

PERFORMANCE AND QUALITY INDICATORS AND THE GOVERNANCE PROCESS IN BRAZILIAN FEDERAL UNIVERSITIES: A MULTI-CASE STUDY

OS INDICADORES DE DESEMPENHO E DE QUALIDADE E O PROCESSO DE GOVERNANÇA NAS UNIVERSIDADES FEDERAIS BRASILEIRAS: UM ESTUDO MULTICASO

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ABSTRACT

The aim of this study was to verify the relationship between the use of the performance and quality indicators and the governance process of the Brazilian federal universities. To achieve this, semi-structured script interviews were conducted with the managers of four universities with the best performance and quality indicators. Following the request to maintain anonymity in the interviews, universities were codified as University 1, University 2, University 3 and University 4. Secondary data were collected in bibliographical and documentary research on the official websites of the universities participating in the research. For the analysis of the results, the triangulation of data sources was used. As a result, it has been verified that governance has a great influence on the way in which management conducts its work, since management with greater maturity in the governance process better understand the importance of indicators and all institutional information, and use them in a strategic way.

Keywords: Governance, Indicators, Information Management, Federal University.

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RESUMO

O objetivo desta pesquisa foi verificar a relação entre a utilização dos indicadores de desempenho e de qualidade e o processo de governança das universidades federais brasileiras e para atendê-lo, realizaram-se entrevistas, com roteiro semiestruturado, com os gestores das quatro universidades com melhores resultados tanto nos indicadores de desempenho quanto de qualidade. Entretanto, para manter o anonimato nas entrevistas, conforme solicitado, codificou-se as universidades como universidade 1, universidade 2, universidade 3 e universidade 4. Os dados secundários foram coletados em pesquisas bibliográficas e documentais nos sites oficiais das universidades participantes da pesquisa. Para a análise dos resultados optou-se por fazer a triangulação de fontes de dados. Como resultado verificou-se questão da governança influencia sobremaneira a forma pela qual a gestão conduz seus trabalhos, pois as gestões em que se percebeu uma maturidade maior no processo de governança, compreendem melhor a importância dos indicadores e de todas as informações institucionais e os utilizam de forma estratégica.

Palavras-chave: Governança, Indicadores, Gestão da Informação, Universidade Federal.

1 INTRODUCTION

In the knowledge economy era universities play a fundamental role in the development of a country. In the case of Brazil, as well as generating knowledge, it is also expected that higher education guarantees the formation of socially critical and technically qualified professionals to act as agents of economic growth, promoting the reduction of poverty and social inequalities (Corbucci, 2007).

For Magalhães, Silveira, Abrantes, Ferreira and Walkim (2010), the investments made since 2003 enabled the improvement in the conditions of the existing Federal Institutions of Higher Education, as well as the creation of new institutions with the objective of boosting the production of knowledge in the country (Magalhães, Silveira, Abrantes, Ferreira, & Walkim, 2010). However, changes in organizations – notably private ones – occur very quickly, which requires a more efficient professionalization of management. Nevertheless, such requirement has also occurred in the public sector, which includes education, as it needs to follow the evolution of other organizations. This is mainly a result of the management reform faced by the State, which now requires greater efficiency and effectiveness of public institutions and a new posture of the managers in relation to the form of management of these organizations (Bresser-Pereira, 2010, Cittadin, 2011).

Thus, keeping the search for quality education in sight, public higher education institutions need to develop management mechanisms that ensure the continuity of their activities, creating a management model that is appropriate to their needs, which should include: strategic planning, budget and cost system, control and evaluation of areas' performance, as well as financial and personnel management (Cittadin, 2011).

In this sense, to measure performance through a process and quantify the efficiency and effectiveness of past actions, indicators can be used. They are fundamental mechanisms for the management to monitor and evaluate activities, as they enable the management to constitute the data, which allows the follow-up of established goals in order to observe the evolutions, as well as rectify actions to fulfill what has been planned (Sampaio, 2011, Boynard, 2013, Brasil, 2012).

Therefore, this study aims to verify the relationship between the use of performance and quality indicators, and the governance process of Brazilian federal universities. For that, interviews were conducted with the managers of four federal universities which stand out among other Brazilian federal universities, according to performance results published by official bodies.

This study is presented in five sections, including this introduction. The second section brings the theoretical background, then the research method is described, and in the fourth section, the results and discussion are presented. Finally, the final considerations of the study, as well as the limitations of the work and suggestions for future research, are made.

2 THEORETICAL REFERENCE

To support the development of this research, we sought to revisit authors who addressed the topics on new public management and the evaluation processes of education, but also indicators and information management, as presented in the following section.

2.1 The New Public Management and the process of evaluation of Brazilian education

During the 1990s, Brazil and other Latin American countries underwent a process of State restructuring that altered the relationship between the State and civil society. This change was justified by governments as necessary to make the structural adjustments that the countries needed, mainly due to the external debt crisis (Andrade Oliveira, 2015, Bresser-Pereira, 1999a, Oliveira, 1996 and Rossato, 2005). In addition, the Reform of the State apparatus is seen as a global strategy guided by international organizations such as the International Monetary Fund (IMF) and the World Bank (WB) to enable countries to deal with the crisis, as well as a way for the State to increase its governance and governability (Bresser-Pereira, 1997; Vieira, 2013).

Development theorists define governance as an adequate set of democratic and managerial practices that help countries to improve their economic and social development conditions. Hence, the so-called “good governance” is understood as the combination of good public management practices (Secchi, 2009).

In this perspective, the changes that took place in the Brazilian public administration after the State reform directly influenced the educational policy so that it came to conform to the foundations of the New Public Management (Paro, 2001). Management by results is one of its main axes and, therefore, requires from organizations a strategical plan, autonomy management, the elaboration of performance indicators and, fundamentally, the evaluation by results (Terto & Pereira, 2011).

The New Public Management also advocates the evaluation of the education system as one of its main mechanisms of regulation. To achieve this, it would be necessary to create education quality indicators so that not only public authorities, but also society could monitor the practices to reach the efficiency that, in the case of education, has been associated with quality (Andrade Oliveira, 2015).

Thus, institutional evaluation, which is considered a process, provides society with a service that enables the academic community to reflect on its mission, purpose, commitments, goals and modes of action. The evaluation becomes then a mechanism that starts to guide public policies in the construction of a higher education system according to the needs of its time (Francisco, Nakayama, Melo, Pitta, & Oliveira, 2015; Milk, Tutikian, & Holz, 2000).

However, for the academy, the equivalence relation between efficiency in the indicators’ results and the quality of teaching is somewhat controversial. Authors such as Catani, Oliveira and Dourado (2001) affirm that the education evaluation system implements, bit by bit, to a process of educational economization, which alters its objectives and values while promotes significant changes in university management and in vocational training. Terto and Pereira (2011) corroborate with these authors when they state that in this model, the concern is focused on the final product and not on how the process occurs. This stimulates competitiveness and suitability to economic and marketing rationality.

Despite criticisms regarding the evaluation, it is recognized that its development in a broad way is directly related to the need to better know the differences and asymmetries of the system. This way, it becomes possible to produce diagnoses that enable the acknowledgement of imbalances and their correction with the objective of promoting greater equity – i.e., the eval-

uation process is a cycle that is fed by means of corrective actions resulting from the evaluation itself (Andrade Oliveira, 2015; Gomes, 2009).

In this line, Vieira (2007) affirms that through the evaluation culture quality education can be achieved. The author argues that results-based management should not be feared, but rather encouraged, since getting the results alone is not enough. What really matters is that institutions recognize each other in their data, so that any generalizations can be surpassed by levels of detail. Vieira (2007) clarifies that the result is only the first step; it is indispensable that it can be interpreted and that the manager incorporates it into the planning, execution and monitoring of public policies. The data alone do not reflect a lot – they need to be transformed into information and then into knowledge.

In this regard, it is necessary to understand what information management is and how it can help the management of universities with institutional indicators.

2.2 Information Management

The literature on organizational theory states that information is created and used by organizations in three strategic fields. In the first field, the company interprets and gives meaning to the information obtained about the environment around it and how it is acting. This can be understood as information management and competitive intelligence. In the second field, in order to innovate and learn – i.e., to manage knowledge – the organization combines the experiences of its members, creating new knowledge. In the last field, information is processed and analyzed so that it can be used in strategic decision making; that is, to execute strategic intelligence (Choo, 2003).

Information, however, was only understood by this perspective from the evolution of information management, as the initial focus of document and data management for information resource management was changed. In this context, with a more strategic perspective, information management starts to appear in the formal organizational structure, whose responsibility passes to the high organizational level (Davenport & Prusak, 1998).

For Davenport (1994), in addition to the responsibility for managing information, the establishment of information policies applicable to organizations is also the competence of the highest-level; so is the creation and maintenance of information stocks, together with the coordination of such information, the promotion of efforts to improve the quality of information, the creation of appropriate spaces for production/dissemination of information based on identified needs, as well as the planning and sharing of information across the organization.

The main objective of using information management in a strategic way is to gain competitive advantage. The more relevance the information has to the business of the organization, the greater and more effective is the management over it. With this understanding, we begin to discuss how information can generate competitive advantage, and how to implement the actions that will enable the strategy to generate results. To do so, it is necessary to use systems and techniques for collecting, selecting, processing, interpreting and distributing information that will support the decision-making process of the organization, which may be formal or informal (Choo, 2003; Siqueira, 2005).

Therefore, the main objective of information management is to identify and enhance information resources and information that is available, so that the organization can learn and adapt to change through the application of the information cycle (Tarapanoff, 2006).

Hence, it is necessary to understand the characteristics of the strategic resources available – be them tangible or intangible – as well as how they may influence everyday activities of a Higher Education Institution. Based on this understanding, the management of the Institution can establish how these resources can be explored in all possible ways so that they can serve as an inducing and sustaining element of organizational strategies (Gonçalves, Vieira, & Stallivieri, 2016).

Regarding this, Barney (1991) analyzed resources as sources of competitive advantage in organizations. First, he sought to define some key terms, considering the function of the firm's idiosyncratic resources in creating sustained competitive advantages. For this definition, he uses the concepts of enterprise resources adopted by Daft (1983), which states that enterprise resources include all assets, capabilities, organizational processes, company attributes, information, knowledge, etc., controlled by a company which allows the creation and implementation of strategies for achieving both efficiency and effectiveness.

This research has the understanding that the indicators used to measure the performance and quality of higher education in Brazil are strategic resources that can be appropriated by the university manager, using the information management, which enables the resources to be interpreted. In the following section, the concepts of indicators will be presented, as well as the indicators used in the evaluative processes of Brazilian higher education.

2.3 Indicators

Ferreira, Cassiolato and Gonzalez (2009) conceptualize indicator as a measure that can be both qualitative and quantitative. It also has a specific meaning and is used to organize and capture important information – i.e., it is a methodological resource that empirically demonstrates the evolution of the elements that form the observed object.

In public management, indicators are considered instruments that contribute to identifying and measuring aspects that are pertinent to a phenomenon arising from an action or omission of the public power and, therefore, are able to identify and measure the aspects of a determined public policy with a certain periodicity. They enable the systematic monitoring, description, classification, ordering, comparison or quantification of the observed reality and, thus, they provide subsidies to the evaluation process while meeting the needs of decision makers (Brasil, 2011, 2012).

For the development of this study, the quality indicators for Higher Education defined by the National Institute of Educational Studies and Research Anísio Teixeira (INEP) and the Performance Indicators prepared by the Federal Court of Auditors (TCU), will be used as reference. The topics will be covered in the sequential items.

The General Index of Evaluated Courses of the Institution (IGC), the Preliminary Course Concept (CPC), the Difference Indicator between Observed and Expected Performance (IDD) and the ENADE Concept (CC) (INEP, 2018a) are considered quality indicators. The methodology for calculating these indicators was approved by CONAES, in order to comply with Law 10861 of 2004, the SINAES Law (INEP, 2018a).

In their rendering of accounts, the instruments by which the Federal Institutions of Higher Education (IFES) in Brazil are evaluated, as far as performance is concerned, are the management indicators proposed by the Federal Audit Office (TCU), at the Federal Secretaries of Internal Control and Higher Education of the Ministry of Education (Barbosa, Freire, & Crisóstomo, 2011; Brasil, 2006). In this sense, the IFES should present the following indicators: Current Cost with HU / Equivalent Student; Current Cost without HU / Equivalent Student; Full-time Student / Equivalent Teacher; Full-time Student / Official Equivalent with HU; Full-time Student / Equivalent employee without HU; Equivalent Employer with HU / Equivalent Teacher; Equivalent Employer without HU / Equivalent Teacher; Degree of Student Participation (GPE); Degree of Student Engagement with Postgraduate Diploma (CEPG); CAPES / MEC Concept for Post-Graduation; Teacher Qualification Index (IQCD); Graduation Success Rate (TSG) (Brasil, 2006).

3 METHODOLOGY

The methodological approach used in this research is exploratory, whose objective is to know the study variable in the way it is presented, its definition, as well as the context in which it is inserted (Queiróz, 1992).

The paradigm of research is interpretative, in which the phenomenon to be studied results from the placement of meanings that the researcher imposes on the phenomenon, which is adapted by the way in which the parts interact (Santana & Sobrinho, 2007).

With regard to its nature, the approach will be qualitative, whose characteristic is to be highly descriptive, with emphasis the social construction of reality and focus on demonstrating how the existing theory can act in specific cases (Eisenhardt & Graebner, 2007).

The case study used for this research aimed to analyze a social unit intensely and in depth so that the empirical investigation happens within the real context, in which the researcher does not have control over the events and neither over the variables. Thus, it seeks to apprehend the general situation in a creative way by describing, understanding and interpreting the complexities of the facts studied (Martins & Theóphilo, 2016; Eisenhardt & Graebner, 2007).

Despite the fact that the study is a unique case of richly describing the existence of a certain phenomenon (Siggelkow, 2007), the choice for this research was to develop multiple case studies. According to Yin (2001), by doing so it is possible to observe a broader scope of results – not limiting to information from just one organization – and a stronger foundation for theory building can usually be provided. Regarding the number of cases, Eisenhardt (1989) states that there is no ideal number, but suggests between four to ten cases.

Hence, the primary data collection was done through interviews with a semi-structured script, previously elaborated, applied to the managers of four Brazilian federal universities chosen after the analysis of the performance and quality indicators, which stood out with the best results according to data from the TCU and the INEP, respectively. In order to maintain anonymity in the interviews, however, it was decided to code the universities selected for the research, such as University 1, University 2, University 3 and University 4.

University 1 has 35 undergraduate courses, 30 of which are presential and five are distance learning. It has 10,904 students enrolled, 574 administrative technical staff and 751 lecturers (INEP, 2018b). In University 1, the Planning Prorector, the Graduation Prorector, the Institutional Educational Procurator – who also has the function of Institutional Researcher – and the Advisor of Governance and Management of the Rectory were interviewed.

University 2 offers 65 undergraduate courses and 5 distance learning courses; it has 13,011 students enrolled, 1000 administrative technical staff and 1472 lecturers (INEP, 2018b). In University 2, the General Secretary of Planning of the current management and the previous management and in both administrations were interviewed. These Secretaries also accumulated the functions of Institutional Researcher and Institutional Educational Procurator. Firstly, the interview was conducted with the current manager, but due to the answers obtained and the short time in which he was in the management, it was important to interview also the Secretary of the previous management. In addition, the Administrative Prorector was also interviewed.

University 3 has 96 face-to-face undergraduate courses and 2 undergraduate distance learning courses; it has 29,190 students enrolled, 2655 administrative technical staff and 2881 lecturers (INEP, 2018b). In University 3, the Prorector of Planning, the Institutional Researcher, who accumulates the function of Institutional Educational Procurator and the Secretary of Institutional Evaluation were interviewed.

University 4 offers 90 undergraduate courses and five undergraduate distance learning courses; it has 31,613 students enrolled, 4393 administrative technical staff and 3508 lecturers (INEP, 2018b). In University 4, the Director of Institutional Evaluation, who accumulates the functions of Institutional Researcher and Institutional Educational Prosecutor, the Prorector of Management Planning from 2008 to 2011 and the Assistant Prorector of the Management Planning 2012 a 2016, were interviewed.

The interviews were carried out from September to November of 2018 and, in addition, secondary data were collected by means of bibliographic and documentary research, such as the Institutional Development Plan – PDI, Accountability and Management Report, Statistical Yearbooks, Higher Education Census Report, Institutional Self-Assessment Reports, Activity Reports, Universities’ E-Portals, among others.

For this research, the triangulation of data sources (or data triangulation) was adopted, in which the responses of the interviewees of each university were compared with the official documents collected.

4 ANALYSIS OF RESULTS

According to the interview, the management of University 1 nowadays understands well the importance of the indicators – a better knowledge of their data to improve the management. However, when the works started by sending spreadsheets, requesting data, information or even sharing information about institutional data and indicators, they found resistance from some people,

[...] at first we had a lot of friction, but over time, those who were initially defensive about it, changed their minds and said that those data and those indicators were helping them in so many ways that they could see the institution better, they could manage better, but it happened later, it was difficult at first and required some work.

Regarding this resistance, University 1 justifies that it is understandable because it happened at the beginning of the current management – they were beginning and had no experience. This lack of experience and even lack of knowledge of some people allocated in the management, mainly because they did not have training for this, were considered as a problem faced by the universities. It becomes a cycle because when those with no experience begin to gain it, another electoral process comes and new people who may not have experience arrive. In this sense, the results found in this research, corroborate with the studies of Silva, Cunha and Possamai (2001) and Silva and Moraes (2002), because they concluded that university managers do not have training to administer, and to achieve that, they need to be qualified. In general, these managers learn by doing, since it is during the mandate that they accumulate knowledge.

As a way of minimizing such problem, the university promotes governance and management courses to train its managers, as reported in an interview, “we gather the prorectors, we give them courses, we show the issue of the administration theory itself, concepts, practices and we have evolved a lot in this sense”.

Another result found in the research refers to the expansion of the professionalization of public management. For University 1, however, this professionalization has occurred due to the demand and the direction from the control bodies, CGU and TCU, which was considered a process inducing an improvement in public management as a whole by University 1.

Although University 1 is concerned with the issue of governance and the analysis of indicators, this practice is recent. It started about four years ago, but the need to evolve is em-

phasized, especially with regard to transparency and minimization of resistance, which still exist from people of the finalistic activities of the university.

The research with University 1 also showed the importance of the institutionalization of its procedures, which makes the governance process maintain itself with some independence from those who are at the forefront of management,

[...] we have to guarantee sustainability for the institution more or less independent of who is at the forefront of management at the time, because for completely new management, if we do not have institutionalized procedures to ensure the governance, we may have quite a few surprises which may compromise the institution's own sustainability.

In this governance process, University 1 believes that it will be able to have a more professional management over a short time – about two or three or years.

When analyzing the results obtained with the interviews made with the previous and current management of University 2, some differences were observed, both in the recognition of the importance of the indicators and in the use of these indicators in the governance process.

From the results it was possible to verify that in the previous management of University 2, the concern with the evaluation and with the monitoring of the indicators was constant. There was a belief that when working with the indicators in the analyzes and in the seminars to publicize them, or when proposing suggestions for improvement, they were acting on the institutional development. Such thinking incorporates the statement made by Rua (2004), when he describes that there is a consensus that all evaluative and monitoring processes should be based on the verification of indicators.

In this sense, indicators have always been used when promoting annual meetings with the purpose of evaluating, detailing or even adjusting the PDI, since it has been understood that

[...] the indicators showed the way we were following, where we were going, whether it was to the place we wanted to go or not, and thus, redirect actions, because with so much external measurement coming and a series of internal requirements also to be fulfilled, if we do not know exactly where we have to improve, it gets difficult (Interview management previous University 2).

This understanding of indicators of previous management of University 2 follows the definition used by Brasil (2011, 2012), where indicators are considered instruments with the purpose of contributing to identify and measure aspects pertinent to a phenomenon arising from an action or from an omission of the public power. Therefore, they are able to identify and assess the aspects of a certain public policy with certain periodicity, allowing the systematic monitoring, description, classification, ordering, comparison or quantification of the observed reality. This way, they provide subsidies to the evaluation process and also meet the needs of decision makers.

In the evaluation processes, the previous management of University 2 worked the results of the indicators always by two perspectives: when the results were unsatisfactory, the analysis was made followed by proposed actions of improvement or actions to avoid repeating the same faults; when results were satisfactory, an analysis was made aiming to improve results even more, since each item that composed the report was analyzed.

Furthermore, according to a consultation of University 2 made to the PDI MEC 2013-2017, it was verified that it was part of the actions established by the previous management that prepared the PDI “to regularly evaluate the evaluation policy of the institution's courses and programs, in a participatory and democratic manner, building indicators that enable monitoring of processes”,

as well as “proposing diagnostic procedures and indicators to follow disciplines/curricular activities with high failure rates, aiming to identify possible causes and their solution”. Therefore, the importance given by previous management to the use of the indicators is confirmed.

Unlike the results obtained with previous management, in the current management of University 2 it was verified that no systematization is adopted to work the institutional indicators. When receiving the results of external evaluations, the procedure is to forward these data to the course coordinators, and according to reports, these results have been considered negligible, “in general the staff turns away, they only do something when the grade drops, then they want to try to appeal”.

It was found that current management acknowledges that it has misused its indicators, mainly quality indicators such as IGC, CPC and ENADE, in which it was reported that nothing is done with these data. However, prospects for changes have been noticed, especially when analyzing Institutional Self-Assessment Project of University 2 documentation, published on the institution’s website in 2018. It was possible to notice that some change initiatives regarding the use of indicators by the current management of University 2 began to emerge because, according to documentation, the CPA will adopt some basic procedures for the realization of the self-assessment in 2018, referring to the period from 2015 to 2017. Among them is the analysis of the University’s performance indicators.

In addition, still according to the above-mentioned documentation, a partnership between the CPA and the General Secretariat for Planning and Institutional Development reorganized and redefined the performance indicators of the university in the dimensions of SINAES, and promoted discussions on these indicators with the academic community.

From the interview, it was possible to verify that many things that happen in the current administration of University 2 was related to political issues. As it was verified during the interviews, the previous management considers that the current management has another line of thought and, by being opposition, it implemented some changes and had some resistance from the academic community. On the other hand, the current management affirms that, because they were the opposition, there was not a process of transition from one management to another, with open dialogues and exchange of experiences.

In this regard, authors such as Bundt (2000), Cunha (1995) and Meyer Jr (1991) affirm that one of the characteristics in a complex organization, such as universities, is the strong presence of corporatism combined with the frequent changes of the main managers. This leads to political considerations dominating the management, since there are interest groups that exert great influence in the decisions. From the results, it was observed that the management of University 2 are exemplifications of the affirmations mentioned above.

Hence, it was noted that the work that had been done with the institutional information by the previous management did not have continuity, which may represent a setback because, instead of making adaptations to the methodology used by the previous management, creating a new methodology from scratch implies delays, as well as trial and error.

In this sense, the results found by the research done with University 1 fit perfectly for the management of University 2, as it is well verified that the institutionalization of the procedures is important, as long as it is formalized. This can be done by means of a mapping of processes, so that the new management can continue the works or improve them – rather than recreate them. Thus, regardless of who is in charge of the management, it is possible to ensure institutional governance without compromising the sustainability of the institution.

It is important, therefore, to maintain the institutional interest above the individual or small political groups. With this thinking, it is necessary to formalize the processes and establish

dialogues. Otherwise, when the current management has its methodologies reestablished, it may be that there is another change of management and everything has to be restarted all over again.

Processes should be institutionalized and regimented in a way that they can minimize the impacts of this characteristic of universities. Also, the training courses for these managers should be established, since their experiences allow a faster maturation and establish more efficient management and governance processes.

Regarding the results obtained by the research with University 3, it was verified that this university understands the importance of the indicators, as reported in an interview,

[...] the manager has to administer taking all indicators into account, because they are indicators that will tell us, for example, our capacity to meet a particular need, how much we depend on a new lecturer vacancy, an extra sum of money or of how our performance is.

Corroborating with the interview, according to a consultation made to the PDI 2016-2026 of University 3, it was verified that the basic assumption for the elaboration of this document is “the construction of a set of indicators to follow the strategic objectives proposed in the PDI”, because according to the interview, the management of University 3 understands that long-term strategic objectives can be redirected and, therefore, they need to be monitored by means of medium and short-term actions that will be controlled and evaluated through the indicators.

Besides being considered an instrument for the control and evaluation of the strategic actions, the indicator is also a guide for management decisions. Thus, because part of the university budget depends also on the good performance of the indicators that compose the Budget Matrix of Other Costs and Capital – OCC Matrix, University 3 reported in an interview that it seeks the involvement of other sectors in their work, so that these indicators can be improved; hence, try to increase the participation of University 3 in the OCC Matrix.

[...] our focus is on the OCC Matrix, this way we try to ensure that the courses have good assessments, good CPCs, good concepts in ENADE, and we also care about the qualification indexes of the faculty and for this, the Prorector’s Office of Personnel Management is always attentive.

The importance given by the management of University 3 to the evaluation processes was also denoted. It was possible to identify the interest of the management for the results, the indicators from these results, and that they are used in the elaboration of institutional policies. In fact, they were used in the construction of the PDI 2016-2026, and University 3 has been working increasingly to reinforce the practice of using the indicators.

The results obtained with University 4 on this topic referred to some dispositions that had not observed in other universities. Due to the fact that University 4 had indicators of excellence for many years, they have always in the spotlight among the Brazilian universities. The university is very well classified in all indicators and emphasized that the indicators do not reflect what they need to do anymore, since they no longer signal the directions. Yet, they should not be neglected, because even if the university achieves a degree of excellence in the results of the indicators, it should not be stuck when it comes to improving quality and performance.

For universities that have not yet been able to reach the maximum scores, it has been suggested that indicators would play a more important role than for those institutions that have already achieved them. Institutions which have not reached the maximum scores in their indicators are able to know where they need to improve and can plan on going about to achieve it. However, universities that have already succeeded need to find other means of measurement so not to be stagnant.

Another result presented in research 4 refers to the fact that the indicators should not be considered as objectives,

[...] we need to be careful because the tendency of those working with indicators is to start putting the indicators no longer as indicators, but as objectives. The institution itself starts to look at the indicator instead of targeting the goals established as important, and then things get lost. We have to watch ourselves, policing all the time not to fall into this game and, on the other hand, we have to be pragmatic enough not to neglect the indicators either, because a course 7 can become a course 3.

In this sense, like the evaluation, the indicator should not be considered an end in itself, but rather a means by which management can measure its performance in order to achieve the goals and targets established in the PDI.

University 4 also affirms that, although it stands out in all indicators either in performance or quality, it should not be placed as a model to be followed or incorporated by other institutions because its results are consequences of a construction over the years: “I believe that our university, over time, has developed its own system of control, assessment and detailed monitoring of activities, as if it were an internal culture that developed over time”.

It was also reported that this methodology began in the 1970s, when the university started to consider the planning sector as a priority, and since then, what university 4 has been doing is to continue the work developed by the previous administrations with incremental adjustments to improve the methodology.

The practice adopted by University 4 is in line with what was discussed with regard to Universities 1 and 2 about the importance of current management to understand the processes that were being carried out by previous management. This way, there is no need to recreate them, but to make adjustments to obtain, among other things, celerity and efficiency.

Another result, presented here, refers to the fact that University 4 considers the planning sector as a priority, giving it the responsibility to elaborate the institutional planning, which they consider fundamental to have a good governance. According to the interview, [...] “planning within the university is not merely a question of budget management, as seen in several other Brazilian public universities; it is a real priority and is developed with great attention, with a great deal of emphasis, and very carefully”. This is considered by University 4 as one of the characteristics that make it an institution with so many excellence indexes.

Another difference pointed out by the university is the decentralization of management. The central administration establishes some basic parameters, but the initiatives in terms of research, teaching, extension have origin in the units or departments. When they succeed, they end up being reproduced by other units and departments, and when they are not, the practice does not reach the entire university.

In addition to the interview, PDI 2018-2023 of University 4 was analyzed. It was possible to verify that the institutional policy of administrative governance in this university has its records since the approval of one of its first statutes – Decree nº 167 of May 16, 1935 – and this institutional policy of governance has improved over the years.

It was, therefore, verified that the question of governance is not something recent in University 4 – it is very mature. Perhaps for this reason, for many years, University 4 has considered planning as a priority. And, regarding the indicators, it is considered that the management of University 4 understands their importance and can even detect the risks of their misuse.

5 CONCLUSION

In order to verify the relationship between the use of performance and quality indicators and the governance process of Brazilian federal universities, the managers of four federal institutions with best performance and quality indicators were interviewed. From this perspective, it was possible to verify that the question of governance greatly influences the way in which management conducts its work. Management in which a greater maturity has been perceived in governance, that understands the importance of indicators and all institutional information as strategic resources that can help management, develop their work with indicators in a detailed way. They also try to identify the points to be improved, have the understanding that the data that make up the indicators need attention, leading to policies in this direction. Thus, it was verified that these managements are not only concerned with the final result, but with all the items that make it up.

Furthermore, an important point deriving from the results of this research involves the need for training of managers, considering that many have no experience in this area. For this, the provision of training courses for managers was identified, in order to minimize this problem.

The results also showed the need for the institutionalization of procedures, making the governance process maintain a certain independence of those who are at the forefront of management at the time. This is mainly due to the political component, since an institution with a management completely new, in which its procedures are not institutionalized to ensure institutional governance, may face problems that could jeopardize the institution's sustainability. Thus, it is advocated that management processes are institutionalized and that institutional interests are ahead of political interests or small groups.

The relevance of the evaluation processes for the development of a management was also pointed out. It was observed that the evaluation process is the basis for the construction of any policy, and that one cannot do any planning without self-awareness, self-knowledge, but also without losing sight of events outside the university. Hence, the manager must understand the importance of the information generated from the evaluation processes, that indicators resulting from this process must be interpreted, and that such information, aided by the experience of the people doing this work allows the generation of new knowledge, new management policies, using them in a strategic way, supporting the manager in decision making.

REFERENCES

Andrade Oliveira, D. (2015). Nova Gestão Pública e Governos Demorático-Populares: Contradições entre a busca da Eficiência e a ampliação do Direito à Educação. *Educação & Sociedade*, 36(132), 625–646. <https://doi.org/10.1590/ES0101-73302015152440>

Barbosa, G. de C., Freire, F. de S., & Crisóstomo, V. L. (2011). Analyzing management indexes of Federal Universities against students' performance at ENADE. *Avaliação: Revista Da Avaliação Da Educação Superior (Campinas)*, 16(2), 317–344. <https://doi.org/10.1590/S1414-40772011000200005>

Barney, J. B. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*. <https://doi.org/10.1177/014920639101700108>

Bernardes, J. dos S., & Rothen, J. C. (2015). Comissão própria de avaliação: dois lados de uma mesma moeda. *Estudos Em Avaliação Educacional*, 26(62), 420–446. <https://doi.org/http://dx.doi.org/10.18222/ae266202966>

- Boynard, K. M. S. (2013). *Indicadores de gestão em conflito com indicadores de qualidade?: lições econômicas para a gestão universitária*. Retrieved from <http://repositorio.unb.br/handle/10482/14753>
- Brasil. (2006). Orientações para o cálculo dos indicadores de gestão: decisão TCU nº 408/2002 - Plenário. Versão revisada em janeiro de 2006. *Tribunal de Contas Da União - TCU; Secretaria de Educação Superior – SESu/MEC; Secretaria Federal de Controle Interno – SFC*. <https://doi.org/10.1017/CBO9781107415324.004>
- Brasil. (2011). *Orientações para Elaboração do Plano Plurianual 2012-2015*. Brasília: Ministério do Planejamento, Orçamento e Gestão. Secretaria de Planejamento e Investimentos Estratégicos.
- Brasil. (2012). *Indicadores Orientações Básicas Aplicadas à Gestão Pública*. Brasília: Ministério do Planejamento, Orçamento e Gestão. Secretaria de Orçamento Federal. Secretaria de Planejamento e Investimentos Estratégicos. Retrieved from http://www.gespublica.gov.br/sites/default/files/documentos/indicadores_orientacoes_basicas_aplicadas_a_gestao_publica.pdf
- Bresser-Pereira, L. C. (1997). *Reforma do Estado nos Anos 90: Lógica e Mecanismos de Controle*. Brasília: Ministério da Administração Federal e Reforma do Estado, Cadernos MARE da Reforma do Estado.
- Bresser-Pereira, L. C. (1999). Reflexões sobre a reforma gerencial brasileira de 1995. *Revista Do Serviço Público*, 1(4).
- Bresser-Pereira, L. C. (2010). Democracia, Estado Social e Reforma Gerencial. *Revista de Administração de Empresas*, 50, 112–116.
- Bundt, C. F. da C. (2000). *Universidade: mudanças e estratégias de ação*. Universidade Federal de Santa Catarina.
- Catani, A. M., Oliveira, J. F. de, & Dourado, L. F. (2001). Política educacional, mudanças no mundo do trabalho e reforma curricular dos cursos de graduação no Brasil. *Educação & Sociedade*.
- Choo, C. W. (2003). *A Organização do Conhecimento - Livro de gestão do conhecimento...* São Paulo: Senac.
- Cittadin, A. (2011). *Proposta de estruturação de uma unidade organizacional de controladoria em uma Instituição de Ensino Superior*. Florianópolis - SC. Retrieved from <https://repositorio.ufsc.br/handle/123456789/95214>
- Corbucci, P. R. (2007). Desafios da educação superior e desenvolvimento no Brasil. *Desafios Da Educação Superior e Desenvolvimento No Brasil, Texto para Discussão 1287*, 35. Retrieved from <http://repositorio.ipea.gov.br/handle/11058/1887>
- Cunha, C. J. C. A. (1995). *Planejamento Estratégico em Universidades*. Florianópolis: NEST- Núcleo de Estudos do Departamento de Engenharia de Produção e Sistemas da UFSC.
- Daft, R. L. (1983). *Organization theory and design*. St. Paul: West Pub. Co.
- Davenport, T. H. (1994). Reengenharia de processos. *Rio de Janeiro: Campus*, 6–8.
- Davenport, T., & Prusak, L. (1998). *Conhecimento empresarial: como as organizações gerenciam*

o seu capital intelectual. *Peres L, Tradutor, 8.*

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: Opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32. <https://doi.org/10.5465/AMJ.2007.24160888>

Ferreira, H., Cassiolato, M., & Gonzalez, R. (2009). *Uma experiência de desenvolvimento metodológico para avaliação de programas: o modelo lógico do programa segundo tempo. Texto para Discussão* (Vol. 1369). Brasília: IPEA - Instituto de Pesquisa Econômica e Aplicada. Retrieved from http://www.ipea.gov.br/portal/images/stories/PDFs/TDs/td_1369.pdf

Francisco, T. H. A., Nakayama, M. K., Melo, P. A. de, Pitta, M. A., & Oliveira, F. P. de. (2015). *Análise epistemológica da avaliação institucional da educação superior brasileira: reflexões sobre a transposição de paradigmas. Avaliação: Revista da Avaliação da Educação Superior* (Vol. 20).

Gomes, E. G. M. (2009). Gestão por Resultados e eficiência na Administração Pública: uma análise à luz da experiência de Minas Gerais. *Tese de Doutorado*, 187. Retrieved from <http://hdl.handle.net/10438/4652>

Gonçalves, R. B., Vieira, G. B. B., & Stallivieri, L. (2016). Os recursos estratégicos e as Instituições de Ensino Superior: estudo de caso em uma Universidade do Sul do Brasil. *Revista GUAL*, 9(3), 89–107.

INEP. (2018a). Indicadores de qualidade. Retrieved March 10, 2018, from <http://portal.inep.gov.br/web/guest/indicadores-de-qualidade>

INEP. (2018b). Sinopses Estatísticas da Educação Superior.

Leite, D., Tutikian, J., & Holz, N. (2000). *Avaliação & compromisso: construção e prática da avaliação institucional em uma universidade pública. Porto Alegre: Ed. da Universidade, 2000.* Editora Universidade Federal do Rio Grande do Sul.

Magalhães, E. A. de, Silveira, S. de F. R., Abrantes, L. A., Ferreira, M. A. M., & Walkim, V. R. (2010). Custo do ensino de graduação em instituições federais de ensino superior: o caso da Universidade Federal de Viçosa. *Rap—rio de Janeiro*, 44(3), 637–66. Retrieved from <http://www.scielo.br/pdf/rap/v44n3/05>

Martins, G. de A., & Theóphilo, C. R. (2016). *Metodologia da Investigação Científica para Ciências Sociais Aplicadas* (3rd ed.). São Paulo: Atlas.

Meyer Jr, V. (1991). Planejamento Estratégico: Uma renovação na gestão das instituições universitárias. Brasília: Seminário - A administração universitária rumo ao ano 2000.

Monteiro, S. A. (2015). *Indicadores de qualidade para avaliação dos processos de gestão da informação.* Universidade Federal da Paraíba.

Oliveira, D. A. (1996). A qualidade total na educação: os critérios da economia privada na gestão da escola pública. In *Educação e trabalho no capitalismo contemporâneo: leituras selecionadas* (pp. 57–90). São Paulo: Atlas.

- Paro, V. H. (2001). *Administração escolar: introdução crítica* (10th ed.). São Paulo: Cortez.
- Queiróz M. I. de P. (1992). O pesquisador, o problema da pesquisa, a escolha de técnicas: algumas reflexões. In *In: Lang, A.B.S.G., org. Reflexões sobre a pesquisa sociológica* ((Coleção T, pp. 13–29). São Paulo: Centro de Estudos Rurais e Urbanos.
- Rossato, R. (2005). *Universidade: nove séculos de história*. Universidade de Passo Fundo, UPF Editora.
- Rua, M. das G. (2004). Desmistificando o problema: uma rápida introdução ao estudo dos indicadores. *Avaliação de Resultados No Ciclo Da Gestão Pública*, 1–20. Retrieved from <http://antigo.enap.gov.br/downloads/ec43ea4fUFAM-MariadasGraEstudoIndicadores-novo.pdf>
- Sampaio, H. (2011). O setor privado de ensino superior no Brasil: continuidades e transformações. *O Setor Privado de Ensino Superior No Brasil: Continuidades e Transformações.*, (Revista Ensino Superior, 2(4)), 28–43. Retrieved from https://www.google.com.br/search?q=sAMPAIO,+H.+Ensino+superior+no+Brasil.+O+setor+privado.+Ed.+Hucitec,+São+Paulo,+1999&ie=utf-8&oe=utf-8&client=firefox-b-ab&gws_cr&ei=9c-1CWaHRBsPhmwGijKGoBw#q=sAMPAIO,+H.+Ensino+superior+no+Brasil.+O+setor+privado.
- Santana, É. E. de P., & Sobrinho, Z. A. (2007). O Interpretativismo, Seus Pressupostos e Sua Aplicação Recente na Pesquisa do Comportamento do Consumidor. *Anais Do I Encontro Do Ensino e Pesquisa Em Administração e Contabilidade*, 1–10.
- Secchi, L. (2009). Modelos organizacionais e reformas da administração pública. *Revista de Administração de Empresas*, 43(2), 347–369. Retrieved from <http://www.scielo.br/pdf/rap/v43n2/v43n2a04>
- Siggelkow, N. (2007). Persuasion with Case Studies. *The Academy of Management Journal*, 50(1), 20–24. <https://doi.org/10.5465/AMJ.2007.24160882>
- Silva, M. A. da, Cunha, C. J. C. de A., & Possamai, F. (2001). O que os aprendem para dirigir unidades universitárias: o caso da UFSC. *Anpad*. Retrieved from <http://www.anpad.org.br/admin/pdf/enanpad2001-cor-751.pdf>
- Silva, M. A. da, & Moraes, L. V. dos S. de. (2002). Como os Professores Aprendem para Dirigir Unidades Universitárias: O Caso da UFSC, 1–16. Retrieved from <http://www.anpad.org.br/admin/pdf/enanpad2002-cor-948.pdf>
- Siqueira, M. C. (2005). *Gestão Estratégica da Informação*. Brasport.
- Tarapanoff, K. (2006). *Inteligência, informação e conhecimento em corporações*. Instituto Brasileiro de Informação em Ciência e Tecnologia (IBICT).
- Terto, D. C., & Pereira, R. L. de A. (2011). A Nova Gestão Pública e as Atuais Tendências da Gestão Educacional Brasileira. *Simpósio Brasileiro de Política e Administração Da Educação*, 10. Retrieved from <http://www.anpae.org.br/simposio2011/cdrom2011/trabalhosCompleto02.htm>
- UFLA - Universidade Federal de Lavras. (2018). Relatório de Autoavaliação Institucional - 2015-2017. LAVRAS: CPA - Comissão Própria de Autoavaliação UFLA.
- UFMG - Universidade Federal de Minas Gerais. (2018). Plano de Desenvolvimento Institucional -

PDI 2018 – 2023. Belo Horizonte: Universidade Federal de Minas Gerais.

UFRGS - Universidade Federal do Rio Grande do Sul. (2016). Plano de Desenvolvimento Institucional - PDI 2016 – 2026. (UFRGS - Universidade Federal do Rio Grande do Sul, Ed.). Porto Alegre.

UFSCAR- Universidade Federal de São Carlos. (2013). Plano de Desenvolvimento Institucional - PDI/MEC. Universidade Federal de São Carlos.

UFSCAR - Universidade Federal de São Carlos. (2017). Projeto de autoavaliação da Universidade Federal de São Carlos, 1–47.

Institucional - PDI/MEC. Universidade Federal de São Carlos.

Vieira. (2013). Educação Superior No Contexto Nacional : Retrieved from <http://www.scielo.br/pdf/rap/v51n1/0034-7612-rap-51-01-00147.pdf>

Vieira, S. L. (2007). Gestão, avaliação e sucesso escolar: recortes da trajetória cearense. *Estudos Avançados -USP*, 21(90), 45–60. Retrieved from <http://www.revistas.usp.br/eav/article/viewFile/10236/11853>

Yin, R. K. (2001). *Estudo de caso: planejamento e métodos*. Porto Alegre: (4º. ed.) Bookman.