each cross-level and nuclear area. As a result, the analysis of the threats and opportunities is sorted by area, taking advantage of the way the self-evaluation process took place.

Governance and Management

The comments on the threats that could potentially influence the *governance and management* area were predominant in relation to those on the opportunities.

Nine Faculties felt that the reduction of State Budget funding and its instability was a threat. Particularly, they stress the unclearness of funding for the second and third cycle degree programmes. In addition to the difficulties associated with funding, two Faculties mentioned the non-existence of sufficient autonomy. As a result of the reorganization of the U.Porto, following the adoption of the new Legal System Applicable to Higher Education Institutions (RJIES), two Faculties identified the potential loss of autonomy, this threat being of an internal nature.

Other dangers were also referred to in the self-evaluation reports. However, these threats are more related to internal factors rather than external factors. Some of the examples include the insufficient horizontal coordination of services (plus the need for it to be established by integrating it into the SIGARRA information system), and the increase of complex management tasks related to new management models.

In terms of opportunities, four Faculties pinpointed the RJIES as enabling the modernization of governance structures within the Faculties. Some Faculties consider using other sources of funding (through the development of specific policies) in order to raise funds.

Still in the chapter on opportunities, other topics are mentioned by the ECs, but they are clearly related to internal issues at the Faculty level. For example, two Faculties referred to the information system as an opportunity to implement an integrated monitoring system. At the same time, the re-definition of governance structures is anchored in the promotion of an internal dialogue. Along the same line of reasoning, but within the activity of the University Rectory, some comments were made on the availability of specific *software* to support the management area, programmes supporting the requalification and the thorough analysis of teaching competencies, as well as the implementation of new technologies to optimize the management of resources.

Human Resource Management

About half of the Faculties have identified threats in the area of *human resource management*. For example, the lack of mechanisms to enable the management of salaries and career prospects is seen as threatening the ability to retain qualified personnel (teaching staff). As such, the current Teaching Career Statute (ECDU) is referred to as emphasizing the inequalities between the public and the private sector (favouring the latter), highlighting the lack of a favourable framework to value the services rendered to the community, as well as the management activities. Furthermore, it is felt that funding limitations may emphasize even more the difficulties associated with the hiring of teaching staff.

We see the same types of threats for non-academic staff, and the fact that the implementation of the Integrated Evaluation System for the Public Administration (SIADAP) is still an uneasy factor in labour relations. One Faculty also mentioned as a threat the fact that some academic processes under the responsibility of the Rectory take very long (an internal problem of the University).

With regard to opportunities in the *human resource management*, and in other areas too, they are often confused with capacities within the University. As such, many "opportunities" listed by the ECs are, in fact, means or instruments to achieve objectives. For example:

- prompt pedagogic and financial support to the IRICUP Institute of Common Resources and Initiatives;
- review the of the academic positions framework;

- adopt a pro-active staff management policy;
- assume clear rules on progression in the academic career;
- use a system of incentives;
- increase the proficiency of the non-academic staff;
- support the dissemination of good practices.

However, the self-evaluation reports also contain suggestions adapted to the concept of opportunity. For example, they suggest the use of the predictable increase of continuous education activities at the University as a quick way to promote the training of its employees. Their recommendation is as follows:

- explore the possibility of hiring qualified professionals in the labour market with academic degrees adapted to the ECDU Teaching Career Statute;
- increase the impact of performance evaluation (SIADAP);
- sign individual work contracts;
- develop mobility policies to attract highly qualified foreign teaching staff.

ICT

Generally speaking, the ECs found it difficult to identify threats and opportunities in this area. The analysis of threats and opportunities puts emphasis on the latter, clearly coinciding with the internal factors. An example of this is the possibility of improving cooperation in terms of sharing the information systems provided by the Rectory, to facilitate the access to pedagogic, scientific, technical or administrative information. The threat of an insufficient budget to implement the ICTs mentioned by some Faculties is the exception.

Within the opportunities, it was difficult to find positive external factors that have an impact on the management of ICTs. The most relevant references were the possibility of attracting target groups and the (random) initiatives of the relevant Ministry to promote the ICTs.

Teaching/learning

The most relevant opportunities mentioned by some Faculties are related to the implementation of the Bologna process and the interrelated possibility of attracting new publics. On the improvement and expansion of the University's offers, they mention multidisciplinarity and the new 2nd and 3rd cycles. A further opportunity connected to the Bologna process involved the mobility of students between cycles, which is seen as an "alternative" to the traditional mobility schemes. The increase in the ability to attract the best students is also seen as an opportunity by some Faculties.

In terms of threats, several Faculties indicated the unpredictability of the labour market; the drop in the demand for scientific professions; and the loss of the attractiveness of technological areas, linked to the technological and scientific illiteracy of secondary education students. The current problems in the economy of the Northern region, with a consequent

limitation of employment opportunities, particularly for the strategic and management positions, are also seen as an issue that threatens the recruitment of students (especially the best students). Note that the decrease in the number of students in higher education can still be exacerbated due to the high drop-out rate in secondary education and the low birth rate. Some Faculties feel that their ability to attract students can be harmed by the growing competition between higher education institutions. They also call attention to the danger that the increase of the *numerus clausus* can pose to the quality of teaching/learning, if a reciprocal investment is not made in human and material resources. The threats also include the legal uncertainties with direct implications for the *teaching/learning* areas, and the financial constraints to following post-graduate studies.

There are other specific threats, but they are only relevant to specific scientific/pedagogic components. These threats are, for example, the lack of clarity concerning the institutions that will be competent for teacher training and the failure of the labour market to accept some professions. In the case of the fine arts, threats include the overall social unfamiliarity with artistic practices and the lack of legislation regulating specific professions. In the health sector, the changes in policies with direct implications for the current partnerships signed with the Hospitals and other Health Units are considered to be threats.

The changes stimulated by the implementation of the Bologna process are marked as a threat in the following aspects: the inadequacy of premises (lecture rooms and large classrooms) to encompass the paradigm shift from teaching to learning; the need for more interactive teaching practices; and increased rigidity in the programme structure, which suffered a decrease in the elective curricular units in the 1st cycle curricula.

Research and Development

Academic excellence is seen as an added-value that many Faculties feel must be explored. As such, there is an opportunity to strengthen and broaden the research networks among the research units of the U.Porto, and among other national and international counterparts. The promotion of research following post-doctorates is seen as an opportunity, in interaction with the *teaching/learning* area. Along this line, they suggest that joint PhD programmes can lead to the merging and reorganization of research centres in some Faculties.

They also suggest other opportunities related to national incentive policies on the mobility of researchers, and identified emerging scientific areas that can help to expand the domain of the R&D units. In the health area, we have the public investment at national and European level as a factor fostering the development of R&D activities in a more consistent way.

The higher education policies adopted nationwide, with implications in terms of funding, are generally seen as a threat. They also identified some internal factors as threats:

- the dispersion of human resources;
- undefined criteria for scientific production;

• the excessive offer of 2nd cycle degree programmes; consequently teaching staff are overloaded with teaching activities.

Services to the Community and Internationalisation

In terms of opportunities, the reports mention the national recognition of quality at the Faculty level, when these are assumed individually. Expectations as to the increase of student and professional mobility represent an opportunity not only within the framework of Bologna but also in terms of the increase of the connections to the Portuguese speaking countries. The development in the *teaching/learning* and *research and development* areas will probably influence the internationalisation strategy, and the examples given are the increasing number of programmes and the reorganization or merger of research centres. The ICT area can have a tremendous impact in this field, as it allows new forms of dissemination and university cooperation activities. On the other hand, the adjustments made in *governance and management* can also influence the diversity of funding sources, enabling further investments in the area of *services to the community and internationalisation*.

Other examples of opportunities mentioned include: to explore the capacity of service provision, and to strengthen or expand the number of national and international partnerships; however, no clues are given as to how they will be achieved.

Basically, the threats compromising the area of *services to the community and internationalisation* involve:

- the lack of political initiatives to provide financial support to the internationalization strategies;
- linguistic and cultural barriers that hinder the use of a second language of instruction; and
- a persistent reactive mentality that does not go along with a positive and strategic attitude needed for internationalisation.

Operational objectives

The study of the mission and strategic goals conducted by the ECs was specifically useful to analyse the operational objectives thoroughly, even though in all Faculties the concept of operational objective is not assumed and shared transversely by the management bodies and the teaching and non-teaching staff alike. The identification of operational objectives was the result of the analysis carried out by the ECs (cf. Part I, "Operational objectives in each area", p. 5).

On the other hand, the operational objectives of each specific area do not seem to have taken the threats and opportunities into consideration (identified in the previous step), nor are they consolidated through the definition of medium and long term targets that contribute, directly or indirectly, to the completion of the strategic goals. The specific areas of *teaching/learning*, *research development* and *services to the community* and *internationalisation* received the highest number of comments on the identification of operational objectives. In the case of *teaching/learning*, we highlight the following:

- improve and increase the training offer (including continuous education);
- increase the number of students;
- increase the number of good teaching/learning practices.

The objectives for research and development are:

- increase the number of research units funded by the FCT;
- consolidate and increase the areas of research;
- improve the scientific production ratios and performance indicators.

In terms of services to the community and internationalisation, the following stand out:

- increase the synergies with the community;
- increase the number of significant partnerships.

Strengths and weaknesses

Only about half of the Faculties identified the specific strengths and weaknesses that might favour or hamper each operational objective. However, the analysis of the strengths and weaknesses was, in general, useful, in that it focused on the analysis of each Faculty's performance, on each specific area.

Governance and Management

In this field, the analysis of the strengths and weaknesses was clearly focused on the identification of strengths. This fact can apparently be related to the idea that the implementation of the RJIES will bring about changes, which in turn will require the organizational structures and the management models to adapt.

The strengths inherent to the *governance and management* area interact strongly with the strengths of other areas, especially with the *human resource management* and *ICT* areas. This interdependence will possibly help to increase the synergies.

Apparently, for most Faculties the structures of governance seem to be adequate. On the other hand, we also note the concerns regarding the observance of scientific, financial, administrative and pedagogic principles. In the Faculties where there is a decentralized model, for example, the matrix model, the balance (yet unstable) generated between the various bodies (including the directors of study programmes) is considered to be a strength. Regarding the directors of study programmes, one Faculty mentions as a weakness the lack of representativeness of these individuals on the scientific board, while for another Faculty the creation of a programme director post has guaranteed an effective adjustment between the participation in management affairs and the agility of decisions.

Regarding participation in the management bodies, two Faculties felt that the commitment and dynamics of the academic community are strengths (one of the Faculties acknowledges that the students have an active role in this issue).

In terms of management, the references to the strengths are, once again, widely varied:

- the ability to raise funds;
- the implementation of ICTs and the computerization of services (which tends to expedite the monitoring of some services);
- a balanced budget (for two Faculties).

One set of strengths is referred to by one Faculty only:

- the qualification of human resources;
- the SIADAP, as a management instrument (despite the variations of distorted results based on the definition of quotas);
- · environmental management;
- the information generated by monitoring processes.

The list of weaknesses identified in the report is vast and diverse. We note that, in some cases, the frailties highlighted do not seem to be properly connected to the area under analysis. They include:

- complexity and lack of effectiveness of the organizational structure;
- weak links between the management bodies and the R&D units (with direct implications for the *research and development* area);
- insufficiencies in monitoring the internal processes;
- reactive attitudes associated with the definitions of operational strategies;
- shouldering of functions by the teaching staff;
- weak participation of members external to the University;
- lack of a representative sample of the degree programme directors on the scientific board;
- precarious premises;
- budget constraints;
- retraction of own revenue;
- inadequacy of programme management models.

Human Resource Management

For most Faculties, the strengths are found mostly in the qualification and performance of teaching staff. However, they also mention other characteristics, especially as potential strengths, since future developments can augment their positive effects. For example, the approval of criteria and evaluation parameters for the competition for associate professor and full professor positions would improve the gradual increase of requirements for academic

career progression in the entire University (note that the absence of criteria applicable to acquire academic tenure was identified as a weakness).

Pedagogic innovation is also seen as a potential strength, as long as there are mechanisms enabling its dissemination and openness to peer review. This category of strengths includes the generalization of the pedagogic monitoring system, which includes the pedagogic survey (where the students evaluate the teachers).

The weaknesses identified in the *human resource management* area cover cross-level topics, such as:

- inbreeding;
- the insufficient number of teaching and non-teaching staff (consequently, the staff is overloaded);
- the lack of a systematic evaluation of teachers' performance;
- the inflexible selection processes as a result of the inadequate legal framework (ECDU);
- the uncertainty as to the proper balance of time spent on teaching, researching and management;
- the lack of autonomy in the human resource management area;
- the lack of criteria applicable to the final appointment of teaching staff;
- the limited capacity to renew teaching staff;
- the reduced internal mobility of non-academic staff and of the teaching staff;
- the limited training opportunities for the teaching staff;
- the lack of expectations and the inconsistencies between the qualifications and performance of the professional activity;
- the frailties of the SIADAP, although it is considered a positive management tool;
- the lack of participation of non-academic staff in the debates on the implementation of the RJIES.

ICT

With regard to the management of ICTs, the strengths include the following:

- the general computerization of services;
- the increased use of ICTs as a teaching and management tool;
- the satisfactory coverage of the wireless network;
- the existence of some curricular units with e-learning contents;
- the high level of satisfaction with the ICT services;
- the adequacy of human resources;
- the existence of an adequate investment policy.

Among the weaknesses reported in this area, there is the idea that the information system (SIGARRA) is perhaps not responding adequately in all Faculties (note that the Faculty of Sciences is the only Faculty of the U.Porto with its own information system – the

InfoCiências). The weaknesses are said to be the unsuitability to the specificities of some Faculties; the under-use of the potentials offered by SIGARRA; the need to implement or improve a helpdesk system; and insufficient support from the Rectory. The lack of a procedure guide is mentioned with regard to the *InfoCiências*, with regard to the improvement of services.

Some of the weaknesses are listed below:

- the resistance to the use of ICTs;
- the low computer/student ratio;
- the lack of autonomy of ICTs as a management area;
- the insufficient number of non-academic staff allocated to the ICTs;
- the lack of a strategic e-learning policy;
- the lack of classrooms with an adequate size (this affects teaching/learning).

Teaching/Learning

The *teaching/learning* area received most of the reflections on strengths and weaknesses, visible in the number and size of comments. Apparently, this is a sign of the importance given to the ECs on the process of teaching/learning compared to the other areas.

With regard to the field of *teaching/learning*, we see that, in general, the Bologna process is seen as an opportunity, grounded on strengths related to the will to change. In addition to this practically cross-level vision of the Faculties, many other aspects are classified as strengths:

- the qualification of human resources;
- the possibility of expanding the offer of 3rd cycle degree programmes:
- the existence of successful partnerships;
- the production of the best graduates in the respective scientific areas;
- the dissemination of the ICTs in library use;
- the setting up of structures and mechanisms to follow up on the graduates in their active life;
- the student/teacher relationship;
- easy monitoring of processes enabled by the SIGARRA;
- granting prevalence to scientific performance over pedagogic performance for progressing in the teaching career;
- the promotion of research to the students to stimulate their interest;
- awarding scientific merit prizes to students;
- the quality of infrastructures;
- the existence of strong and dynamic student associations;
- the strong link with the labour market;
- the potential capacity to fill all places in the national competition for university admissions;

- the capacity to attract good students for the 2nd and 3rd cycles and for the integrated masters;
- the existence of favourable relations between the profile of graduates and pedagogic methods;
- the promotion of pedagogic training actions for teaching staff;
- the increase in demand for post-graduate and 2nd and 3rd cycles programmes by students outside the University;
- curricular flexibility;
- the scope and diversity of the training offer graduate and post-graduate programmes, open programmes and continuous education programmes; professionalization programmes;
- the existence of monitoring procedures for programmes or structures to monitor the quality and evaluation of pedagogic processes;
- the existence and general implementation of the pedagogic survey;
- the positive pedagogic evaluation of teaching staff.

It should be noted that some of the strengths identified are related to procedures and mechanisms that typically correspond to the minimum requirements needed for the working conditions of degree programmes. In fact, "to restructure and put into operation the 1st cycle degree programmes", "to define transition study plans", "to appoint degree programme directors and follow-up committees", "to provide evaluation procedures for student performance" can not really be considered as strengths.

The list of weaknesses in the *teaching/learning* area is long, and renders many different situations from Faculty to Faculty:

- the lack of coordination between structures (which has led to the lacking impact of the students' pedagogic evaluation of teachers);
- the lack of indicators to support decisions on the creation of new degree programmes;
- the absence of periodical evaluation mechanisms since the evaluation process of courses carried out within the scope of the CNAVES National Evaluation Council for Higher Education, no longer exists;
- the insufficient definition of "research areas" (with implications for research and development);
- the lack of human resources;
- the lack of follow-up procedures of graduates and of evaluating how the programme structure is adapted to the labour market;
- the lack of concrete and substantial partnerships between Faculties, especially at the level of 3rd cycle and research programmes, and of mechanisms to support the sharing of resources;
- the low number of students in some curricular units, with negative implications for the allocation of human resources;

- in terms of experimentation with new pedagogic methods, the need to assess the education failures/achievements of students;
- the lack of explicit strategies to trigger cross-level skills in students;
- the adjustment of old study programmes, as a result of the Bologna process, and the consequent removal of curricular units that students find interesting (additional, elective units);
- the excessive number of students per class;
- the frailties shown in the availability and implementation of continuous assessment;
- the excessive number of tests and the short period available for research and extracurricular activities;
- the weak capacity to attract students from outside the region;
- the weak participation of 3rd cycle students in class activities;
- the slight importance given to stimulating practices, recognition of merit and reinforcement of identity;
- the poor conditions in the classrooms;
- the lack of support for the social integration of foreign students, with implications for relationships with the external environment and internationalization;
- the lack of capacity to attract 3rd cycle students;
- low pro-activity (affecting all areas under analysis);
- the absence of overall regulations for the methods of evaluation of knowledge and for the teaching methods in 2nd and 3rd cycles;
- the insufficiency of material resources;
- the high student/teacher ratio in the clinical cycle (1/6), which is counterbalanced by using voluntary teachers (FMUP);
- the lack of definition of learning outcomes per curricular year and curricular units;
- the reduced use of learning platforms (e-learning, b-learning);
- the low flexibility of programme structures;
- the reduced pedagogic training of teaching staff.

Research and Development

Having reflected on this area, it is clear that there is interaction with the issues in *teaching/learning*. We stress, in particular, the potential in exploiting this interaction: the strategies followed in *research and development* can contribute significantly to enrich the process of *teaching/learning* and vice-versa. Generally speaking, as long as those two areas and the area of *human resource management* are better related (in terms of allocating resources to the research and/or teaching activities), the research conducted at the U.Porto is a strength; however, not all positive consequences have been extracted from it.

We see that, according to the criteria used, sometimes the development of scientific performance indicators can be seen as strength and sometimes as weakness. For example, for

one Faculty, scientific production was assumed as a strong point, due to the high number of scientific papers and to the consequent positive impact on its respective scientific area at national level. On the other hand, the scientific production (even if copious) was felt to be a weakness by one EC in a Faculty in the area of arts, as it reveals a small number of scientific papers indexed in the ISI.

A considerable number of factors, which are quite different depending on the Faculties, are mentioned as strengths:

- the qualification of the teaching staff;
- the research centres recognized and funded by the FCT, are well positioned;
- the adequate infra-structure;
- the large number of scientific papers;
- the existence of incentives for student participation in research;
- the existence of internal incentives for participation in research projects;
- the structures supporting the application and management of research projects;
- the investment in specific scientific areas with development projects;
- the multidisciplinarity of the research teams;
- the inter-institutional local dynamics, namely with several organic units and research institutes of the U.Porto, which in some cases, have enabled the incorporation of researchers from outside the Faculty;
- the strong investment in activities publicizing the research carried out;
- the editions designed for scientific dissemination;
- the tendency for teachers to see research as a priority;
- the conversion of scientific units into Associated Laboratories;
- the positive increase of innovation and entrepreneurship capacity;
- the increase in post-graduate offers;
- the adjustment of 3rd cycles in partnership with foreign universities;
- the public recognition of scientific activity.

The list of weakness is extensive (note that some of these are considered to be strengths by other Faculties):

- the poor scientific production indexed in the international databases;
- the scant use of editorial and validation procedures for the quality of scientific production referenced at international level;
- the poor participation in international projects, as the result of frailties in the R&D units (in terms of organization, financial and human resources, and support);
- the dispersion of scientific activity in research units or research institutes, making the consolidation of indicators more difficult to achieve;
- the difficulties found in research management, as the research units receive the funding directly from the FCT;
- the lack of infrastructure;

- the poor capacity to attract foreign researchers;
- the lack of positions in the research career;
- the lack of institutional strategies that promote, on the one hand, the creation of new research units under the framework of the FCT (and the respective allocation of teaching staff) and encourage, on the other hand, partnerships with the industry and the value of intellectual property;
- the existence of rather small research teams;
- the reduced proportion of teachers involved in the existing research units;
- the difficulties found in balancing teaching and research activities;
- the lack of student participation in research projects;
- the weak capacity to attract external funding;
- the difficulties in purchasing bibliography and equipment due to budget constraints;
- the difficulty of fitting into the scientific areas designated by the FCT;
- the lack of interdisciplinarity;
- the lack of a policy and an incentive system to encourage research and development, which is in part based on individual initiatives;
- the lack of a benchmarking culture;
- the scarce and underrated effort shown by the teachers to find areas of activity that are socially relevant, and show prospects of economic value or of connection to companies;
- the lack of external and internal visibility of the research activities.

Services to the community and Internationalisation

The strengths are found in:

- the high qualification of human resources;
- the capacity to organize events and initiatives of a national and international nature, to help promote the connections with the outside sphere;
- the capacity to attract foreign students to the 1st cycle;
- the strong relations with research centre counterparts;
- the capacity to offer curricular units in English;
- the capacity to provide services, and to raise funds;
- the number of contacts and connections with the business world;
- the creation of the infrastructure needed to foster the interaction with the community or to support internationalization activities;
- the brand image and public recognition.

The weaknesses mentioned in the comments are related to:

- the poor international exchange of students and teaching staff, and the small number of substantive cooperation agreements with higher education institutions in the top positions of European rankings;
- the lack of a structured network of contacts with institutions receiving trainees/interns;

- the lack of information in English;
- the poor connections with institutions outside the University;
- the lack of consolidated information on the international activity of the teaching staff and of procedures to assess and monitor external and international activity;
- the poor external visibility and deficiencies in the image of the Faculty/University as a an important role-player in changing society;
- the insufficient use of sabbatical leave for post-doc studies/visits to foreign universities;
- the difficulty in attracting foreign quality teaching staff, in some cases, to supervise doctorates;
- the financial constraints and the lack of support structures in the provision of external services.

Monitoring

In general, the process of identifying strengths and weaknesses did not make full use of the monitoring tools that would support an improvement plan. In any case, where there was the chance to establish a connection between operational objectives and the improvement plan, the indicators used by the Faculties seem to allow for the actual follow-up of the processes.

The existing monitoring mechanisms seem to be more consolidated in the *teaching/learning* area, in particular with the implementation of the pedagogic survey (even though we can still detect some faults in the resulting implications) and in the *research and development* area, with activities linked to the evaluation of the scientific performance of teaching staff. On the other hand, the SIGARRA information system has allowed most of the procedures and the respective feedback to be done in a quasi-automatic way, and therefore the monitoring of the essential academic management processes is potentially included in the SIGARRA system itself. However, the development of the system is not the same in all Faculties.

The fact that the connection between operational objectives and the improvement plan is frail shows that this type of connection should receive greater focus in the future, within the University and at the Faculty level. The lack of such a connection has not allowed the clear identification of processes that transform threats into opportunities. The failures in the monitoring processes seem to be related to:

- the need to improve the SIGARRA system, suited to the specific nature of each Faculty;
- the evaluation of modules contained in the SIGARRA (Scientific Papers; Projects; Curriculum Vitae, Activity Report, Cooperation);
- the creation of support structures (helpdesk, the integration of graduates in the labour market);
- the absence of human and financial resources linked to the implementation of improvement processes and quality management;
- the establishment of benchmarking mechanisms to implement the general good practices of partner institutions.

Improvement plan

The identification of operational objectives did not always support the improvement plan. However, the improvement actions suggested reinforce the strengths identified, and this justifies the importance of a previous identification of strengths and weaknesses.

Governance and Management

The reflections on the improvement plan within the *governance and management* area often reveal the need for an in-depth strategic analysis of the Faculty, using the University as a reference. Note that, according to the Self-evaluation Guidelines, the improvement plan should be based on the identification of the operational objectives, which, in turn, would be in line with the strategic goals of the Faculty. Furthermore, these strategic goals should be appropriate and provide adequate answers to the mission and strategic goals of the University. From the analysis of the self-evaluation reports, we can also conclude that, in this area, the identification of operational objectives and strategic goals lacks a more in-depth discussion and internal dissemination.

However, we can conclude that at the Faculty level there is the need to:

- encourage an organizational culture based on quality;
- reformulate an organizational structure in light of the new statutes;
- improve the effectiveness of services;
- increase their own revenue by investing in the provision of services to the community.

There are also some improvement actions connected implicitly to the areas of *human resource management* and *ICT*.

Human Resource Management

The *human resource management* area is related to one of the strengths detected by the ECs, which is the qualification of human resources. They recommend that teaching performance must be improved, especially the pedagogic approach. The fact that the pedagogic survey did not have a positive impact is pointed out as a weakness. Another aspect considered to be important is related to the balance between the activities linked to teaching, research and management. The implementation of a real strategic management policy focusing on human resources is also recommended.

In terms of non-academic staff, the opinion is that the promotion of its qualification must continue.

ICT

Generally speaking, the ECs suggest that the services must foster the intensive use of ICTs. Furthermore, the reconversion process associated with the implementation of ICTs and its

interconnection with other areas (e.g., *governance and management* and *teaching/learning*) are grounds for the development of actions to help promote and generalize their use.

Teaching/Learning

It seems obvious that the adjustments made as a result of the Bologna process are mostly seen as an opportunity for improvement and, as such, must be assessed in a systematic way. The suggestion is that this assessment should focus on pedagogic, academic, operational and logistic issues, and that the results of the changes affecting the teaching staff, students and non-academic staff must be explored. Although this idea is common to many Faculties, there is no indication of how this evaluation should be done. In this context, the limited impact of the pedagogic survey and the lack of an evaluation system for teaching staff are also felt to be relevant.

Research and Development

In this area, the improvements that must be conducted by the various Faculties include the intention to increase scientific production and the participation in research projects. On the other hand, the monitoring of research and development activities seems to imply the improvement of information collection, and is based on the efficient management of ICTs applicable to this area.

Services to the Community and Internationalisation

In general, the items most referred to are related to the selection and identification of more systematic opportunities for cooperation. In terms of relations with the outside community, the suggestion is that the promotion strategies must be linked to research and service provision, to increase their own revenue, and the external visibility, as well as the relevance of the Faculty. With regard to internationalisation, the reinforcement of the European dimension could be done by developing a strategy linked to the language of instruction adopted in the courses. However, the use of English as language of instruction in 2nd cycle degree programmes, for example, does not seem to be a priority action for most Faculties. In these circumstances, we will expect these improvement actions to focus on the development of activities that privilege quality.

Part III - General Conclusions

The institutional self-evaluation process aimed to assess the quality assurance and improvement mechanisms within the Faculties (and, therefore, in the University) and, in a more general way, the state of a continuous improvement culture and practice. By evaluating the Faculties, we aimed to examine whether the management systems were ready and effective in view of the implicit or explicit objectives, and their capacity to respond to new challenges. Finally, we hoped that these processes would bring less successful aspects to light, and to identify improvement actions. As such, the exercise would be of little use if we were not able to draw recommendations for the future from it. It is within this context that the contents of this section must be understood.

According to the European Association for Quality Assurance in Higher Education (ENQUA), the standards and guidelines for an internal quality assurance system in a higher education institution must be anchored in an institutional strategy steered at continuous improvement, which ought to have a formal statute and be visible from an outside perspective. The institutional evaluation process is considered an essential component in this type of strategy. We could then conclude that the system adopted in the U.Porto meets the requirements laid down by the ENQUA. However, the analysis of the self-evaluation reports and the external evaluation reports reveals that the quality assurance and improvement system at the University of Porto:

- a) does not seem to be fully assumed by most of its management structures; and
- b) it is not obvious that it is perceptible from an outside perspective.

We can then derive two major lines of action. At an internal level, we need to consolidate and systematize the procedures for improving processes/cycles: (1) define the objectives (what we aim to do); (2) monitor/assess (what is being done); and (3) provide an improvement plan (what should be done). At an external level, we need to increase the visibility of these processes. Note that the advantage of giving external visibility to an improvement strategy is that, among others, it will show in the recognition of an institution's performance.

Therefore, the priority seems to be the establishment of mechanisms in each Faculty to encourage the definition of the operational objectives required, so that they can be deployed in their respective organizational structures. The self-evaluation process revealed strong limitations in this area. In fact, many Faculties do not have objectives or targets, or they are not implicit in any way that will in the short and medium term contribute to fulfilling the strategic goals. This, in turn, reveals some of the limitations that the management structures of the Faculties have in identifying threats and opportunities, and in the capacity to induce planned changes within their organisations. In this context, we can consider that the self-evaluation of Faculties is the beginning of a learning process that must be followed in a systematic way.

Another aspect that stands out in the self-evaluation process is that monitoring – which is a crucial element in all internal quality assurance systems – still shows frailties which call for intervention. In part, these frailties are the result of missing (or implicit) objectives or targets, as we have already mentioned, or because the various constituencies (teaching staff, non-academic staff, management bodies) have different interpretations of what they feel is the "interest" of the institution (of both the Faculty and of the University as a whole), making it difficult to consolidate overarching and stable procedures.

Despite the limitations, in some areas the various Faculties are provided with fairly well established follow-up mechanisms, which are already part of their daily routine. These procedures are typically based on the SIGARRA system, which is an essential element for self-knowledge. In addition to those mechanisms, there are several examples of systematized experiences of information collection and processing, for example covering the performance of students; the achievement rates and failure rates; the follow-up of graduates; and academic mobility. Within the research area, the monitoring process is considered to be external to the Faculties (FCT). At the internal level, the collection, measurement and dissemination of scientific production indexed in reputed databases (namely the ISI – WoS or the Scopus) are concentrated at the Rectory, as well as the collection and dissemination of classifications given to the R&D units.

With regard to monitoring, we need to define and put into practice a set of activities and indicators that must be implemented throughout the University, which require a formal follow-up, by means of procedures and reports. There is also the need to define how this follow-up will be done and put into practice for the specific activities relating to a certain area or Faculty.

The third phase of the improvement cycle – the improvement plan – should be the result of what the University aims to achieve – the objectives – and what is actually being done (which is provided by the monitoring system). In some cases, the limitations in the identification of operational objectives and in the monitoring system do not support the improvement plan. In any case, some ECs established a clear connection between the operational objectives and the improvement plan, and suggested some follow-up indicators. On the other hand, suggestions for improvement are generally based on the strengths identified, which allows us to conclude that the previous analysis of strengths and weaknesses was useful. As expected, the ECs were not very convincing in clearly identifying the processes that will allow the transformation of threats into opportunities.