

Assessing the quality of third mission activities in Portuguese universities

A avaliação da qualidade das atividades de terceira missão nas universidades portuguesas

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Abstract

Since 2009, Portuguese higher education institutions have been developing their own internal quality assurance systems and policies as a result of the reforms of higher education quality assurance in Europe and Portugal. This paper analyses how far Portuguese universities, within the remit of their internal quality assurance systems, define and employ mechanisms and procedures in order to assess the quality of their third mission activities. The analysis was conducted on documents submitted by institutions to the Portuguese Agency for the Assessment and Accreditation of Higher Education (A3ES) under the institutional evaluation process. Findings suggest that although the analysed Portuguese institutions apparently embrace the third mission, the quality assurance of this core activity is still in an embryonic stage of development. This suggests that quality assurance systems need to be developed so as to integrate the various core missions of an institution (e.g. teaching and learning; research and third mission), ensuring they receive similar levels of consideration.

Keywords: Quality assurance. Third mission. Portugal. Quality assessment.

Resumo

Desde 2009, as instituições de ensino superior portuguesas têm vindo a desenvolver os seus sistemas e políticas internas de garantia de qualidade, como resultado de reformas na garantia da qualidade do ensino superior na Europa e em Portugal. Este artigo analisa até que ponto as universidades portuguesas, no âmbito dos seus sistemas internos de garantia de qualidade, definem e implementam mecanismos e procedimentos para avaliar a qualidade das suas atividades de terceira missão. A análise foi realizada tendo por base os documentos apresentados pelas universidades à Agência de Avaliação e Acreditação do Ensino Superior (A3ES) no âmbito do processo de avaliação institucional. Os resultados sugerem que, embora as instituições portuguesas analisadas se dediquem, aparentemente, a atividades de terceira missão, a garantia da qualidade destas atividades ainda se encontra num estágio embrionário de desenvolvimento. Isto sugere que os sistemas de garantia da qualidade devem ser desenvolvidos de modo a integrarem as várias missões principais de uma instituição (por exemplo, ensino e aprendizagem, investigação e terceira missão), garantindo que as mesmas são consideradas de forma semelhante.

Palavras-chave: Garantia da qualidade. Terceira missão. Portugal. Avaliação da qualidade.

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Introduction

Over the past decade, Portuguese higher education institutions have been developing their own internal quality assurance systems and policies as a result of the reforms of the quality assurance system (Law 38/2007), which made the assessment and accreditation of study programmes and of higher education institutions mandatory. According to Kettunen (2012), quality assurance is meant to verify and ensure the achievement of defined objectives. Consequently, quality assurance systems produce information about how an institution has succeeded in meeting its goals, while this information is then used to improve the institution's activities (KETTUNEN, 2012). In a higher education context, the purpose of internal quality assurance systems is to improve the institutions' core missions: teaching and learning, research and third mission.

Over the past decades, the third mission – referring to higher education's engagement with the society and the community – has gained ground alongside the traditional core missions of teaching/learning and research. However, extant studies suggest that these three missions do not receive equal attention in terms of their monitoring and improvement (MANATOS; SARRICO; ROSA, 2017b) and that higher education institutions are still far from achieving the integration of these different missions as far as quality assurance is concerned (KETTUNEN, 2012). A recent systematic literature review (MANATOS; SARRICO; ROSA, 2017b) has revealed that the third mission is the most neglected dimension regarding quality assurance.

Against this background, this paper examines the extent to which Portuguese universities, within the remit of their internal quality assurance systems, define and employ mechanisms and procedures in order to assure the quality of their third mission activities. For this purpose, the paper starts by discussing the broadening of higher education missions to include the third one and the incipient stage of quality assurance in addressing this mission. Then, the paper presents the evidence base and the method employed for the analysis of the data. Next, the findings are presented regarding the third mission activities reported by institutions and regarding the mechanisms meant to assure the quality of these activities. Finally, based on these findings, the paper draws some conclusions.

Third mission and quality assurance

The enlargement of the missions of higher education

Higher education's relevance for the society, its proactive engagement with the community and its impact on the surrounding region are relatively recent concerns, triggered especially by the advent of the knowledge society and by the importance attributed to knowledge as an engine of social and economic progress (PINHEIRO; LANGA; PAUSITS, 2015). Higher education institutions' key role as producers and transmitters of knowledge has elevated their status to "primary institutions", that is, institutions that fulfil a central purpose in the society (ETZKOWITZ, 2003). According to Etzkowitz (2003), industry and government used to be such primary institutions, whereas universities used to occupy a secondary status.

The knowledge-based society reconfigured academic institutions as a source of regional economic development and broadened their missions to include this purpose (the case of Silicon Valley is an example in this sense). Therefore, higher education institutions nowadays integrate a triple helix of university-industry-government relations as an influential actor and equal partner (ETZKOWITZ, 2003). This purpose is often designated as higher education's 'third mission'. As the term suggests, this mission comes after teaching and learning (representing the first mission) and after research (as the second mission). In an initial development, the first academic revolution transformed the university into a teaching and research institution. The integration of economic and social development with teaching and research could be considered as "the second academic revolution", according to Etzkowitz (2003). The third mission implies, broadly, the engagement of universities in business-related activities, in local and regional development, economic growth, and societal development in general (LAREDO, 2007).

Activities which fall under this mission are widely diverse and include, for example: continuing education and professional development courses, workshops, and seminars; technology transfer units, science parks, or entrepreneur programmes for student 'start ups'; activities with social and political motivations, such as projects directed at economic development, integration of minorities, addressing environmental questions, and healthcare services; or cultural activities like concerts, exhibitions, seminars, radio and TV stations, literary events and so on (MONTESINOS et al., 2008). Some of these activities have an entrepreneurial nature (e.g. courses in lifelong learning programmes or consultancy services) and contribute to the diversification of the institution's revenue, which is a characteristic typical of the 'entrepreneurial university' (CLARK, 1998). However, the gene-

ration of economic benefit, accepted in private institutions, may generate “mission controversies” in public institutions, as it can be considered incompatible with the public interest. At the other end, services for the society with no or little cost for the user (e.g. volunteering or cultural activities) are meant to promote and improve the institution’s image (MONTESINOS et al., 2008).

The conceptual transformations of the missions of higher education do not always have equal reflection and relevance in the practices of higher education institutions. According to Kohtamaki (2015), third mission activities lack proper incentive structures at both the national and institutional levels, preventing the successful institutionalization of such activities. Additionally, third mission endeavours can meet academic resistance; even among senior leaders some wish to avoid too much engagement, fearing that it may be perceived as non-academic or illegitimate (WATERMEYER, 2015). A likely explanation is the fact that the third mission is a latecomer among the missions of higher education and often sits uncomfortably alongside its other more traditional dimensions of teaching and research. Additionally, there is a need to develop methods and indicators which could measure the performance and the impact of activities related to knowledge transfer, entrepreneurship, services to the society, alliances with industry and so on (MONTESINOS et al., 2008; PIVA; ROSSI-LAMASTRA, 2013).

For instance, Montesinos et al. (2008, p. 267-270) propose some indicators for the monitoring and evaluation of the lifelong learning and the entrepreneurship dimensions of society engagement. For the assessment of lifelong learning activities, the following indicators can be employed: the number of hours or days per year academics commit to it, the number of courses organised each year, the number of academics involved in lifelong learning activities or the number of participants. As for the indicators that could measure entrepreneurship and innovation, these could be the number of spin-offs/start-ups created per year, the number of students trained in the entrepreneurial spirit, the number of companies located in science and technology parks, or the number of international patents registered per year. Piva and Rossi-Lamasta (2013) make recommendations about the evaluation of university-industry alliances, suggesting that any performance evaluation systems should distinguish between the different stages that a university-industry partnership implies (e.g. inputs, in-process activities, outputs and outcomes) and proposing different indicators for each stage. According to them, it is not enough to evaluate the satisfaction of project members with the relationship. They argue for an ongoing monitoring of alliance activities, which requires an “evaluation of the resources committed in the alliance at each stage, the costs engendered by the

alliance, the results of alliance activities, and the competences that the company has developed through the alliance” (PIVA; ROSSI-LAMASTRA, 2013, p. 50).

The quality assurance of third mission activities

The relative novelty of community and society engagement as a mission of higher education institutions is also reflected in the fact that quality assurance activities still pay little attention to third mission activities (KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017a, 2017b; SRIKANTHAN; DALRYMPLE, 2002). Activities falling under different missions are therefore contemplated in unequal and variable degrees. As a result, an argument for the integration of the quality assurance of the different missions is put forward in several studies (KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017a, 2017b; SRIKANTHAN; DALRYMPLE, 2002). According to Kettunen (2012, p. 520), integration “is a way to make a whole, or to unify disparate activities or parts... An integrated system works in conjunction with previously incompatible elements”. In an integrated approach, the three key missions of higher education – learning and teaching, research and scholarship, and third mission – are treated as processes (KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017b; SRIKANTHAN; DALRYMPLE, 2002). To these, one can add a fourth process consisting of the support processes which cover administrative services as well as other support processes and activities (MANATOS; SARRICO; ROSA, 2017b).

Kettunen (2012) argues that integration of quality assurance can be ensured through the adoption of a process approach. He states that:

Integration is the task of improving the performance of large and complex collection of internal processes by managing the interactions among the people involved in those processes [...] All the processes of a system must work together for the entire system to function as a whole. An integrated system is representative of how an organisation is structured and how each process is related to other processes either indirectly or directly forming a total system (KETTUNEN, 2012, p. 521).

However, the process approach – implying therefore that the processes, their mutual interaction and their management are interrelated – has not yet reached a strong position in higher education, with the institutions’ outreach and engagement in their region being signalled as an area presenting challenges (KETTUNEN, 2012). The systematic literature review conducted by Manatos, Sarrico and Rosa (2017b) on the integration of quality management in higher education institutions has also concluded that there are few studies which report the integration of the four processes. Literature has mainly found that quality assurance in higher edu-

cation pays primary attention to the process of learning and teaching, to academic and pedagogic aspects and students' educational experiences (KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017a, 2017b). The support processes, comprising administrative and management processes, are also a dimension which receives due attention (e.g. support activities for students, facilities and infrastructure or student counselling) (MANATOS; SARRICO; ROSA, 2017b). Processes related to research and scholarship come next, whereas the third mission is the dimension receiving least attention. This unequal attention to the different processes can be attributed, at least in Europe, to the almost exclusive focus of the European Standards and Guidelines for Quality Assurance (ESG) on the learning and teaching dimension:

An overall analysis of the ESG allows us to conclude that teaching and learning and support processes are highly and substantially represented, respectively, but research and scholarship and third mission are insufficiently represented (MANATOS; SARRICO; ROSA, 2017a, p. 348).

The ESG have been used as the main reference framework by European quality assurance agencies in their assessment and accreditation activities and by European institutions when devising their internal quality assurance systems. The omission of third mission from the ESG has therefore been replicated in institutions' internal quality assurance. According to Manatos, Sarrico and Rosa (2017a), some European accreditation agencies are now starting to address this gap by introducing new standards and guidelines concerning research and scholarship, and third mission, thus taking a step towards the integration of the processes corresponding to the core missions of higher education institutions.

This is also the case of the Portuguese Agency for Assessment and Accreditation of Higher Education – A3ES (SANTOS, 2011). The A3ES guidelines and report templates for the assessment and accreditation of higher education institutions and study programmes address the three core institutional processes: teaching and learning, research and community engagement. As a result, the internal systems of Portuguese institutions generally make reference to all these processes. However, they tend to be highly focused on teaching and learning (CARDOSO et al., 2017), which is evident in the fact that quality assurance processes and mechanisms are mainly oriented towards learning and teaching, while information management systems generally include data about the pedagogic performance of study programmes. The study carried out by Cardoso et al. (2017) focused on a limited number of self-assessment reports which had been, at that time, submitted to A3ES for the certification of internal quality assurance systems. This study aims to extend the coverage to comprise all Portuguese universities, public

or private, independent of whether their internal quality assurance systems have been certified by A3ES or not. The purpose of this study is to understand whether the third mission activities that institutions refer to in their self-assessment reports are actually matched by corresponding quality assurance activities. In other words, are there mechanisms and procedures for the quality assurance of declared third mission activities?

Data and methods

The study resorts to the analysis of documents in the possession of the A3ES, provided by all the Portuguese institutions of a university nature, public and private, totalling 36. Of these, 16 are public and 20 are private institutions. Besides universities, there are institutions in Portugal which cannot use the name *university*, as this is restricted to institutions which offer at least three doctoral programmes in three different disciplinary areas. Nonetheless, they have a university institute status. Unlike polytechnics, which have a more vocational nature, universities have been classified as “ivory towers”, having the traditional missions of teaching and research, and searching, in a disinterested way, for “pure” knowledge. Since the third mission implies engagement with the community and an “interested” search for knowledge, universities have been, in principle, more challenged than polytechnics to change their traditional role and have had to make a greater effort to adapt to this transformation. This is the reason why the choice rested on universities/university institutes. Institutions were anonymised in the study, attributing to each one a number (the first 16 correspond to public institutions and the remaining ones to private institutions).

The documents analysed in this study include the institutional self-assessment reports submitted in 2017 to the Portuguese accreditation agency for the purpose of institutional assessment and accreditation (anonymised as A), as well as the quality manuals of the respective institutions (anonymised as B) – see Table 1. In regard to the first set of documents, the analysis focused on two sections which elicited information on third mission activities and also on the organization of the internal quality assurance system. Regarding the second set of documents, the analysis focused on the coverage of internal quality assurance of third mission activities expressed in quality manuals, which implied an overall view of the documents.

Table 1 – Higher education institutions and documents under analysis

	Institution		Documents	
	Public	Private	Reports	Quality manuals
University	1-14	17-25	A	B
University Institute	15-16	26-36	A	B

Fonte: systematization of authors.

The analysis was conducted with the software MAXQDA and used a grounded theory method adapted from Strauss and Corbin (1990). This involved open coding and selective coding. During the former, the data were broken down to yield categories. The codes and relationships between categories were constantly cross-checked against the data to ensure consistency. Then, selective coding generated the final categories and the final analytical framework. The framework allowed the systematisation of information around the following two dimensions: a) third mission activities institutions declared to be engaged in; b) quality assurance mechanisms and procedures employed to third mission activities. The aim was to find out whether these different third mission activities were effectively monitored and assessed within the remit of internal quality assurance system with a view to continuous improvement.

Quality assurance of third mission activities in Portuguese universities

In this section, findings both on the third mission activities developed by Portuguese universities and the quality assurance mechanisms targeting these activities are presented and discussed.

Third mission activities undertaken by institutions

All institutions provided information on the array of third mission activities they were undertaking. Irrespective of their motivations being intrinsically determined or simply responding to requirements set by external assessment, this finding suggests that Portuguese universities have embraced the engagement with the surrounding environment as one of their core missions, as literature in other contexts also suggests – see special issue of the *Journal European Journal of Higher Education* on Institutionalizing Universities' Third Mission, edited by Pinheiro, Langa and Pausits (2015).

Under the dimension *third mission activities*, the following major categories emerged, in order of importance:

- a) collaboration with local/national organisations;
- b) services coherent with the institution's mission;
- c) events for the community;
- d) knowledge transfer;
- e) cultural/artistic/sports activities;
- f) lifelong learning;
- g) social responsibility/volunteering;
- h) entrepreneurship and career development;
- i) *alumni*.

Some differences were noted between the public and the private universities, with a higher intensity of the activities of knowledge transfer, cultural/artistic/sports activities, regional development, and entrepreneurship and career development in the public universities; and a higher engagement with activities related to lifelong learning, services coherent with the institutional mission, collaboration with local and national organisations, events for the community and social responsibility/volunteering among the private universities. Some of these differences are understandable, given the fact that public universities are much less dependent on the generation of own revenue, given the state funding they benefit from and their greater capacity of attracting higher education candidates (TAVARES, 2013; TEIXEIRA, 2012). In this sense, the services coherent with the institution's mission, generally provided for remuneration, are more prominent in the case of private universities. As referred in the literature, revenue generation for economic profit is often controversial in public institutions (MONTESINOS et al., 2018). For example, one private institution specialised in Health Sciences sells services to the public:

The clinics provide not only oral health care (dentistry), for adults and children, but also appointments and treatments, and complementary diagnostic tests in the area of Nutrition, Physical Therapy, Psychology, Speech Therapy, Cardiology and Pulmonology. These activities allow an exchange of experiences and increase the range of training opportunities, facilitating and completing the overall preparation of students, as well as developing an important social support action to the inhabitants of the Municipality and neighbouring areas (Institution 32, document A).

Similarly, the fact that public universities are spread throughout the Portuguese territory, compared to the concentration of private universities in the great urban centres (TEIXEIRA, 2012), explains the higher incidence of regional development activities in public institutions, especially those from the inland regions.

HEIs have a great effect on the environment in many areas, both on the demand side (e.g. through the income associated with their activity) and on the supply side (e.g. at the level of knowledge associated with their graduates and the research conducted), which interact with each other. This set of effects is of crucial importance for economically and demographically depressed regions, so [University] plays a key role in the development of the region and in the blurring of the asymmetries, thus contributing to regional and national development, in accordance with its institutional mission (Institution 6, document A).

The fact that the research dimension is generally stronger in public universities (compared to private ones, which tend to be more teaching-focused) also justifies why knowledge transfer activities are more visible in the case of the public sector. For example, the report of an inland public university states:

As a consequence of its research work, [University] has established wide-ranging strategic partnerships with companies. Furthermore, in order to establish contact networks and facilitate the development of partnerships, [University] regularly participates in technology transfer networks and in brokerage events and sector fairs (Institution 6, document A).

Whereas institutions have mentioned the above third mission activities, it is also worth exploring whether these activities are effectively assured by quality mechanisms specifically designed for this purpose.

Quality assurance mechanisms and procedures targeted at third mission activities

Considering that the study aimed to assess the correspondence between declared third mission activities and their respective quality assurance mechanisms and procedures, the same categories identified under *activities* were replicated under the *quality assurance* dimension. However, the level of detail encountered in the description of third mission activities was hardly found in the description of the respective quality assurance mechanisms explained in the quality manuals. As the literature suggest, this may reveal the relative novelty of the third mission, the lack of incentives to institutionalise it (KOHTAMAKI, 2015), as well as the lack of indicators to measure performance in this area (MONTESINOS et al., 2008). Hence, the third mission emerges as an undeveloped process in terms of quality assurance (KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017a, 2017b). This occurs despite the fact that the majority of institutions stated that the third mission represented a principle or a reference point underpinning their quality assurance systems. The following statement from the quality manual of one private institution illustrates the identification of third mission as a quality concern, expressed as an institutional objective:

The institution is equipped with mechanisms to promote, assess and improve interinstitutional and community collaboration, in particular as regards its contribution to regional and national development (Institution 30, document B).

Generally, there is no information on the concrete procedures and tools used to monitor the different individual activities with a view to improvement. Instead, several quality manuals limit themselves to repeating information on the third mission activities they engage with, but say nothing or little on their quality assurance. The following statement, taken from one quality manual (supposedly explaining quality assurance procedures and mechanisms) is a good example of this:

The mission of the University is to prepare future generations and ensure the production and dissemination of knowledge to the society as a whole, thus contributing to its development. It is a mission of enormous responsibility, structured in the following three pillars: production of knowledge through scientific and artistic research, experimentation and technological and humanistic development; socialisation of knowledge, providing the traditional student population as well as the workforce with academic qualifications through undergraduate, master's and doctoral programmes, *ad hoc* training courses and informal lifelong learning; transfer of knowledge to the community for innovation and competitiveness modernization of public services and the social and cultural community as a whole (Institution 2, document B).

This means that although institutions are aware that the third mission is an area which needs their attention, they have not yet reached the point of developing specific procedures to monitor its quality (MONTESINOS et al., 2008). Information is generally restricted to a few paragraphs, standing in stark contrast to the description of quality assurance of learning and teaching (CARDOSO et al., 2017; KETTUNEN, 2012; MANATOS; SARRICO; ROSA, 2017a, 2017b) which, in general, is very detailed. When information does exist, quality manuals make rather general statements on the comparison between annual activity plans and annual reports in order to verify whether the intended objectives have been achieved, or attribute responsibility for the monitoring of third mission activities to specific units/roles. The quality manual of a public institution states:

In this context, the annual results, presented according to the Activity Plan and their compliance with the goals and objectives established for the same period by the Vice-Rector in charge of this area, are analysed based on the description of actions and initiatives taken by the different departments and units responsible for the articulation with the outside world (Institution 5, document B).

In very few cases, the quality manuals explain that work is underway to mainstream and standardise procedures for the quality assurance of third mission activities. Only one institution (a large public university with a certified internal quality assurance system) describes quality assurance mechanisms and procedu-

res discriminating between each of its third mission activities. For instance, regarding the “procedures to promote, monitor and evaluate the activities of interface and external action, in particular with regard to the provision of services to the outside world” (Institution 8, document B), the institution identifies the following responsible bodies or services, as well as the documents or activities related to its quality assurance:

Responsible organs or services: Pro-Rector responsible for relations with industry, innovation and entrepreneurship; Innovation Unit.

Related documents and/or activities: services provided to the community, regulations for providing services to the community, entities associated to the university [...] (Institution 8, document B).

To the other extreme, the quality manuals of a few institutions (generally private ones) give no information altogether on the quality assurance of third mission activities, while two others (also private) state that the quality assurance of the third mission dimension is under development. For example, one of these private institutions foresees “the creation of a new nuclear process to aggregate the activities of interaction with the community, as the third pillar of the [university institute] mission – which was an integral part of the ‘Strategic Planning’ process” (Institution 32, document B).

Conclusions

This study aimed to understand whether the third mission activities reported by institutions are actually matched by corresponding quality assurance mechanisms. Findings indicate that Portuguese institutions are already engaging with third mission activities, which are in a consolidated stage of development. However, differences related to the higher education sector can be found regarding the prevalence of third mission activities undertaken: while the private sector institutions, which are not state funded, develop activities aiming to increase their revenue, the public sector institutions, which are funded by the state, appear to be more focused on activities which are not conducted with the revenue generation in mind (see also MONTESINOS et al., 2008).

Despite the fact that the third mission is apparently embraced by the analysed Portuguese institutions, the quality assurance of this core activity is still in an embryonic stage of development. This finding is more revealing about internal quality assurance systems than about institutions’ engagement with third mission activities. Internal quality assurance systems are a quite recent development

among Portuguese institutions and are likely to have been designed in response to external demands posed by the new national framework for the assessment of higher education (TAVARES; SIN; AMARAL, 2016); additionally, the guidelines of the Portuguese accreditation agency were inspired by the European Standards and Guidelines, which leave out the third mission (MANATOS; SARRICO; ROSA, 2017a). It is therefore understandable that the majority of institutions have failed to contemplate, in their underdeveloped internal quality assurance systems, the mechanisms targeted at the quality assurance of third mission activities, because they are still in a reactive mode to external requirements (TAVARES; SIN; AMARAL, 2016).

Additionally, the third mission is also a latecomer (ETZKOWITZ, 2003) among universities' activities and, consequently, methods and indicators to measure the performance and the impact of such activities are yet to be developed (MONTE-SINOS et al., 2008; PIVA; ROSSI-LAMASTRA, 2013). This may also explain the embryonic stage of development of quality assurance procedures and mechanisms for third mission activities. Thus, the integration of the different processes in one quality assurance system and its expansion beyond teaching and learning (see MANATOS; SARRICO; ROSA, 2017a, 2017b) are a next step to be considered in the further development of internal quality assurance systems.

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