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Proposal

Title: Third mission activities in quality assurance systems: do theory and practice match?

Abstract (150 words max):

Along with the traditional missions of a university – teaching & learning, and research – a latecomer is now well established in higher education: interaction with society, often designated as third mission (TM), which includes a set of different activities that are now an integral part of what universities do. They are present in university strategy discourses and in the university's structure with dedicated units. Is this also true when considering quality assurance systems (QAS)? Literature shows that most QAS are mainly concerned with learning & teaching and that there is a mismatch between theory and practice in what concerns TM. This study focuses on the case of a public Portuguese university and intends to assess how far along it is in terms of integrating performance indicators (PIs) for TM activities in its QAS. Content analysis was conducted to internal and external quality assessment reports and crosschecked with national (A3ES) and international guidelines (ESG). Ultimately, the paper proposes a set of relevant PIs that could enhance quality assurance of TM activities at this institution.

Has this paper previously been published/presented elsewhere? If yes, give details. No.

Text of paper (3000 words max):

Introduction

Higher education (HE) has been undergoing worldwide an unprecedented rapid change and growth pace over the last 50 years. In Portugal, real change came in the 1970s when the system underwent significant expansion (Ferreira, Machado and Santiago, 2008) with the creation of new universities, a binary system where universities and polytechnic institutes coexist and later on the expansion of the private HE sector. Demand for HE increased and the system rapidly evolved from an elite to a mass system, according to the stages of development identified by Trow (1973).

Such rapid growth of the system had a significant impact on public higher education institutions (HEIs) as it put some new pressure on them in terms of funding models and accountability needs, with consequences at autonomy level and state steering of the system (Ferlie, Musselin & Andresani, 2008).

Another change of relevance that results from the previous one concerns the attention HEIs had to start paying to community and industry engagement activities, which makes up a new mission that adds to teaching and research: the so-called Third Mission (TM).

Changes such as the ones just mentioned implied a greater attention to quality issues and to data gathering that would enable HEIs to be able to account for their activities and are therefore the basis for the creation of internal quality assurance systems (QAS). Literature shows that most Portuguese public universities' QAS focus primarily on learning & teaching activities, and third mission is still at embryonic



stage (Sin, Tavares and Cardoso, 2018). The present study focuses on the case of a public Portuguese university and intends to assess how far along it is in terms of integrating performance indicators (PIs) for TM activities in its QAS. Ultimately, the paper proposes a set of relevant PIs that could enhance quality assurance of TM activities at this institution.

Third mission in higher education: scope and background

Universities are among some of the oldest institutions and their relevance to society is unquestionable. They have from the beginning been responsible for knowledge production and transmission and both these activities correspond to their main missions: learning & teaching and research. For a long time, however, only a tiny part of society was concerned and universities were a kind of 'ivory tower' (Rüegg, 2011) where only a few would teach and be taught, and where academics would decide for themselves on how to run their own lectures, research and institutions. No questions asked.

Relevance to society and increasing interest from society on HE gained new insight and scope over the time and especially in the last decades. As HE systems grew, so became state expenditure with HE bigger and society at large came to perceive as fair that HEIs would have to explain how they were using public funds, thus increasing the need for accountability. As more and more people were attending and graduating from HEIs and entering the labour market, so grew the interest of industry for the knowledge that was being produced and how skilful and competent those graduates were for the tasks they were expected to perform. Finally, the central role taken on by the scientific knowledge and technology at a global scale has put new pressures on HEIs as producers of knowledge, considered as a very important asset for development and wealth creation (Etzkowitz et al. 2000; Gibbons et al. 1994; Pinheiro, Langa, and Pausits 2015).

Although not always perceived positively by the academic community (Watermeyer 2015), synergies between HEIs and society / industry became therefore unavoidable. Most HEIs now include interaction with society in their mission statement, in their strategic plans, in their own structure with dedicated support units to cooperation, business centres, incubators, science parks and units promoting lifelong learning programmes.

Third mission, engagement and interaction with society, cooperation, these are all expressions that mean to designate a certain type of activities now developed in HEIs. It is not always easy to delimit and define which activities specifically are concerned here. One can argue that universities have always had an interaction with society, with governments and with the business world and this as a result of their other two main missions, thus contributing for the economic development of the region and the country they are located in (Maximiano, 2019). From this point of view, some authors understand TM not as something new to the university but as a reframing of some activities HEIs develop as TM, moving them from the institutional periphery to the core of their activity (Nedeva, 2007). In this perspective, some authors refer to a "redesign or reproduction of core functions" in two main dimensions: external relations and relevancy (Nedeva, 2007; Pinheiro, et al., 2015). Jongbloed, Enders and Salerno (2008) argue that TM should not be conceptualised as a separate mission and consider that it 'entails a good deal of mission overlap'. They rather choose to define TM as 'community engagement' and consider that 'third mission is not so much its own mission as it is a reflection of the unique stakeholders that fall outside of the traditional purview' (Jongbloed et al. 2008: 312).

The figure below seeks to provide an account of the activities that usually fall in the realm of what is considered as TM. We can see the 'overlap' Jonbloed et al. (2008) refer to, as most of these activities are rooted in education and research.



Figure 1: An account of some third mission activities

If it is true that TM activities have found their own place in HEIs, the same cannot be said about the attention they get from quality assurance systems (Manatos et al. 2017a, 2017b). As a latecomer to higher education, definition of indicators and methodologies for measuring TM activities is still underdeveloped in most HEIs (Marhl and Pausits, 2011). Nevertheless, there are already some approaches to analysing TM activities and defining a set of indicators to measure them just as with education and research. One of the approaches that came to be widely disseminated is one that resulted from the *E3M-Project – European Indicators and Ranking Methodology for University Third Mission*, which identifies three main dimensions under which TM activities fall: Continuing Education, Technology Transfer and Innovation, and Social Engagement (Carrión, García-Gutiérrez, Bas and Carot, 2012).

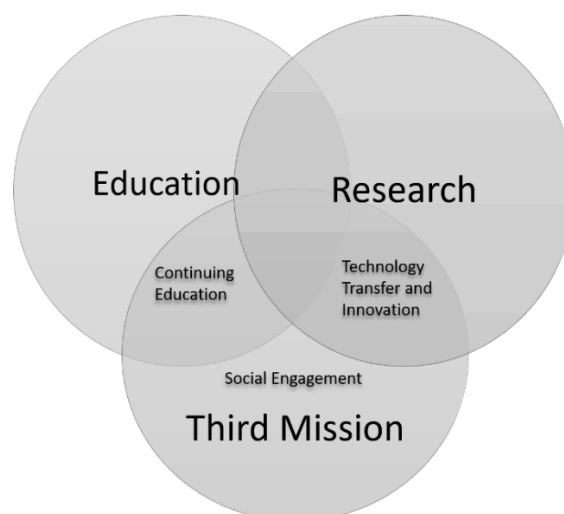


Figure 2: Dimensions for TM: how they overlap with a university's core missions.



Continuing education refers to “all general education, vocational education and training, non-formal education and informal learning undertaken throughout life, resulting in an improvement in knowledge, skills and competences within a personal, civic, social and/or employment-related perspective” (EU Commission LLP 2007-2013, 2011). The second dimension encompasses all activities of transfer of knowledge and results of the research carried out in HEIs into the non-academic world (Carrión et al., 2012). The category of social engagement refers to all those activities addressed to society or specific sectors “to enrich them on the cultural or developmental field” (Carrión et al., 2012). Ultimately, the project identifies a final set of 54 indicators, distributed among each of these three dimensions.

Other approaches to develop methods and indicators that may enable measurement of TM activities may frame indicators differently but still conceptualising it in somehow similar dimensions: social engagement is a recurring one, for example, where categories such as entrepreneurship and lifelong learning are considered (Montesinos, Carot, Martinez and Mora, 2008; Piva and Rossi-Lamastra 2013).

Due to the specific characteristics of TM activities, which overlap traditional first and second missions of HEIs, as we have seen, it is not an easy task to define feasible indicators to measure them (Marhl and Pausits, 2011). Based on the E3M Project, Marhl and Pausits (2011) have followed a methodology whereby first dimensions for TM activities are defined, then the processes that characterise the dimensions and then they look for feasible indicators (Marhl and Pausits, 2011: 52).

With this context in mind, both in what concerns

- the mismatch between theory and practice (HEIs embrace TM activities and incorporate them as one more core mission, however this is not yet reflected in solid quality assurance mechanisms for TM), and
- on the other hand, considering a methodology for defining feasible indicators based on dimensions and processes,

we will proceed with the analysis of our case study. Further considering that performance indicators for TM must not be a ‘one size fits all’ solution, as they should be defined according to each institution’s mission statement and strategy, we will also discuss possible indicators for the public university under study.

Methodology

The present case study aims to assess how far along a Portuguese public university is in terms of integrating third mission activities in its quality assurance system. Furthermore, it also aims to propose a set of PIs considered as relevant for this university according to its mission statement and vision, as well as its strategy in what concerns society and industry engagement activities.

Methodological options, therefore, include a thorough review of relevant literature on this topic, as well as content analysis (Bardin, 2009) of internal and external documents. Literature review made it possible to account for a theoretical background enabling a critical analysis of the emergence of a third mission in HE and its integration in QAS. It further enabled to better frame and define which activities are accountable as third mission activities.

Content analysis to both internal and external documents made it possible to assess where does this university stand in terms of quality assurance of engagement activities. Content analysis was done to documents such as the university’s strategic plan, the quality manual and the self-assessment report for certification purposes of the institution’s QAS. Further analysis was also done to the university’s QAS for an identification of possible PIs that address third mission activities’ quality assurance. Some external documents have also been analysed to enable a better understanding of what was expected of HEIs in terms of third mission quality assurance: guidelines from the Portuguese assessment and accreditation agency (A3ES) and the European standard guidelines (ESG).

The set of PIs that resulted from this study as a possible relevant set for this university has been organised according to the three categories that constitute TM and are identified in the figure below.

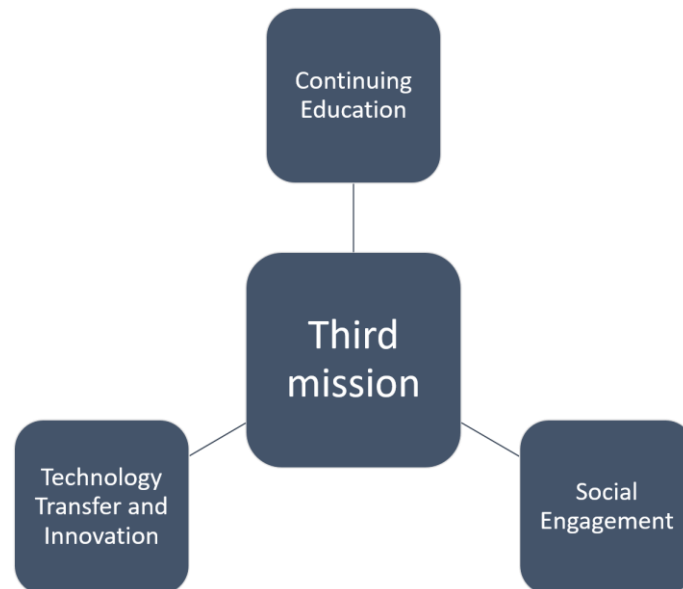


Figure 3: TM dimensions based on the E3M Project

Findings

Analysis of the selected internal documents of the Portuguese public university under study shows that this institution has fully embraced TM activities as a core mission alongside with learning & teaching and research. This is in line with the findings of a broader study on TM activities in Portuguese universities (Sin et al. 2018).

Right in its mission statement, the idea of engagement with society is very much present:

The [university's] mission is to create, share and apply knowledge, involving the whole community through teaching, research and cooperation with the surrounding environment, in order to make a clear difference for individuals and society. (*Mission statement*)

It further goes on saying that the project is based on innovative and lifelong learning and on cooperation with society.

The university's strategic plan also argues for a strong commitment to TM activities by referring to an institutional strategy geared to boosting income, which is then related to cooperation, an active contribution to regional development, to strengthen entrepreneurship, as well as knowledge and technology transfer.

The [university] must have a leading role in the economic and social development of the region, based on an innovation and scientific and technological model that promotes cooperation (...).

It must also train qualified technical staff for sectors expected to have an increasing presence in the region, with special attention to lifelong learning programmes (...) (*Strategic plan 2018*)

As a result from the purposes set out above, the strategic plan then refers to the creation of an Institute for Cooperation, which is meant to be the organisational structure where all activities associated to TM will be concentrated.



Moving the focus closer to quality assurance of TM activities, the university's strategic plan defines the goal of incorporating the subsystems of research and cooperation with society in the institution's internal quality assurance system (IQAS) and of specifically developing internal performance indicators for cooperation.

This brings us to the other question we set out to analyse: where does this institution stand in terms of integrating TM in its QAS? For this purpose, we have looked into the institution's Quality Manual, its Self-assessment report sent out to A3ES within the IQAS certification process, and the A3ES External Assessment Committee's (CAE) final report.

Analysis of the university's Quality Manual (2016) reinforces the argument for a commitment to cooperation with society as a core mission of the institution. There is a part of the Manual dedicated to Cooperation with society from which it stands out that monitoring and assessment procedures result from the Annual Management and Accounts Report. This is again in line with literature that shows that TM activities in QAS are still at an embryonic stage (Sin et al., 2018).

There is however a set of indicators for cooperation with society, which are already identified in the Quality Manual. They are defined in association with specific goals that the university has set out to achieve, such as:

- increase of own income,
- promote entrepreneurial innovation,
- promote entrepreneurship in the academy and in the region,
- promote the creation of knowledge with economic impact,
- operationalise an employability observatory,
- increase the number of voluntary actions and civic participation.

The indicators defined are therefore mostly addressed to financial issues, number of contracts, number of patents, number of new incubated companies, employability issues, and number of initiatives related to the last goal set out above.

If we consider A3ES reference framework for IQAS, and specifically Reference 7 – External relations, we see that the Agency considers the inclusion of TM activities in QAS mechanisms as part of 'a sound and well developed internal quality assurance system':

The institution adopts mechanisms to promote, assess and enhance collaboration with other institutions and with the community, namely regarding its contribution to regional and national development.

In the ambit of its external relations policy, the institution has in place procedures to promote, monitor, assess and enhance interface and external action activities, namely with regard to:

- Inter-institutional collaboration;
- Services to the community;
- Cultural, sporting and artistic external action;
- Integration in national projects and partnerships;
- Contribution to regional and national development, in accordance with its institutional mission;
- Collection of own income, through the activities undertaken.

(A3ES Reference Framework for Internal Quality Assurance Systems)

The European Standards and Guidelines (ESG), although referred to by A3ES Reference framework, are not relevant in terms of quality assurance of TM activities as they are mostly addressed to quality



assurance of learning and teaching, and make only small references to society: 'Quality assurance takes into account the needs and expectations of students, all other stakeholders and society.'

The university's Self-assessment Report acknowledges that its IQAS is more developed in the area of education. However, it also argues for an incorporation of the evaluation procedures, as established by national institutions.

The internal quality assurance procedures are executed in a global way at [university], and there is evidence of the existence of strategies and policy supported in documents (...).

In these documents relevant indicators for this area are defined, for example: the value of external contracts (in mil. Euros) included in the Contract-Programme, and representing the funds raised through protocols, doctoral fees and research projects.

(University's Self-assessment Report)

The university further presents a SWOT analysis to its IQAS, which identifies (in terms of Cooperation with society) the following strengths (a) and weaknesses (b): (a) there is a cooperation strategy involving the main regional actors; (b) dispersion of responsibilities and lack of a structure dealing with cooperation with society, which would contribute to a more effective and structured IQAS.

The final report by CAE acknowledges that the university has an institutional policy for cooperation. It further acknowledges that the university has developed a set of indicators for the assessment of the impact and monitoring of regional development policies. The CAE classifies the degree of development of the institution's IQAS as substantial. CAE further agrees with the university on the need for further development of specific instruments and mechanisms in the area of cooperation with society, acknowledging the need to 'overcome shortages in relevant indicators for the assessment of the impact and monitoring of policies of regional development.' This university's IQAS has been certified by A3ES, which means it complies with A3ES criteria for certification, as well as its set of reference points, in spite of the shortages identified.

In view of the above, we will now provide a set of possible indicators for TM activities that could be considered as specifically appropriate for this university. For that purpose, we have considered the university's strategic options so that indicators meet, first of all, strategy. The Strategic Plan underlines the great importance given to knowledge transfer activities, cooperation with business, a sound and close relationship with the region and its community, and a growing interest for sports activities, both by increasing the number of sports events and university athletes. The Rectory team presently in place includes a Pro-Rector for the promotion of the practice of sports and the development of adequate conditions for the advancement of sport, as well as cooperation with clubs and sports associations. Considering that this university does not offer any degree in sports, this shows nonetheless an important commitment to this area.

Definition of a set of possible indicators also considered the three dimensions previously identified and that we consider apply to this university (Continuing education, Technology transfer and innovation, and Social engagement), and the indicators identified in the E3M Project.

Continuing education	Technology transfer and innovation	Social engagement
Existence of a strategy for continuing education, included in the mission statement and/or in the strategic plan	Existence of a strategy for technology transfer and innovation, included in the mission statement and/or in the strategic plan	Existence of a strategy for social engagement activities, included in the mission statement and/or in the strategic plan
Degree of development of quality assurance procedures for continuing education activities	Degree of development of quality assurance procedures for technology transfer and innovation activities	Degree of development of quality assurance procedures for social engagement activities
Number of lifelong learning programmes delivered	Number of incubated spin-off and start-up companies / Number of teaching staff FTE	Number of sports events held at the university's infrastructures
Number of vacancies for lifelong learning programmes	Number of patents and prototypes / Number of teaching staff FTE	Number of athletes involved in sports events held at the university's infrastructures
Number of participants in lifelong learning programmes	Number of interinstitutional partnerships / Number of teaching staff FTE	Number of university athletes who participate in national and international sports competitions / Number of students
Number of lifelong programmes in partnership with public and private business organizations	Number of research projects with public and private business organizations / Number of teaching staff FTE	Number of cultural events promoted by the university open to community
Lifelong learning students' degree of satisfaction	Number of traineeships in companies / Number of students	Number of participants in cultural events promoted by the university
	Existence of entrepreneurship fostering initiatives	Number of events organized by external organizations held at university's infrastructures
	Physical areas made available for entrepreneurial actions	Number of participants in events organized by external organizations held at university's infrastructures
	Number of R&D contracts with non-academic partners / Number of teaching staff FTE	Number of university members (staff and students) engaged in civic projects for the community / Number of university members
	Number of consultancy contracts / Number of teaching staff FTE	Number of academic staff participating in professional bodies, networks, organizations and boards outside academia

Figure 4: Proposal for a set of indicators for TM activities

An interesting future exercise would be to look at these indicators and for each one ask the following two questions:

- Degree of relevancy. How relevant is this indicator for the university?
- Degree of data collection. Is the university already collecting the necessary data to calculate each of these indicators?

Indicator	Degree of relevancy			Degree of data collection		
	Highly relevant	Relevant	Not relevant	Systematically collected	Partially collected	Not collected

Table 1: Exercise proposed for each indicator

Conclusions

To sum up, findings make it possible to establish that, as is the case in other HEIs, the Portuguese public university of our case study clearly embraces TM activities as one of its core missions. They are both present in mission statements and strategic plans, as in organizational structures dedicated to it. However, as is also the case in HEIs in general, although present to a certain degree in QA mechanisms, it still lacks full integration with specific performance indicators in its QAS, which means that in terms of QA, TM activities are still at an embryonic stage (Sin et al, 2018). We can therefore speak of a mismatch between theory and practice. Based on the literature review and the characteristics of this public university, it was possible to establish a set of performance indicators that could be appropriate for this institution, suggesting a future exercise of testing their degree of relevance and data collection.

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Please submit your proposal by sending this form, in Word format, by 22 July 2019 to egaf@eua.eu. The file should be named using the last names of the authors, e.g. Smith_Jones.doc. Please do not send a hard copy or a PDF file.