DIGITAL AND OPEN GOVERNMENT AS A PLATFORM FOR
SOCIAL CONTROL OF PUBLIC POLICIES

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ABSTRACT

The work involved the theme of the exercise of social control of public policies in the areas of health and education, based on the concept of democracy and participatory citizenship enshrined from the promulgation of the CRFB/88, as well as under the prism of digital and open government in favor of transparency of public information. The guiding problem of the research consisted in analyzing how the digital portals maintained by the municipalities that are members of the Association of Municipalities of the Extreme South of Santa Catarina State (AMESC) comply with the information requirements, as raised by the correlated legislation and by the empirical analysis of the external control performed by the Santa Catarina State Court of Audit (TCE-SC), to verify whether they produce transparency, from the idea of communication, and, consequently, materially enable the exercise of social control of public policies in the areas of health and education. The research hypothesized that the digital portals maintained by the municipalities that are members of the Association of Municipalities of the Extreme South of Santa Catarina (AMESC) do not comply with all the information requirements, as extracted after an analysis of the pertinent legislation, as well as an empirical analysis of the external control performed by the Santa Catarina State Audit Court (TCE-SC). The work had as a general objective to investigate the way in which the digital portals maintained by the municipalities associated with the Association of Municipalities of the Extreme South of Santa Catarina (AMESC) comply with the information requirements, duly raised from the applicable legislation and by the analysis of the experience of the external control performed by the Court of Auditors of the State of Santa Catarina (TCE-SC) and, thus, verify whether they produce transparency and, therefore, make materially possible the exercise of social control of public policies in the areas of health and education. In order to reach the general objective, three specific objectives were defined, which correspond, respectively, to the three chapters of the development of this work, namely to analyze the social control of public policies from the conception of participatory democracy; to understand the emergence of new
technologies and digital democracy, digital and open government in Brazil, as well as cyber-transparency from the idea of communication; finally, analyze, considering the information requirements raised by means of an analysis of the legislation that governs the matter in conjunction with the empirical analysis of the external control performed by the TCE-SC, the way in which the digital portals of the municipalities that are members of AMESC produce transparency and, thus, make possible the social control of public policies in the areas of health and education, as well as present legal, technical and operational assumptions for the reformulation of municipal transparency from the conception of digital and open government. The deductive approach was used, while the procedural methods were monographic and comparative. The research used the techniques of bibliographic and indirect documentary research.

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1 INTRODUCTION

The work in question will be developed from the study about the exercise of social control of public policies, based on the concept of democracy and participatory citizenship, enshrined from the promulgation of the Constitution of the Federative Republic of Brazil in 1988, as well as under the prism of digital and open government in favor of transparency of public information.

Besides being a full member of his municipality, being a citizen consists in understanding that this condition involves a political decision, that is, beyond just electing his representatives, being able to participate directly in the affairs of the city either as its ruler or as a political man (VIEIRA, 2005, p. 27).

As we will see, one of the facets of citizenship consists in the exercise of social control, which, from the outset, should be understood and used in this work as the control activity performed by society in relation to the State, and not the other way around.

Besides this, as material assumptions for performing social control, the effective existence of transparency and access to public information must be glimpsed, because one can only really control what is known.

It is also necessary to make clear that the concept of transparency used in this research is derived from the idea of information that produces communication between rulers and ruled.

Along these lines, the mere formal access to documents or technical data, without easy access, understanding through the adoption of a common language, as well as the availability of information to society in a standardized and/or systematized way, does not result in transparency in the sense we are working on here.

Well, the emergence of the Internet and the development of new technologies have come to play a fundamental role in the search for transparency and access to information, especially in the Public Administration, from which the term digital and open government is derived.

The use of new information and communication technologies - NICTs in the scope of Public Administration, when applied in favor of transparency and access to public information, from a dialogue between law and software engineering, can materially enable the exercise of social control of public policies, with the development of digital portals of public entities that actually produce communication between rulers and ruled.

The differential of this dissertation is in the attempt to break with the traditional scientific division highlighted by Gomes¹ (2018) regarding the application of technologies in the legal scenario, where on one side are those who are dedicated to the topic of digital government and on the other are those who focus on the topic of digital democracy, since, as will be shown, both digital democracy and

¹ "[...] there is even a social division of labor between the two fields here. 'Public administration scholars, public policy analysts, and public management experts focus on e-government, while political communication experts, social movement scholars, and democracy theorists hone their analytical tools on e-democracy; but, at bottom, the link between the two areas, while not direct, is certainly achievable' (GOMES, 2018)."
digital government have a symbiotic relationship regarding the material realization of the exercise of social control of public policies.

It is also evident that the discussion on digital democracy and digital government cannot be disconnected from the debate on the aspects of digital inclusion, under penalty of not producing all the expected effects and aggravating social exclusion even more (TAVARES; VIEIRA, 2020, p. 297).

As will be seen, digital democracy does not aim at replacing the physical/non-digital models of popular participation and social control that currently exist.

Along these lines, Gomes (2018) points out that as there is some consolidation in the idea of digital democracy, the trend is that the scientific approach in the studies produced is increasingly practical, applied and segmented, based on concrete problems related to technological models, specific characteristics of digital solutions employed or studies of experiments or experiences2.

And this is the case of the research presented here. As stated, the objective here is to empirically work on the issues of digital and open government as a platform for social control of public policies.

It is noted that there are other themes that are related to digital and open government and to digital democracy itself, such as the study of the so-called smart cities, of the new technological standard sm+m (social media + mobile) and of the use of big data and data protection in the scope of the Public Administration, which deserve special attention and specific studies, but that will not be dealt with in this work, given the methodological and scope limits outlined here.

In Brazil, the strengthening of social control mechanisms is even more important when considering its territorial extension and the large number of existing municipalities, currently 5,570, according to data from IBGE - Brazilian Institute of Geography and Statistics (2020).

In the same way, it is emphasized that the external control organs responsible for the inspection of municipal accounts, especially the State Audit Courts, accumulate both the inspection of the state management itself and of the municipalities in their districts, since the Federal Constitution, in its article 31, paragraph 4, prohibits the creation of new Municipal Audit Courts.

In this context, considering that the physical headquarters of the State Courts of Auditors are in the state capitals, a certain geographical distance is often established between them and the supervised municipalities, which makes it impossible to keep a constant watch on the acts and activities performed by the municipal administrations.

Therefore, social control is revealed as a true complement to the Public Administration’s system of institutional controls, not as a mere adjunct, as is often perceived, but as an equal protagonist

2 “The search for reconnection to digital democracy by increasingly autonomous applications and fields may become an important counter-trend in the area of e-democracy. This need has already been particularly felt in the area of digital government, where a considerable concentration of attention on e-service delivery or on digital solutions for smart cities and smart government tends to lead to a disconnection with e-democracy and its requirements [...] This strengthens the tendency to force the introduction of democratic criteria in e-government initiatives and projects to reconnect, for example, digital solutions and applications for public service delivery to e-democracy” (GOMES, 2018).
of the correct conduct of state activity and public policies.

As a question to be answered, the research in question will focus on solving the following question: In what way do the digital portals maintained by the member municipalities of the Association of Municipalities of the Extreme South of Santa Catarina (AMESC) comply with the information requirements, thus raised by what the correlated legislation disposes of and by the empirical analysis of the external control performed by the Court of Accounts of the State of Santa Catarina (TCE-SC), to verify if they produce transparency from the idea of communication, and, consequently, materially enable the exercise of social control of public policies in the areas of health and education?

The hypothesis raised is that the digital portals maintained by the municipalities that are members of the Association of Municipalities of the Extreme South of Santa Catarina (AMESC) do not comply with all the information requirements, extracted after an analysis of the pertinent legislation, as well as an empirical analysis of the external control performed by the Santa Catarina State Court of Audit (TCE-SC).

Thus, the general objective will be to investigate the way in which the digital portals maintained by the municipalities associated with the Association of Municipalities of the Far South of Santa Catarina State (AMESC) comply with the information requirements, as established by the related legislation and by the empirical analysis of the external control performed by the Santa Catarina State Court of Audit (TCE-SC), to produce transparency and, consequently, materially enable the exercise of social control of public policies in the areas of health and education.

The choice to analyze only the public policies in the areas of health and education was made due to their materiality in the public budget of the AMESC municipalities (see table 1). Table 1), besides being the areas in which the Constitution foresees minimum percentages of application regarding the net current revenue (RCL), according to article 212, of the CRFB/88, and article 77, III c/c § 4, of the Transitory Constitutional Provisions Act (ADCT), and, therefore, constitute, in case of non-compliance, hypotheses authorizing the intervention in the municipality, according to article 35, item III, of the CRFB/88, as well as the essentiality of these public services, without prejudice to the importance of the other areas.

The municipalities that make up AMESC, on the other hand, were chosen because they are the region where the author and the University of Extremo Sul Catarinense (UNESC) and its Post-Graduate Law Program (PPGD) are located.

The information requirements, understood as the necessary information for the social control of public policies in the areas of health and education, will be based on the provisions of the Access to Information Law (LAI) and the Fiscal Responsibility Law (LRF) and their respective regulations on active transparency, as well as on the detailed analysis of all the operational audit processes conducted by the Santa Catarina State Audit Court (TCE-SC) in the municipal sphere and in the areas of health and education.
As for the empirical analysis of the external control activity performed by the TCE-SC in the areas of health and education, it should be noted that the intention of this researcher is not to draw a watertight list or even define that this will be the only or the best information that should be analyzed by social controllers, but only to collaborate, in an exemplifying or guiding way, but applied and practical, both for the evaluation of the active transparency of municipal digital portals, and for future social control activities in these areas, based on the experience that will be detailed and discussed here.

The methodological path of this study will be deductive, since we will start from general arguments to specific ones and we will have a base theory for the research (MEZZAROBA; MONTEIRO, 2003, p. 65-67). The deductive method is one that, “[...] starting from theories and laws, most often predicts the occurrence of particular phenomena” (MARCONI; LAKATOS, 2010, p. 88).

The methods of procedure will be the monographic, which “consists of the study of certain individuals, professions, conditions, institutions, groups or communities, with the purpose of obtaining generalizations” (MARCONI; LAKATOS, 2010, p. 90) and the comparative, which constitutes indirect experimentation, by which it allows the analysis of concrete data, deducing from them the constant, abstract and general elements (MARCONI; LAKATOS, 2010, p. 89).

We will use bibliographic research techniques, which aims to “put the researcher in direct contact with everything that has been written, said or filmed about a particular subject” and “provides the examination of a topic under new focus or approach, reaching innovative conclusions” (MARCONI; LAKATOS, 2010, p. 183), and indirect documentary research, which consists of “gathering data from various sources, whatever the methods or techniques used” (MARCONI; LAKATOS, 2010, p. 174).

The bibliographic research will be performed at the library of the University of Extremo Sul Catarinense (UNESC), CAPES’ Thesis and Dissertation Bank, the Scielo database and CAPES’ Journal Portal, as well as publications on the theme in Brazilian journals qualified in Qualis.

The documentary research will be performed through public consultation on the electronic portal of the Court of Auditors of the State of Santa Catarina to the operational audit processes performed at the municipal level in the areas of health and education, as well as the current official electronic sites of the Executive and Legislative Powers maintained by the municipalities associated with the Association of Municipalities of the Extreme South of Santa Catarina - AMESC, a total of fifteen, namely: Araranguá, Balneário Arroio do Silva, Balneário Gaivota, Ermo, Jacinto Machado, Maracajá, Meleiro, Morro Grande, Passo de Torres, Praia Grande, Santa Rosa do Sul, São João do Sul, Sombrio, Timbé do Sul and Turvo, for the analysis of the information made available through active electronic transparency referring to public policies in the areas of health and education.

The goal is, from the survey of information requirements through the analysis of the legislation that governs the matter in conjunction with the empirical analysis of the external control performed by the TCE-SC in the areas of health and education.

Next, a comparative analysis will be performed between the information gathered in the previous step in relation to the digital sites maintained by the Executive and Legislative branches of the
municipalities associated with AMESC, to answer the question posed in this research, which is to analyze whether the digital portals of these municipalities comply with the information requirements to produce transparency, in the concept of communication, and, consequently, make social control of public policies possible in the areas under analysis.

Finally, it will deal with the presentation of legal, technical, and operational guidelines for the reformulation of active municipal transparency, from the structuring of digital transparency portals to be maintained by the municipalities to the legal, technical, and operational requirements for the availability of public information and data, based on the application of information and communication technologies and software engineering techniques, to structure the digital and open government model as a platform for the social control of public policies.

2 THE DIGITAL AND OPEN GOVERNMENT AS A PLATFORM FOR SOCIAL CONTROL OF PUBLIC POLICIES: ASSUMPTIONS FOR THE REFORMULATION OF MUNICIPAL PUBLIC TRANSPARENCY

The purpose of this chapter is to present how the municipal public administration can make use of new information and communication technologies, as well as software engineering techniques, to improve and expand public transparency, including the idea of communication, as well as the opening of public data in a structured way, in what is currently known as digital and open government, and, in this way, make it materially possible to exercise social control over public policies.

It is important to emphasize that the empirical study performed took place before the publication of Law 14,129, published on March 30, 2021 - Digital Government Law (LGD), which also depends on the incorporation, at the municipal level, through its own normative instrument.

That said, it is understood that the theoretical framework for the presentation of the proposal outlined here was sufficiently exposed in the first two chapters of this research. Thus, from this chapter on, we seek to enter the practice of the control of the Public Administration to then make the necessary conclusions.

The methodological strategy used here is based on the need to verify whether the information currently offered by the municipalities associated with AMESC in terms of active transparency, through digital means, is adequate to the needs of social control, considering the context of digital and open government.

In this way, this chapter is subdivided into three topics, which have been organized as follows:

The first one will deal with the survey of information requirements for the social control of public policies based on the empirical analysis made through the operational audit processes conducted by the Santa Catarina State Audit Court. According to the methodological delimitation performed, the areas chosen were health and education, since they have the greatest materiality in the public budget of the AMESC municipalities (according to table X), as well as because of the essentiality of these
areas, and because of the fundamental nature of these rights, without prejudice to the importance of the other areas.

The second will consist of a comparative analysis between the information gathered in the first topic in relation to the provisions of the legislation that deals with active transparency, especially the Access to Information Law, as well as the digital sites maintained by the Executive and Legislative branches of the municipalities associated with AMESC, to verify whether the information is totally, partially, or absent from the respective portals and, consequently, to evaluate and present the current state of active transparency of these municipalities in the context of digital and open government, and, especially, of the social control of public policies.

The third and last topic will deal with the presentation of legal, technical, and operational guidelines for the reformulation of active municipal transparency, from the structuring of digital transparency portals to be maintained by the municipalities to the legal, technical, and operational requirements for making public information and data available, based on the application of information and communication technologies and software engineering techniques, especially web programming.

2.1 INFORMATION REQUIREMENTS FOR TRANSPARENCY THAT MATERIALLY ENABLE SOCIAL CONTROL IN THE AREAS OF HEALTH AND EDUCATION BASED ON THE EXPERIENCE OF THE TCE-SC

As pointed out, in this topic, a survey of the information necessary to control public policies in the areas of health and education will be conducted based on the analysis of the operational audit processes conducted by the Santa Catarina State Audit Court.

It should be noted that the type of operational audit was chosen because it is the most appropriate for the treatment of the object of the research in question, i.e., social control of public policies, since this type of audit consists of the systematic evaluation of government programs, projects, activities and systems and aims to examine the government action as to the aspects of economy, efficiency and effectiveness and efficacy of government programs and projects (SILVA, 2018, p. 13).

According to Silva (2018, p. 15), the methodology for conducting operational audits comprises nine steps, which consider “the need to rank priorities over time according to materiality, risks, and scenario changes, given that the available resources are scarce and the costs are high.”

The nine steps cited by Silva (2018, p. 15) are as follows:

1. Unit risk analysis;
2. Hierarchizing and prioritizing the units;
3. Long-term planning and identification of audit cycles;
4. Preliminary surveys;
5. Planning of the selected unit’s work and elaboration of a specific program;
6. Execution of the field work;
7. Preparation of the report with recommendations;
8. Follow-up on the implementation of recommendations; and
9. Feedback the management information system with the new elements gathered during the audit.

In fact, to perform any audit, including operational audits, it is necessary to adopt prioritization criteria, i.e., parameters that will be used to define the object of the audit and its respective scope, since it is not possible, due to lack of human or financial resources, or due to time constraints, to cover all areas of a public entity. At least so far.

In this vein, the criteria of relevance, risk and materiality are used for this purpose of hierarchization and prioritization. Relevance refers to the degree of importance assessed subjectively, according to the expected impacts of the results of the audited actions. The risk refers to the susceptibility of the audited object to undesirable events, that is, losses arising from errors and fraud, as well as the possibility of failure in achieving the expected results. Finally, materiality corresponds to the relative importance or representativeness of the resources involved, usually in monetary terms, but can also be considered in terms of the number of people to be served by a public action, or even natural resources mobilized in a particular venture (BITTENCOURT, 2018).

The choice to analyze only the public policies in the areas of health and education was made because of their materiality in the public budget of AMESC municipalities, as shown in Table 1, besides being the areas in which the Constitution provides for minimum percentages of application as to the net current revenue (RCL), according to Article 212, of the CRFB/88, and article 77, III c/c § 4, of the Transitory Constitutional Provisions Act (ADCT), and, thus, constitute, in case of non-compliance, hypotheses authorizing intervention in the municipality, according to article 35, item III, of the CRFB/88, as well as the essentiality of these public services, without prejudice to the importance of the other areas.

From Table 1, one can see that the expenses made with health and education in the year 2019 fill expressive values of net current revenues, and the municipality of Araranguá/SC, the largest municipality in the micro-region under analysis, spent on health the amount of R$ 33,021,908.21, which comprises 19.42% of its total revenue and 21.81% of its net current revenue, as well as with education.

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3 As for the minimum percentages of application, according to TCE/SC (2020), with respect to "expenses with education, according to article 212 of the Federal Constitution of 1988, the municipalities must apply at least 25% of the revenue from taxes, including that from constitutional transfers, in the maintenance and development of education. As for "health care expenses, as provided in Article 77, III c/c § 4, of the Transitory Constitutional Dispositions Act (ADCT), the municipalities must invest at least 15% of the tax revenue, including that from constitutional transfers, in public health care activities and services" (TCE-SC, 2020).

4 The Net Current Revenue comprises "the sum of all the Federal Entity’s own revenues and current transfers received from other entities, less, in the case of municipalities, the contribution of public servants to fund their own social security system and the revenues from financial compensation between social security systems" (TCE-SC, 2020).
R$ 41,960,936.66, which represents 24.68% of its total revenue and 27.71% of its net current revenue:

**Table 1-** Expenses incurred with health and education in 2019 in relation to the Total Revenue and Net Current Revenue - RCL of the municipalities of AMESC

<table>
<thead>
<tr>
<th>MUNICIPALITY</th>
<th>TOTAL IN R$</th>
<th>RCL IN R$</th>
<th>HEALTH – 15% IN R$</th>
<th>EDUCATION – 25% EM R$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Araranguá</td>
<td>170,018,242,31</td>
<td>151,404,042,16</td>
<td>33,021,908,21</td>
<td>41,960,936,66</td>
</tr>
<tr>
<td>Balneário Arroio do Silva</td>
<td>35,666,421,96</td>
<td>36,268,499,59</td>
<td>7,133,965,01</td>
<td>11,254,521,84</td>
</tr>
<tr>
<td>Balneário Gaivota</td>
<td>45,240,951,55</td>
<td>38,008,678,65</td>
<td>8,581,177,57</td>
<td>13,042,838,31</td>
</tr>
<tr>
<td>Ermo</td>
<td>17,555,634,00</td>
<td>15,469,177,81</td>
<td>3,715,305,88</td>
<td>3,259,673,52</td>
</tr>
<tr>
<td>Jacinto Machado</td>
<td>43,546,037,89</td>
<td>32,017,076,63</td>
<td>6,489,512,00</td>
<td>11,767,500,56</td>
</tr>
<tr>
<td>Maracajá</td>
<td>28,480,289,82</td>
<td>25,204,053,19</td>
<td>4,347,465,24</td>
<td>8,275,101,14</td>
</tr>
<tr>
<td>Meleiro</td>
<td>25,901,826,57</td>
<td>25,624,422,85</td>
<td>5,459,496,00</td>
<td>7,730,131,94</td>
</tr>
<tr>
<td>Morro Grande</td>
<td>17,751,209,03</td>
<td>18,186,993,13</td>
<td>3,957,757,97</td>
<td>4,062,315,91</td>
</tr>
<tr>
<td>Passo de Torres</td>
<td>31,303,928,94</td>
<td>30,551,546,89</td>
<td>5,979,927,88</td>
<td>12,807,563,81</td>
</tr>
<tr>
<td>Praia Grande</td>
<td>25,128,192,51</td>
<td>24,746,425,09</td>
<td>4,757,296,47</td>
<td>7,565,949,82</td>
</tr>
<tr>
<td>Santa Rosa do Sul</td>
<td>30,396,407,04</td>
<td>26,255,603,47</td>
<td>5,739,076,01</td>
<td>9,257,953,31</td>
</tr>
<tr>
<td>São João do Sul</td>
<td>21,790,940,51</td>
<td>24,797,514,54</td>
<td>5,328,108,29</td>
<td>9,216,776,31</td>
</tr>
<tr>
<td>Sombrio</td>
<td>93,141,435,93</td>
<td>78,925,836,12</td>
<td>18,370,643,03</td>
<td>31,624,349,52</td>
</tr>
<tr>
<td>Timbé do Sul</td>
<td>24,343,835,10</td>
<td>20,626,644,09</td>
<td>6,416,235,91</td>
<td>5,119,315,90</td>
</tr>
<tr>
<td>Turvo</td>
<td>44,739,657,24</td>
<td>39,466,771,20</td>
<td>8,649,886,01</td>
<td>13,400,152,43</td>
</tr>
</tbody>
</table>

Source: performed by the author based on information extracted from the TCE/SC’s e-Sfinge system, which discloses the data sent by the municipalities.

Having defined the operational audits in the areas of health and education as the object of the research, we proceeded to gather the information necessary for social control from the analysis of the processes conducted by the Santa Catarina State Audit Court.

To do so, a public search was conducted in its digital portal, available through the link <http://servicos.tce.sc.gov.br/processo/index.php>, through the “Advanced Search” tab, to allow the necessary filters for the objectives outlined here:
The criteria used to search for the operational audit processes in the areas of health and education at the municipal level were as follows: a) Year: “All”; b) Sphere: “Municipal”; c) “Health” and “Education”; d) Type of process: “Operational Audit - RLA”, and the rest of the fields were left blank or the option previously marked “All” was kept.

The following were the operational audit processes in health care in the municipal sphere found:
As for the operational audit processes in the municipal sphere in education, the following relationship was found:

From this preliminary survey of the processes, we proceeded to access these operational audit processes in their entirety, as well as to identify the information that was necessary for the audit team of the Santa Catarina State Court of Auditors to be able to answer the fixed audit questions.
It should be noted, in this regard, that although the online consultation of these processes, the respective digital files referring to the entire analysis were experiencing technical problems that did not allow immediate access to some processes.

Thus, it was necessary to request access to information addressed to the TCE-SC to provide the digital files that are unavailable for access by the digital platform, which were duly provided, in pdf (portable document format) digital format, within the legal deadline provided by LAI.

At this point, past experience is recalled, but not very old, in relation to the request for access to information made by the author on April 09, 2018, being that, on October 11, 2018, through Communication n. 321/2018, the TCE-SC responded that, to make available the full copy of 07 (seven) audit processes requested, fees totaling, in all, R$ 2,078.00 (R$ 0.20 per sheet) should be collected, which certainly made access to information unfeasible on that occasion, as can be seen in Annex V of the Appendix to this work.

Thus, an important point in favor of the technological increment in the scenario of administrative organization of the public powers is the reduction of costs with photocopy reproduction, as well as the scalability of public information and data, besides being an ecologically more appropriate measure.

In possession of the processes, the information used was then broken down, which resulted in the preparation of tables 5 to 9, starting with the processes related to health (figure 2) and ending with those related to education (figure 3).

Table 5 refers to the operational audit cases RLA-09/00594845, RLA-09/00594764 and RLA-09/00594179:

<table>
<thead>
<tr>
<th>CASES # (MANAGEMENT UNITS INVOLVED)</th>
<th>RLA-09/00594179 (City of Biguaçu); RLA-09/00594845 (City of São José/SC); RLA-09/00594764 (City of Palhoça).</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERESTED</td>
<td>Santa Catarina State Health Secretariat (SES)</td>
</tr>
<tr>
<td>OPERATIONAL AUDIT OBJECTIVE</td>
<td>Evaluate the execution of the Family Health Strategy (ESF) Program</td>
</tr>
</tbody>
</table>

5 According to Ordinance No. 648/GM/2006, based on Law No. 8.080/90 (Organic Law of the Unified Health System/SUS, the role of the State Health Secretary (SES) is to provide technical advice to municipalities in the process of implementing and expanding the Family Health Strategy, in addition to technical supervision, which must assess and disseminate the results achieved (TCE-SC, 2020).

6 The Family Health Program (PSF) was created in 1994 as a government program. It evolved to become a national policy that aims to reorganize Primary Health Care. It is currently known as the Family Health Strategy (ESF) and is characterized as a strategy to reorient the care model and is based on the deployment of multidisciplinary teams in Basic Health Units (BHUs) to work with a predetermined number of families located in a defined area. It is guided by the principles of universality, accessibility and coordination, linkage and continuity, integration, humanization, equity, and social participation. Moreover, the ESF is a tripartite effort, i.e., of integration among the federal, state, and municipal levels. (TCE-SC, 2020)
### Period of Realization

October 2009 to February 2010

### Audit Questions Set for the Scope of Work

- a) Is the municipality promoting the actions and services of Primary Health Care recommended by the ESF?
- b) Is the State Health Secretary (SES) conducting monitoring and evaluation of the development of the ESF?
- c) Is the ESF providing the municipality’s users with access to health care in Primary Care?

### Methodological Strategy Adopted

- a) Conducting on-site visits;
- b) Documentary research;
- c) Survey of information contained in government databases (National Register of Health Establishments - (CNES); Center for Informatics and Automation of Santa Catarina (CIASC); TCE-SC’s Integrated Management Surveillance System (e-Sfinge));
- d) Conducting questionnaires (postal and interviewer-applied).

### Main Findings of the Audit Team

- a) Deficiencies in the infrastructure of the UBSs;
- b) Irregular supply of pharmaceutical items and contraceptive methods;
- c) Incomplete Family Health Teams or teams responsible for more families than recommended by the Ministry of Health;
- d) Prevalence of the traditional health care system;
- e) Absence of a systematized procedure for supervision of the activities of the Family Health Teams by the SMS;
- f) Health resource allocation does not prioritize the Family Health Strategy;
- g) Deficiencies in the execution of the monitoring and evaluation of the ESF by the SES;
- h) Weakness in the formation of bonds between the teams and the community;
- i) The offer of health services referred by the ESF does not meet the demand and UBSs do not provide access to Primary Care at alternative times;

### Municipal Information* Used for the External Control Performed by the TCE-SC

- a) Location and number of UBSs in the city with photographic records;
- b) Physical and structural conditions of the UBS, with photographic records;
- c) Availability of materials and equipment;
- d) Availability of pharmaceutical items for distribution and emergency care, as well as contraceptive methods;
- e) Availability of medicines;
- f) Composition, quantity and form of contracting of the family health team;
- g) Number of families served per team;
- h) Quantities of services classified as prevention, promotion and recovery of users;
- i) Availability of introductory and permanent training courses;
- j) Availability of continued educational activities for population groups;
- k) Existence of team performance evaluation;
- l) System of frequency registration (time) of the teams;
- m) Quantity of federal and state resources received by the municipality;
- n) Detailed breakdown of the application of budget resources in the ESF;
- o) Hours of service and operation;
- p) Deadline for exams;
- q) Appointment scheduling times by specialty, containing waiting days.

*State responsibility information was not included, as it is not in the scope of this dissertation.

Source: Adapted by the author based on the Summary Report of the Operational Audit on the family health strategy: State Health Secretary and Biguaçu City Hall conducted by the Santa Catarina State Court of Audit in the period from 10/2009 to 02/2010 and published in 2011 and analysis of the Report and Vote of cases RLA-09/00594845 and RLA 09/00594764 of the TCE-SC.
Table 6 concerns the analysis of the operational audit files RLA-15/00146860, RLA-15/00146789, RLA-15/00146606 and RLA-15/00146517:

**Table 6 - Health Information Requirements Survey - cases RLA-15/00146860, RLA-15/00146789, RLA-15/00146606 and RLA-15/00146517**

<table>
<thead>
<tr>
<th>PROCESS NO. (MANAGEMENT UNITS INVOLVED)</th>
<th>RLA-15/00146606 (City of Araquari/SC); RLA-15/00146517 (City of Canoinhas/SC); RLA-15/00146860 (City of Florianópolis/SC); RLA-15/00146789 (City of Joinville/SC); RLA-14/00675828 (State Secretariat of Health of SC - SES).</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESOURCES INVOLVED - Expenditures by sub-functions: Basic Care and Hospital and Outpatient Care (2011-2013)</td>
<td>R$ 23,915,780.11 (Municipality of Araquari/SC); R$ 63,343,808.77 (Municipality of Canoinhas/SC); R$ 523,238,024.27 (Municipality of Florianópolis/SC); R$ 639,382,739.57 (Municipality of Joinville) and R$ 2,367,694,674.10 (SES).</td>
</tr>
<tr>
<td>OPERATIONAL AUDIT OBJECTIVE</td>
<td>To evaluate aspects related to care, access, infrastructure, and resoluteness of primary care for users and whether primary care management at the federal, state, and municipal levels provides quality services.</td>
</tr>
<tr>
<td>PERIOD OF REALIZATION</td>
<td>June to December 2014</td>
</tr>
</tbody>
</table>
| AUDIT QUESTIONS SET FOR THE SCOPE OF WORK | a) How do the Health Departments act to promote the allocation/permanence, training and continuing education of primary care managers and professionals?  
b) Do the states and municipalities have structure, indicators and IT support, so that the monitoring and evaluation system can contribute to the improvement of management?  
c) Does the primary care planning process reflect the needs of the population, consider the articulation between primary care and the other levels of health care, and does it have financial resources from the three federative spheres? |
| METHODOLOGICAL STRATEGY ADOPTED | a) Documentary research on the Internet, such as articles and news reports, and evaluation of documents made available by the SES;  
b) Interviews;  
c) Preparation of SWOT analysis⁷, Risk Verification Diagram (DVR), Stakeholder Analysis⁸ and Ishikawa Diagram⁹;  
d) On-site visits;  
e) Questionnaires;  
f) Electronic extraction of information from government databases (National Register of Health Establishments - CNES);  
g) Electronic data crossing. |

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![Image](Image1)

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⁷ SWOT - an audit technique used to frame strengths, weaknesses, opportunities and threats related to a particular government program or agency/entity. (TCE-SC, 2020)

⁸ Stakeholder Analysis allows you to identify the appropriate form of participation by all parties involved in a program or project. This technique is a very useful tool in program evaluation. (TCE-SC, 2020)

⁹ Ishikawa Diagram is a graphic tool for quality management and control. It makes it possible to hierarchically structure the potential causes of a given problem, as well as its effects. (TCE-SC, 2020)
### MAIN FINDINGS OF THE AUDIT TEAM

- a) Lack of a survey on the training needs of managers and professionals in Primary Care and the Municipality’s Permanent Education Plan;
- b) Insufficient supply of training courses for the professionals who work in Primary Care;
- c) Deficiency in the articulation between Municipal Health Secretariats - SMSs and SES in the promotion of training and managers and health professionals in Primary Care;
- d) Lack of a Career Plan, Positions and Salaries that attends the professionals of the Basic Attention of the Municipalities;
- e) Lack of actions that promote the allocation and permanence of professionals in Primary Care;
- f) Lack of a diagnosis of the staff allocation needs of the UBSs, in disagreement with the provisions of Ordinance GM/MS n. 2.488 (National Policy of Basic Care - PNAB), of October 21, 2011, item 3.4, item XII;
- g) Absence or insufficiency of structures and specific technical teams in the SES/SDRs/SMSs for monitoring and evaluation (M&E) of Primary Care;
- h) Inexistence of input indicators and processes to perform the Monitoring and Evaluation (M&E) of the Primary Care, deficiency of its use for the planning of health actions and lack of publicity on the internet of the planning instruments;
- i) Insufficient IT structure;
- j) Deficiencies in the planning process, which does not contribute to making it participatory and compatible with the health needs of the population;
- k) Low participation of Health Councils in discussions related to planning, hindering the exercise of their role in the execution of health policies;
- l) Precariousness of the pact instruments and low adhesion of the States to the Health Care Public Action Organizational Contract (COAP);
- m) Restriction of the population’s access to other levels of care;
- n) Deficiencies in the integration between levels of care;
- o) Deficiencies in the state transfer to the municipalities for the tripartite financing of Primary Care;
- p) State contribution to tripartite financing of Basic Care to municipalities with a percentage lower than the total state resources for health;
- q) Unequal distribution of federal and state health resources to the municipalities;
- r) Lack of updating, by the municipal health secretariats, of information about professionals in the National Registry of Health Establishments (CNES);

### MUNICIPAL INFORMATION* USED FOR THE EXTERNAL CONTROL EXERCISED BY THE TCE-SC

- a) Total number of teams and professionals by category;
- b) Location and number of UBSs in the city with photographic records;
- c) Infrastructure of the UBSs, photographic records, number and condition of rooms, quantities of IT equipment, computers, and printers;
- d) Public Expenditure Breakdown by sub-functions - Basic Care and Hospital and Outpatient Care;
- e) Applicable legislation (Laws, decrees and ordinances);
- f) Diagnosis that includes formal mechanisms to identify the training needs of the professionals who work in Primary Care;
- g) Availability and Quantity of Training Courses taken per professional;
- h) Technical and pedagogical instruments that facilitate the training and continuing education process of the members of the management and health care teams;
- i) Career, Positions and Salaries Plan (PCCS);
- j) Actions to promote the allocation and permanence of primary care professionals (productivity incentives, professional valorization);
- k) Survey/diagnosis of the staffing needs of the UBSs;

*State responsibility information was not included.
l) Structures and technical teams for monitoring and evaluation of Primary Care;
m) Input and process indicators for monitoring and evaluating Primary Care, as well as planning instruments and results;
n) IT Structure;
o) Requirements, the information and procedures used to support the health needs assessment;
p) Participation of the Health Councils in discussions related to planning;
q) Form adopted to promote the access to other services provided by the health care network by means of request (via Intermunicipal Consortium, for example);
r) Number of state medical and high complexity outpatient facilities and medium and high complexity hospitals in the State of Santa Catarina;
s) Waiting list for specialized medium and high complexity exams and consultations;
t) State and federal transfers to the municipalities for tripartite financing of Primary Care;
u) Updated information about the professionals in the National Registry of Health Establishments (CNES).

Source: Adapted by the author based on the Operational Audit Report on the management of basic health care of the State Health Secretariat and the municipalities of Araquari, Canoinhas, Florianópolis, and Joinville conducted by the Santa Catarina State Audit Court in the period from June to December 2014 and published in 2018.

After this, we proceeded to the analysis of the operational audit processes in the education area, which resulted in the elaboration of the tables below.

Table 7 refers to the analysis of the operational audit process RLA 18/00145362:

<table>
<thead>
<tr>
<th>CASE NO.</th>
<th>RLA 18/00145362</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGING UNIT</td>
<td>Municipality of Guaramirim/SC</td>
</tr>
<tr>
<td>OPERATIONAL AUDIT OBJECTIVE</td>
<td>Check whether the municipality has planning and control tools that promote the fulfillment of the goals of the Municipal Education Plan</td>
</tr>
<tr>
<td>PERIOD OF REALIZATION</td>
<td>2018</td>
</tr>
<tr>
<td>AUDIT QUESTIONS SET FOR THE SCOPE OF WORK</td>
<td>a) Does the Municipal Secretariat of Education (SEMED) have planning and control tools to fulfill the goals of the Municipal Education Plan (PME), as well as the strategies foreseen in this Plan? (efficiency and effectiveness dimensions)</td>
</tr>
<tr>
<td>METHODOLOGICAL STRATEGY ADOPTED</td>
<td>a) SWOT Analysis; b) Risk Verification Diagram; c) Documentary analysis; d) Interviews and on-site visits; and e) Data survey.</td>
</tr>
</tbody>
</table>
MAIN FINDINGS OF THE AUDIT TEAM

a) Inexistence of specific resources for the execution of the PME, in disagreement with art. 9, of the (municipal) Law n. 4.252/2015;
b) Non-performance of continuous monitoring and periodic evaluation of the PME by SEMED, in disagreement with art. 4, I, of (municipal) Law n. 4.252/2015;
c) Restricted disclosure of the results of the PME monitoring by SEMED, in disagreement with item I of paragraph 1 of article 4 of (municipal) Law no. 4.252/2015;
d) Deficiencies in the performance of the CME in relation to the PME, in disagreement with art. 4, ii and § 1 of (municipal) Law No. 4.252/2015; art. 1, caput and §§ 3 and 4, art. 2, i, g and art. 4 of complementary (municipal) Law No. 10/2010;
e) Reduction in the attendance rate in daycare for the population between 0 and 3 years old, contrary to goal 1 of the (municipal) Law n. 4.252/2015;
f) Existence of 4- and 5-year-old children out of school, in disagreement with art. 208, I and IV of the Federal Constitution, art. 4, I of Law n. 9.394/1996 and goal 1 of (municipal) Law n. 4.252/2015;
g) Existence of children and adolescents aged 6 to 14 years out of school, in disagreement with art. 208, I, of the Federal Constitution, art. 4, I of Law n. 9.394/1996 and goal 2 of (municipal) Law n. 4.252/2015;
h) Inexistence of an educational program for the correction of age/grade distortion, in dissonance with strategy 2.18 of goal 2 of (municipal) Law n. 4.252/2015;
i) Low percentage of schools and students with full-time education, in disagreement with art. 34, paragraph 2, of Law n. 9.394/1996 and goal 6 of (municipal) Law n. 4.252/2015;
j) Non-alignment of monthly salaries of teaching professionals, defined in the plan of positions and salaries of municipal servers, with the national professional salary floor, in disagreement with art. 206, VIII, of the Federal Constitution, art. 67, III of Law n. 9.394/1996 and goal 16 of (municipal) Law n. 4.252/2015;
k) High rate of teaching professionals hired on a temporary basis, in disagreement with art. 37, II, of the Federal Constitution, art. 67, I, of Law n. 9.397/1996 and strategy 16.4 of (municipal) Law n. 4.252/2015;
l) Deficiency in the democratic management of public education, in non-compliance with art. 3, VIII and 14 of Law n. 9.394/1996 and arts. 2, VI and 8 of (municipal) Law n. 4.252/2015;

MUNICIPAL INFORMATION USED FOR THE EXTERNAL CONTROL EXERCISED BY THE TCE-SC

a) National Education Plan (available on the Ministry of Education's website - PNE on the move: pne.mec.gov.br)*;
b) Municipal Education Plan - PME with its annexes, established by law, with the elaboration of goals and strategies, as well as monitoring and evaluation responsibilities for the achievement of the goals;
c) Annual Budget Law - LOA and Budgetary Balance for the analysis of the fixed, committed, liquidated, and paid education expenses (function 12 - Education);
d) Legislation regarding the Municipal Education Council (CME);
e) SEMED's planning (annual or multi-year) with the policies and actions related to the PME goals and strategies;
f) Budget Guidelines Law - LDO of the municipality;
g) The municipality's Multi-Year Plan - PPA;
h) Ordinance appointing the technical team for monitoring and evaluation of the PME and monitoring reports;
i) Results of the monitoring of the PME by SEMED and forms of dissemination -

*This is not municipal responsibility information, but was included because it was used for the audit.
j) WEC agendas and minutes;
k) Monitoring reports performed by the CME;
m) Data on day-care enrollment of children up to 3 years old from all education networks in the Municipality and the official population of children between 0 and 3 years old;
n) Pre-school enrollment data for all education networks in the Municipality and the official population of children between 4 and 5 years old;
o) Data regarding the number of students between 6 and 14 years old and the official population;
p) Quantity of vacancies available in all education networks and the real demand;
q) Total number of enrollments in elementary school in all education networks, total number of enrollments in full-time education in elementary school, list of municipal schools containing number of classes per grade/year and number of vacancies;
r) Law 11.738/2008 - National Professional Salary Level Law*;
s) Municipal Public Servants' Positions and Salaries Plan/Magisterial;
t) List of teaching professionals, specifying the way they work for the municipality (permanent, temporary, commissioned);
u) Legislation that disciplines the democratic management of education;
v) Composition and choice of the school board, the CME, the Parent-Teacher Association (APP), the School Advisory Council (CDE) and the Student Council (GE);
x) Legislation related to the Municipal Education System (SISMEN);

Source: Adapted by the author based on the operational audit case #RLA 18/00145362 performed by the Santa Catarina Accounting Court - TCE/SC.

Table 8 refers to the analysis of the operational audit process RLA 15/00519054:

Table 8 - Education Information Requirements Survey - process RLA 15/00519054

<table>
<thead>
<tr>
<th>CASE NO.</th>
<th>RLA 15/00519054</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGING UNIT</td>
<td>Municipality of Anita Garibaldi/SC</td>
</tr>
<tr>
<td>OPERATIONAL AUDIT OBJECTIVE</td>
<td>Perform a diagnosis in education that will provide the Administration with information that will increase public policies in education, mainly aiming at the achievement of the goals set by the National Education Plan - PNE 2014/202411.</td>
</tr>
</tbody>
</table>

10 Furthermore, although a public hearing was held, the communication channel recommended by law was not and is not being used, which is the City Hall's website, since the Secretariat does not have its own page. In a public consultation to the institutional website of the Municipal Government of Guaramirim (https://guaramirim.atende.net/#/tipo/inicial), on 04/09/2018, it was found that the results of the PME monitoring were not available on this communication channel (p. 1135)

11 The effectiveness of education services requires a long-term strategy aimed at the needs of the present and future generations, constitutionally anchored under the perspective of universalizing the provision and expanding its funding, which is why, to comply with the Constitution, the (federal) Law n. 13.005, of 06/25/2014, was approved, promulgated, and published, approving the National Education Plan (PNE) for the period from 2014 to 2024. The PNE constitutes a paradigm for the improvement of the quality of Brazilian education, as it deals with a ten-year State policy in the area of education, from its 10 (ten) guidelines, 20 (twenty) goals and 254 (two hundred and fifty-four) strategies, which cover all levels of education, from early childhood education to higher education, subordinating the other state, Federal District and municipal education plans. (TCE/SC, 2017, p. 1131-1132)
### Period of Realization

<table>
<thead>
<tr>
<th>Date</th>
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<tbody>
<tr>
<td>31/08 a 04/09/2015</td>
</tr>
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</table>

### Audit Questions Set for the Scope of Work

<table>
<thead>
<tr>
<th>Question</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Does the infrastructure of the schools offer adequate conditions for the development of teaching?</td>
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<td>12</td>
<td></td>
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<tr>
<td>b) Does the Municipality invest in professional education, training, updating, and valuing of teachers and managers of the municipal education network and has it developed actions to promote the improvement of their performance?</td>
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<tr>
<td>c) Has the Municipality improved the Basic Education Development Index - IDEB, established in the “Everyone for Education Commitment - Ministry of Education”, in the 2009, 2011 and 2013 evaluations?</td>
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<tr>
<td>d) Does the Municipality support and encourage the participation of the councils that work in basic education and ensure conditions for the democratic management of education?</td>
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<tr>
<td>e) How universal is education in day-care centers (children up to 3 years old), preschool (4 to 5 years old) and elementary school (6 to 14 years old)?</td>
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### Methodological Strategy Adopted for Data Collection

<table>
<thead>
<tr>
<th>Methodology</th>
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</tr>
</thead>
<tbody>
<tr>
<td>a) Document analysis;</td>
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<tr>
<td>b) Data survey on the website <a href="http://www.inep.gov.br">www.inep.gov.br</a>;</td>
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<tr>
<td>c) Interviews with the secretary of education, principals, teachers, employees and students from the municipal schools, drivers of school vehicles, and presidents of the FUNDEB Council, the Municipal School Feeding Council, and the Municipal Education Council;</td>
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<tr>
<td>d) On-site visits to schools and the Guardianship Council;</td>
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<tr>
<td>e) Direct observations;</td>
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<tr>
<td>f) Photographic records;</td>
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<tr>
<td>g) Public hearing.</td>
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</tbody>
</table>

12 Question related to Goal 6 of the PNE.
13 Question related to Goals 16 and 18 of the PNE.
14 The Basic Education Development Index (IDEB), created in 2007 by the Anísio Teixeira National Institute for Educational Studies and Research (Inep), works as a national indicator that enables the population to monitor the quality of Education through concrete data, with which society can mobilize in search of improvements. To this end, IDEB is calculated from two components: the school performance rate (approval), obtained from the School Census, and the average performance of students in Portuguese language and mathematics on the exams applied by Inep. The performance averages used are those of Prova Brasil, for the municipalities, and of the Basic Education Evaluation System (Saeb) for the states and the Union, which take place every two years. The composition of IDEB not only makes possible the updated diagnosis of the educational situation in all these spheres, but also the projection of individual intermediate goals towards the improvement of the quality of education. The goals are exactly that, the path laid out of individual evolution of the indexes so that Brazil reaches, in the year 2021, the national average of IDEB equal to 6.0 in the early years of elementary education and 5.5 in the final years of elementary education. (TCE/SC, 2017, p 1063)
15 Question related to Goal 7 of the PNE.
16 Question related to Goal 19 of the PNE.
17 Question related to goals 1 and 2 of the PNE.
a) Deficiencies in the infrastructure\(^{18}\) of the schools that make up the municipal teaching network of Anita Garibaldi;

b) Precarious school transportation, with total lack of safety and the precariousness of the school buses made available to the students;

c) Lack of investment in training and improvement of education professionals, especially those focused on inclusive education, in violation of articles 3, VII, and 67, II, of Law 9.394/1996 c/c art. 27, of Law 13.146/2015;

d) Absence of a career and remuneration plan for teachers in which the salary floor is set as the starting salary of the career, in compliance with the provisions of arts. 2, paragraph 1, and art. 6 of Federal Law 11.738/2008;

e) The municipal school system of Anita Garibaldi did not achieve the projected goals of the Basic Education Development Index (IDEB), in the 2009, 2011 and 2013 evaluations, referring to the second phase of elementary school (9th grade);

f) Fall from 88% (in 2011) to 74% (in 2013) in the school performance rate (approval) of students from 6th to 9th grade in the municipal education network;

g) Lack of effective performance and monthly ordinary meetings of the FUNDEB Council, in violation of art. 9 of municipal law 1.748/2007;

h) Absence of opinions from the FUNDEB Council, as well as fragility of the information contained in the minutes that approved the rendering of accounts of the resources of that Fund, in contravention of art. 5 of municipal law 1.748/2007;

i) Lack of effective performance and ordinary meetings of the School Feeding Council - CAE, in affront to art. 2, paragraph 6, of municipal Law 1.418/2001;

j) Lack of effective performance and monthly ordinary meetings of the Municipal Education Council - CME, in affront to art. 2, paragraph 5, municipal law n. 1.025/1991;

k) Lack of infrastructure for the operation of the Councils, with the municipality failing to meet the precepts established in Article 24, paragraph 10, of Federal Law 11.494/2007 and Article 17, VI, of Federal Law 11.947/2009;

l) Lack of training for members of the Municipal Education Councils, with a view to their effective performances, in line with Target 18.1 of the Municipal Education Plan, approved by Municipal Law n. 2.098/2015.

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\(^{18}\) The Directorate of Control of Municipalities of TCE/SC used a study published in 2013 by researchers from the University of Brasilia - UnB and the Federal University of Santa Catarina - UFSC, based on data collected by the 2011 school census and conducted by the National Institute of Educational Studies and Research Anísio Teixeira (Inep), entitled "A scale for measuring school infrastructure", which determined levels of scales as to school infrastructure, classifying them as follows: (a) elementary infrastructure; (b) basic infrastructure; (c) adequate infrastructure; (d) advanced infrastructure.

In this direction, according to the study prepared, the elementary infrastructure comprises elementary aspects for the operation of a school, such as water, sanitary, energy, sewage, and kitchen. These are essential, elementary aspects for the operation of a school building, without any specific characteristics related to the teaching-learning process.

The basic infrastructure, besides having the elementary aspects of the initial classification school, contemplates a basic infrastructure, typical of school units. In general, they have: a boardroom and equipment such as TV, DVD, computers and printer. Adequate means that the school has a more complete infrastructure, which allows for a more favorable environment for teaching and learning. These schools have, for example, spaces such as a teacher’s room, a library, a computer lab, and a toilet for early childhood education. There are also spaces that allow social interaction and motor development, such as a sports court and a playground. In addition, these schools have complementary equipment such as copying machines and internet access.

Finally, the advanced infrastructure - in the view of the study - is the most robust and closest to the ideal, with the presence of a science lab and adequate facilities to serve students with special needs. This level provides students with a school environment with adequate infrastructure for the purposes of quality education (TCE-SC, 2020).
MUNICIPAL INFORMATION USED FOR THE EXTERNAL CONTROL EXERCISED BY THE TCE-SC

*This is not municipal responsibility information, but was included because it was necessary for the audit.

| a) | Survey of information regarding the population, economic and social development index - HDI / UNDP, gross domestic product - GDP, results obtained by the municipality when evaluating the IDEB; |
| b) | Number of students enrolled per school per school year; |
| c) | Liquidated expenses in education, with details per element of the five items that most impacted the total expenses classified by function 12 - Education; |
| d) | Tax revenues and transfers in spending on the maintenance and development of education for purposes of compliance with the minimum 25% limit provided in Article 212 of the Federal Constitution; |
| e) | Information from the community - gathered through a public hearing, with an audience of 164 people; |
| f) | Documentation of the school infrastructure by means of photographs, including as to the adequacy of the school to attend to students with special needs; |
| g) | Suggestions for improvement of the school network obtained from teachers, managers and students; |
| h) | Existence of projects and effective actions to offer full time education (equal to or more than 7 hours a day) aiming at reaching goal 6 of the PNE; |
| i) | Information regarding pedagogical planning and report of the nutritionist's attendance to control the menu and the quality of school meals, guidance to the lunch ladies and supervision of food hygiene and conservation; |
| j) | Existence of inventory and stock control of materials in the school; |
| k) | Photo records of the physical condition of the vehicles available for school transportation; |
| l) | Payroll for early childhood education/elementary school; |
| m) | List of teachers working in education - discipline and school/efforts; |
| n) | List of teachers assigned to education - discipline and school/ACTs; |
| o) | List of teachers with post-graduate degrees; |
| p) | Existence of courses offered with formation, professional qualification, training and updating of teachers and managers of the municipal education network; |
| q) | Career plan and teachers’ remuneration; |
| r) | Adherence to the Children’s Literacy Assessment - PROVINHA BRASIL; Simulado da Provinha Brasil; Adherence to the National Literacy Assessment - ANA; Institution of the Accelerated Age/Serial Grade Distortion project; Adherence to the School Dropout Combat Program - APOIA, proposed by the MPSC; |
| s) | Existence of councils that belong to the Municipal Education System, meeting minutes, reports and opinions of activities, photos of the structures for functioning and training for the members; |
| t) | Data on available places, filled places, and student dropouts. |

Source: Adapted by the author based on the operational audit case #RLA 15/00519054 performed by the Santa Catarina Accounting Court - TCE/SC.

Finally, table 9 refers to the analysis of the operational audit process n RLA 18/00145109:
**Table 9 - Education Information Requirements Survey - process RLA 18/00145109**

<table>
<thead>
<tr>
<th>CASE NO.</th>
<th>RLA 18/00145109³⁹</th>
</tr>
</thead>
<tbody>
<tr>
<td>MANAGING UNIT</td>
<td>Municipality of Canoinhas</td>
</tr>
<tr>
<td>OPERATIONAL AUDIT OBJECTIVE</td>
<td>Check whether the municipality has planning and control tools that promote the fulfillment of the goals of the Municipal Education Plan - PME²⁰.</td>
</tr>
<tr>
<td>PERIOD OF REALIZATION</td>
<td>2018 (covered the analysis of the period from 2015 to 2018)²¹</td>
</tr>
<tr>
<td>AUDIT QUESTIONS SET FOR THE SCOPE OF WORK</td>
<td>Does the municipality have planning and control tools to meet the PME goals, in addition to the strategies set forth in this Plan? (dimensions: efficiency and effectiveness)</td>
</tr>
<tr>
<td>METHODOLOGICAL STRATEGY ADOPTED FOR DATA COLLECTION</td>
<td>a) Internet research and analysis of the legislation on the subject in question; b) Analysis of the indicators of compliance with the goals of the Municipal Education Plan (available on the Ministry of Education’s website), which served as a basis for the elaboration of the Risk Matrix, an instrument used to select the municipalities to be audited; c) On-site visit to get to know the structure and the players involved at the municipal level; d) Search for information and interviews with representatives of the following bodies and instances: Mayor of Canoinhas, Municipal Secretary of Education, PME Monitoring and Evaluation Technical Team; Municipal Education Council and Municipal Education Forum. e) SWOT (strengths, weaknesses, opportunities and threats) and DVR (Risk Verification Diagram) auditing techniques.</td>
</tr>
</tbody>
</table>

¹⁹ The file referring to the entire audit process analyzed has 9,179 pages and the estimated cost of the audit was R$ 142,521.49, according to the document presented on page 14 on March 16, 2018 by the audit team.

²⁰ According to TCE/SC (TCE-SC, 2020), “the Constitutional Amendment 59/2009 made an important change in the condition of the National Education Plan - PNE, which was raised from a transitional provision of the Law of Directives and Bases of National Education - LDB (art. 87, § 1, of the Transitory Provisions of Law No. 9.394/1996) to a constitutional requirement with ten-year periodicity (art. 214 of the Federal Constitution). The Federal Constitution establishes that the PNE will last ten years, with the goal of articulating the National Education System in collaboration and defining guidelines, objectives, goals, and implementation strategies to ensure the maintenance and development of education in its various levels, stages, and modalities through integrated actions of the public authorities of the different federative spheres. The PNE, established by Federal Law No. 13.005/2014, determines guidelines, goals, and strategies for education policy to be met by 2024. There are 20 goals and 254 strategies that relate to ensuring the right to quality basic education, universalizing compulsory education, valuing diversity, valuing education professionals, and expanding access to public higher education. The State Education Plan (PEE) of Santa Catarina, instituted by (state) Law nº 16.794, of 14/12/2015, in compliance with art. 214 of the Federal Constitution and art. 166 of the State Constitution, has its goals and strategies aligned to the National Education Plan, and, in articulation with the federated entities, proposes to consolidate the State Education System of Santa Catarina. The Municipal Education Plan of Canoinhas, established by (municipal) Law #5.591, of June 23, 2015, in conjunction with the National and State Plans, aligned its guidelines, goals, and strategies to comply with the provisions of art. 8 of Law #13.005, of June 25, 2014. In this sense, 20 goals and 308 strategies were elaborated”.

²¹ The volume of audited resources, which refers to the amounts committed in Function 12 - Education in the 2016-2017 biennium, totaled R$ 91,660,217.41 (TCE-SC, 2020).
### MAIN FINDINGS OF THE AUDIT TEAM

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Inexistence of specific resources for the execution of the PME;</td>
</tr>
<tr>
<td>b)</td>
<td>No continuous monitoring and periodic evaluation of the PME by the SME;</td>
</tr>
<tr>
<td>c)</td>
<td>Restricted dissemination of the results of the PME monitoring by the SME;</td>
</tr>
<tr>
<td>d)</td>
<td>Deficiencies in the performance of the CME regarding the PME;</td>
</tr>
<tr>
<td>e)</td>
<td>Low attendance rate of children from 0 to 3 years old in early childhood education;</td>
</tr>
<tr>
<td>f)</td>
<td>No children between 4 and 5 years old out of school;</td>
</tr>
<tr>
<td>g)</td>
<td>Existence of children and adolescents between 6 and 14 years of age out of school;</td>
</tr>
<tr>
<td>h)</td>
<td>Percentage of students with age/grade distortion above the recommended in goal 2 of the municipal law;</td>
</tr>
<tr>
<td>i)</td>
<td>Non-existence of schools and students with full-time education;</td>
</tr>
<tr>
<td>j)</td>
<td>Teachers teaching without proof of specific training in the area;</td>
</tr>
<tr>
<td>k)</td>
<td>High rate of teaching professionals hired on a temporary basis;</td>
</tr>
<tr>
<td>l)</td>
<td>Deficiency in the democratic management of public education.</td>
</tr>
</tbody>
</table>

### MUNICIPAL INFORMATION USED FOR THE EXTERNAL CONTROL EXERCISED BY THE TCE-SC

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td>Municipal Education Plan (PME) with annexes I and II;</td>
</tr>
<tr>
<td>b)</td>
<td>Planning (annual or multi-year) by the Municipal Secretary of Education (SME) with the policies and actions related to the goals and strategies of the PME;</td>
</tr>
<tr>
<td>c)</td>
<td>Description of the computerized systems and tools, as well as a copy of the documents used for monitoring and evaluating the fulfillment of the PME targets, with information on all the education networks (federal, state, municipal, and private);</td>
</tr>
<tr>
<td>d)</td>
<td>SME reports on the continuous monitoring and periodic evaluation of the PME since its publication;</td>
</tr>
<tr>
<td>e)</td>
<td>Website or proof of other means used to disseminate the results of the monitoring and evaluation of the PME;</td>
</tr>
<tr>
<td>f)</td>
<td>Official population from 0 to 3 years old and 4 to 5 years old of the municipality used in the last PME monitoring;</td>
</tr>
<tr>
<td>g)</td>
<td>Official population from 6 to 14 years old of the municipality used in the last PME monitoring;</td>
</tr>
<tr>
<td>h)</td>
<td>Total number of enrollments in kindergartens and preschools in all education networks, used in the last PME monitoring and information regarding the use of School Census data;</td>
</tr>
<tr>
<td>i)</td>
<td>Total number of elementary school enrollments in all education networks used in the last PME monitoring and information regarding the use of School Census data;</td>
</tr>
<tr>
<td>j)</td>
<td>Total number of elementary school enrollments aged 6 to 14 years old in all education networks used in the last PME monitoring and information regarding the use of School Census data;</td>
</tr>
<tr>
<td>k)</td>
<td>Total number of enrollments in full-time education in elementary school, used in the last PME monitoring and information regarding the use of School Census data;</td>
</tr>
<tr>
<td>l)</td>
<td>List of municipal Child Education Centers (CEI) and municipal schools, containing the number of classes per grade/year, with the respective number of vacancies registered in the last PME monitoring, discriminating those that develop full-time education.</td>
</tr>
<tr>
<td>m)</td>
<td>List of municipal schools, containing: name of the principal and vice-principal and how the school manager was chosen.</td>
</tr>
</tbody>
</table>

---

22 According to TCE/SC (TCE-SC, 2020), "the use of more than one means of communication to disseminate the results of the monitoring of the PME and collect suggestions from society is considered healthy; however, the holding of only one public hearing, the promotion of public consultation for a short period, only five days, and the disclosure of the results of the monitoring of the PME on the institutional Internet site restricted to the interstice of the public consultation characterize a limitation to social participation in the control of the educational plan and in the suggestion of policies and actions with a view to its fulfillment, which goes against the principle of democratic management in education".
| n) Act of appointment of municipal-public school managers;  
| o) Program/policy/actions developed by SME to solve the age/grade distortion in elementary school;  
| p) SME's planning for the implementation of integral education in the municipal public school system;  
| q) Career Plan for public basic education professionals;  
| r) List of the teaching staff, containing: name, CPF, admission date, employment relationship, position, level of education (high school, college, graduate), training course (for graduates and post-graduates) and area(s) of knowledge in which they work;  
| s) Incentives granted by the SME for the training of education professionals in higher and post-graduation levels.  
| t) List of teaching professionals who are studying for higher education (undergraduate or graduate) because of incentives granted by the SME;  
| u) Notices for admission of professors published in the period from 2015 to 2016, through a public competition to fill a permanent position and/or selection process for admission on a temporary basis;  
| v) Municipal legislation governing the democratic management of public education;  
| w) The Municipal Education Council (CME) and the Municipal Education Forum (FME) constitution act;  
| x) Act of appointment of current WEC and FME members, minutes of WEC and FME meetings in the 2017 school year, internal communications n. 52/2017, 55/2017 and 159/2017 from SME and SME Resolution/005 of 09/22/2015;  
| y) List of municipal schools, indicating which ones have a School Advisory Council (CDE), Parent-Teacher Association (APP), and Student Union (GE), as well as a document that registers the current composition of these bodies and respective meeting minutes;  

Source: Adapted by the author based on the operational audit case #RLA 18/00145109 conducted by the Santa Catarina Accounting Court - TCE/SC

From the empirical survey above, it is possible to verify what information is necessary for performing control over public policies in the areas of health and education, without which the operational auditing activity conducted by the Santa Catarina State Audit Court would be impaired.

2.2 COMPARATIVE ANALYSIS BETWEEN THE INFORMATION GATHERED, THE LEGISLATION, AND THAT MADE AVAILABLE ELECTRONICALLY BY THE MUNICIPALITIES ASSOCIATED WITH AMESC

The geographic cutout for the municipalities that make up AMESC was due to the fact that it is the region where the author and the University of Extremo Sul Catarinense (UNESC) and its Post-Graduate Law Program (PPGD) are located.

Before proceeding to the announced comparison, it is necessary to show the total expenses with software companies per AMESC municipality, considering payments made during the year to the company responsible for maintaining the Transparency Portal of the municipalities (without considering payments of liabilities or entries in accrued liabilities) - search per creditor, according to table 2:
Table 2 - Expenses incurred with software company per AMESC municipality - 2015-2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Araranguá</td>
<td>256,593,55</td>
<td>244,969,01</td>
<td>233,221,13</td>
<td>214,045,11</td>
<td>165,875,46</td>
</tr>
<tr>
<td>Balneário Arroio do Silva</td>
<td>87,424,50</td>
<td>67,651,33</td>
<td>59,930,33</td>
<td>59,930,74</td>
<td>48,305,96</td>
</tr>
<tr>
<td>Balneário Gaivota</td>
<td>214,502,09</td>
<td>191,432,80</td>
<td>174,704,07</td>
<td>174,288,36</td>
<td>126,447,93</td>
</tr>
<tr>
<td>Ermo</td>
<td>117,966,10</td>
<td>110,658,43</td>
<td>104,223,68</td>
<td>89,762,10</td>
<td>80,133,04</td>
</tr>
<tr>
<td>Jacinto Machado</td>
<td>178,217,32</td>
<td>158,078,58</td>
<td>156,582,78</td>
<td>136,034,76</td>
<td>118,656,07</td>
</tr>
<tr>
<td>Maracajá</td>
<td>147,253,52</td>
<td>128,206,10</td>
<td>125,805,41</td>
<td>94,872,58</td>
<td>80,647,26</td>
</tr>
<tr>
<td>Meleiro</td>
<td>89,857,64</td>
<td>86,339,71</td>
<td>83,754,61</td>
<td>80,597,58</td>
<td>64,914,07</td>
</tr>
<tr>
<td>Morro Grande</td>
<td>162,199,19</td>
<td>145,907,50</td>
<td>109,158,84</td>
<td>89,012,88</td>
<td>75,499,70</td>
</tr>
<tr>
<td>Passo de Torres</td>
<td>178,719,49</td>
<td>138,824,19</td>
<td>138,758,71</td>
<td>132,537,47</td>
<td>102,552,70</td>
</tr>
<tr>
<td>Praia Grande</td>
<td>155,160,25</td>
<td>118,380,84</td>
<td>100,672,63</td>
<td>83,086,28</td>
<td>80,616,44</td>
</tr>
<tr>
<td>Santa Rosa do Sul</td>
<td>98,227,19</td>
<td>79,611,24</td>
<td>75,998,10</td>
<td>86,484,42</td>
<td>79,609,10</td>
</tr>
<tr>
<td>São João do Sul</td>
<td>153,768,51</td>
<td>135,345,74</td>
<td>103,308,37</td>
<td>86,313,40</td>
<td>73,081,76</td>
</tr>
<tr>
<td>Sombrio</td>
<td>46,878,87</td>
<td>42,804,41</td>
<td>36,851,42</td>
<td>33,990,72</td>
<td>29,950,52</td>
</tr>
<tr>
<td>Timbé do Sul</td>
<td>151,953,53</td>
<td>119,619,78</td>
<td>103,683,60</td>
<td>78,417,79</td>
<td>69,875,65</td>
</tr>
<tr>
<td>Turvo</td>
<td>186,793,02</td>
<td>163,180,52</td>
<td>153,141,23</td>
<td>124,658,58</td>
<td>111,380,65</td>
</tr>
</tbody>
</table>

Source: Transparency Portal of each municipality consulted.

Public transparency, in the active mode, is contained in Article 8, paragraph 1, items I to VI, of Law No. 12,527/2011, also known as the Access to Information Law, regulated by Article 7, paragraph 3, items I to IX, of Decree No. 7,724/2012.

Table 10 - Active Transparency set forth in the LAI and its Regulation

<table>
<thead>
<tr>
<th>LAI - L. 12.527/2011 - Art. 8, § 1</th>
<th>Decree n. 7.724/2012 - Art. 7, § 3</th>
<th>In the disclosure of information referred to in the caput, at least the following must be included:</th>
<th>The specific section referred to in § 1 must disclose information on</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - register of the competencies and organizational structure, addresses and telephone numbers of the respective units, and public office hours;</td>
<td>I - organizational structure, competencies, applicable legislation, main positions and their occupants, address and telephone numbers of the units, and public office hours;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II - records of any transfers of financial resources;</td>
<td>II - programs, projects, actions, works, and activities, with an indication of the unit in charge, the main goals and results, and, when they exist, result and impact indicators;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III - expense records;</td>
<td>III - transfers or transfers of financial resources;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV - information concerning bidding procedures, including the respective notices and results, as well as all the contracts signed;</td>
<td>IV - detailed budgetary and financial execution;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
V - general data for the monitoring of programs, actions, projects and works of agencies and entities; and
VI - answers to society's most frequently asked questions.

V - bids held and in progress, with calls for tender, annexes, and results, as well as signed contracts and commitment notes issued;
VI - remuneration and allowance received by occupants of public positions, ranks, degrees, functions, and jobs, including allowances, per diems, jetons, and other pecuniary advantages, in addition to retirement and pension provisions for public servants and employees who are still active, in an individualized manner, as established in an act by the Minister of State for the Economy;
VII - answers to society's most frequently asked questions;
VIII - contact of the monitoring authority, designated under the terms of art. 40 of Law No. 12,527 of 2011, and telephone and email of the Citizen Information Service - SIC; and
IX - programs financed by the Workers' Support Fund - FAT


Besides LAI, active transparency is also complemented, when it comes to information related to fiscal management, by the Complementary Law No. 101 of May 4, 2000, known as the Fiscal Responsibility Law, duly regulated by Decree No. 10,540 of November 5, 2020, which repealed Decree No. 7185 of May 27, 2010 and brought greater requirements regarding the information that must be published on expenses and revenues:

Table 11 - Active Transparency's role in the LRF and its Regulation

<table>
<thead>
<tr>
<th>LRF - LC 101/2000 - Art. 48</th>
<th>Decreto n. 10.540/ 2020 - Art. 8º</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following are fiscal management transparency instruments, which will be widely disclosed, including through public access electronic media</td>
<td></td>
</tr>
<tr>
<td>Siafic must allow, directly or through integration with other structuring systems, the availability, in an electronic medium that allows broad public access, of at least the following information related to the acts performed by the managing or executing units:</td>
<td></td>
</tr>
</tbody>
</table>

- the plans, budgets and budget guidelines laws;
- the rendering of accounts and the respective prior opinion;
- the Budget Execution Summary Report and the Fiscal Management Report;
- and simplified versions of these documents.

Table 11 - Active Transparency's role in the LRF and its Regulation

<table>
<thead>
<tr>
<th>LRF - LC 101/2000 - Art. 48</th>
<th>Decreto n. 10.540/ 2020 - Art. 8º</th>
</tr>
</thead>
<tbody>
<tr>
<td>I - as to expenditure:</td>
<td></td>
</tr>
<tr>
<td>a) the data referring to commitment, settlement and payment;</td>
<td></td>
</tr>
<tr>
<td>b) the number of the corresponding process that instructs the budgetary execution of the expense, when this is the case;</td>
<td></td>
</tr>
</tbody>
</table>

§ 1o Transparency will also be ensured through: [...] II - release to society’s full knowledge and follow-up, in real time, of detailed information on the budgetary and financial execution, in electronic means of public access; c) the budget classification, specifying the budget unit, the function, the subfunction, the nature of the expense, the program and the action and the source of funds that financed the expenditure, according to the general rules for consolidation of public accounts referred to in paragraph 2 of art. 50 of Complementary Law No. 101 of 2000; d) the data and information regarding disbursements independent of the budget execution; e) the individual or legal entity that is the beneficiary of the payment, with its respective CPF (taxpayer registration number) or CNPJ (corporate taxpayer registration number), including for disbursements of operations independent of the budget execution, except in the case of payroll and social security benefits; f) the list of the executed agreements, with the corresponding process number, the name and identification by CPF or CNPJ of the covenanting party, the object, and the value; g) the bidding procedure performed, or its dispensation or ineligibility, when this is the case, with the number of the respective process; and h) the description of the good or service acquired, when this is the case; and II - as to revenue, the relative data and values: a) the forecast in the annual budget law; b) to the entry, observing the provisions in art. 142 of Law nº 5.172, of October 25, 1966, and in art. 52 and art. 53 of Law nº 4.320, of March 17, 1964, safeguarding tax secrecy in the form of the legislation, when this is the case; c) the collection, including those referring to extraordinary resources; d) the collection; and e) the budget classification, specifying the nature of the revenue and the source of funds, observing the general consolidation standards of the public accounts referred to in § 2 of art. 50 of Complementary Law No. 101 of 2000.


The information raised in topic 3.1 of this dissertation was agglutinated into a list of 33 items regarding health and 37 items involving education, as can be seen in Appendix E. From this, a table was built to verify the existence or not of this information: first, regarding the existence of a legal obligation of active transparency and second, regarding the (in)existence, in whole or in part, of this information on the digital portals of the municipalities associated with AMESC, which can be seen in Appendix F.
Graph 2 shows the population of each municipality associated to AMESC. It is possible to see that 09 of the 15 municipalities analyzed have a population of less than 10 thousand inhabitants: Ermo, Maracajá, Meleiro, Morro Grande, Passo de Torres, Praia Grande, Santa Rosa do Sul, São João do Sul and Timbé do Sul, therefore, these are not obliged to disclose, through electronic portals accessed through the internet, within the scope of their competencies, information of collective or public interest produced or held in custody by them, according to the LAI.

The surveys are arranged in Table 3 below, which is used to analyze and discuss the results:
### Tabela 3 - Analysis of the existence of information requirements in the areas of health and education in the digital portals of the municipalities associated with AMESC

<table>
<thead>
<tr>
<th>INF²⁴/MUN²⁵</th>
<th>LEG</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
<th>05</th>
<th>06</th>
<th>07</th>
<th>08</th>
<th>09</th>
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<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td>-----</td>
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</tr>
<tr>
<td>INF 1.01</td>
<td>P²⁶</td>
<td>P</td>
<td>P</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>P</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>INF 1.02</td>
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<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
</tr>
<tr>
<td>INF 1.03</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
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<tr>
<td>INF 1.04</td>
<td>A</td>
<td>P</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
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<td>A</td>
</tr>
<tr>
<td>INF 1.05</td>
<td>A</td>
<td>E</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td>A</td>
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<td>A</td>
</tr>
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<td>INF 1.06</td>
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²⁴ For the description of each item referring to the analyzed information, see appendix E.

²⁵ Municipalities analyzed: 01 - Araranguá; 02 - Balneário Arroio do Silva; 03 - Balneário Gaivota; 04 - Ermo; 05 - Jacinto Machado; 06 - Maracaju; 07 - Meleiro; 08 - Morro Grande; 09 - Passo de Torres; 10 - Praia Grande; 11 - Santa Rosa do Sul; 12 - São João do Sul; 13 - Sombrio; 14 - Timbó do Sul; 15 - Turvo

²⁶ Web consultation to the electronic portal - information existing (E), partially existing (P) or absent (A) analysis regarding legal requirement of active transparency of information according to the Legislation (LEG) - required (E), partially required (P) or absent requirement (A).
| INF 1.23 | A A A A A A A A A A A A A A A A |
| INF 1.24 | A A A A A A A A A A A A A A A A |
| INF 1.25 | A A A A A A A A A A A A A A A A |
| INF 1.26 | A A A A A A A A A A A A A A A A |
| INF 1.27 | A A A A A A A A A A A A A A A A |
| INF 1.28 | A A A A A A A A A A A A A A A A |
| INF 1.29 | A E A A A A A A A A A A A A A A |
| INF 1.30 | E P P P P P P P P P P P P P P |
| INF 1.31 | A A A A A A A A A A A A A A A A |
| INF 1.32 | E E E E E E E E E E E E E E E E |
| INF 1.33 | A E E E E E E E E E E E E E E E |
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| INF 2.03 | A A A A A E E A A A E A A E E A A A A |
| INF 2.04 | E A A A A A A E A A A A A A A E |
| INF 2.05 | E E E E A E E E E E E E P E P E |
| INF 2.06 | E E A E E E E E E E E E E E E E |
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| INF 2.20 | A A A A A A A A A A A A A A A A |
Based on the survey and comparative analysis performed on the official digital portals of the municipalities associated with AMESC, it was possible to make some diagnoses, which are presented below:

| INF 2.21 | E | E | E | E | E | E | E | E | E | E | E | E |
| INF 2.22 | E | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.23 | A | A | A | A | E | A | P | A | A | A | A | A |
| INF 2.24 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.25 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.26 | E | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.27 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.28 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.29 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.30 | E | E | E | E | E | E | E | E | E | E | E | E |
| INF 2.31 | A | P | P | P | P | P | A | A | E | A | P | P |
| INF 2.32 | A | P | P | P | P | P | A | P | P | P | P | P |
| INF 2.33 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.34 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.35 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.36 | A | A | A | A | A | A | A | A | A | A | A | A |
| INF 2.37 | A | A | A | A | A | A | A | A | A | A | A | A |

Source: performed by the author from the analysis of the official digital portals of the municipalities in October, 2020 through the links in Appendix D.
Chart 3 - Overview of AMESC municipalities as to the minimum role of active transparency foreseen in the legislation

Graph 3 elucidates, individually per municipality associated with AMESC, the amount of information considered per situation: existing (E), absent (A) or partially existing (P), as to the items where active transparency is legally required, as indicated in the column named “LEG” in table 3.

It is possible to notice some homogeneity among the municipalities, with little variation among the items, largely explained by the similarity/standardization observed among the models used as official digital portals.

From the graph, we can see that there is still partial non-compliance on the part of the municipalities regarding the active availability of certain information requirements, even though there is legal provision for this.
From graph 4, one can see that the non-availability of information, even if at least in a purely technical way, also occurs because current legislation does not require it and/or to the culture of voluntary governmental non-transparency.

It can be seen, therefore, that the analyzed municipalities tend to actively make available, for the most part, only the information when it is legally required.

In this sense, it was found that in 74% of the information requirements surveyed and necessary for social control of public policies in the areas of health and education, there is no legal provision requiring active transparency.

It is important to emphasize that the non-availability of information in an active way would not by itself prevent the realization of social control of public policies, since, disregarding the obstacles and resistance offered by managers with a duty of transparency (which is only done through theoretical discussion), one could use the instruments of access to information and passive transparency to obtain it.

However, the question that arises here is the following: why not expand the role of active transparency through digital means? Since this would be perfectly possible by incorporating a model of digital and open government, as well as a culture of transparency that promotes, in fact, social control.
It seems to be evident that there is no will or willingness to change, either by law or voluntarily, this culture of minimal transparency. Who ultimately is interested in this status quo of transparency? Certainly not society.

Chart 5 - Quantitative of AMESC regarding existing, absent or partially existing information

AMESC Municipalities Quantity

76% of the information requirements were not found in the digital portals of the surveyed municipalities, 10% were partially found, and 14% were totally found.

Therefore, as said before, there is no culture of active voluntary transparency of the information necessary for social control of public policies in the areas of health and education in the municipalities analyzed.

Thus, due to the current situation, social control is dependent on access to information via passive transparency, which, although there is a legal provision in the LAI regarding the deadline for its fulfillment, is constantly not met or is denied without adequate grounds, whether at the municipal, state, or federal level.
Well then, once the analysis resulting from the comparison between the current digital portals maintained by the AMESC member municipalities and the information required by the applicable legislation, as well as the information extracted from the empirical analysis of the operational audits performed by the Santa Catarina State Court of Audit in the areas of health and education, has been performed, some conclusive notes can be made:

a) Municipalities tend to comply, in general, only with the access to information as to the list of information provided in the legislation that disciplines its active availability, but this does not mean that they produce transparency based on the idea of communication.

We reiterate the concept of transparency worked on here, understood as information that produces communication between rulers and ruled, the municipalities.

Based on this meaning and considering the analysis performed in this work, the municipalities, in general:
- do not systematize this information in a way that makes access intuitive for users, which could be solved, for example, with more thematic organization;
- do not use a more simplified language when dealing with information of a more technically robust order, such as those related to accounting or the public budget, using, for example, the generation of graphs, tables, or even the explanation of the most relevant points for society;
- do not detail or make possible the detailing of information for the level of access of documents and records that support the numbers and results presented.

Thus, it can be said that the digital portals referring to the analyzed municipalities, despite fulfilling, for the most part, part of the information requirements raised, do not fully produce the expected transparency, to materially enable the exercise of social control of public policies.

b) The information contained in the legislation regarding the provision of its access in an active way does not meet the information needs of the exercise of control over public policies, considering the empirical analysis of the activities performed by the Santa Catarina State Court of Auditors in the areas of health and education and, therefore, does not materially enable social control.

It is worth emphasizing here that the empirical analysis conducted during this research, with the survey of the information required by the operational audits conducted by the Santa Catarina State Court of Audit in the areas of health and education at the municipal level, due to several factors that would hinder it, did not intend to establish a standard of information required for all the digital portals in the country to be considered transparent.

The intention of the research was simply to demonstrate, in an empirical way, that only the information required by the applicable legislation, in an active way, even if the issue of not producing transparency due to the absence of communication was left aside, does not materially enable social control of public policies.
The survey of the information requirements based on the experience of the Santa Catarina Court of Audit was much more in the sense of a guide or example for the social control of public policies in the areas of health and education than in the sense of a deterministic or restrictive definition.

If the Court of Auditors under analysis were to change to another State, or if the Federal Court were taken as a parameter, this list would certainly change to a lesser or greater extent, because each audit process, even if they are in the same area of public policy, has its own issues, methodologies and demands.

It is worth repeating that there is no control without the necessary information and documents for the correct verification of what is being controlled. Thus, the research contributed, at this point, to highlight the fact that the legislation should be broader as to the information to be promptly made available by the municipalities and to guide possible paths or information requirements for this expansion.

c) Municipalities tend to actively make available on their digital portals, in their great majority, only the set of information required by law, and, as seen, this list does not meet the material conditions for the control of public policies.

As said, from the empirical study performed on the operational audit processes in the areas of health and education, at the municipal level, conducted by the TCE-SC, which aimed only to survey the information requirements with the purpose of guiding the realization of social control of public policies in these areas.

Considering these information requirements of guidance nature, it was noticed that the municipalities, in general, do not make this information available on their digital portals, which, many times, are only available for the internal use of the Public Administration, but, if they were made public, they would contribute to the exercise of social control.

It is thus clear that there is a need to rethink both the content and the way in which municipal public transparency is structured, in the digital realm, or cybertransparency, based on the concept of digital and open government, so that we can effectively leave the culture of obscurantism of public information, and, therefore, make possible the social control of public policies.

d) The digital portals maintained by the analyzed municipalities were developed from a programming pattern based on outdated electronic governance, not focused on the citizen and on the openness of public data, thus making it impossible to make the information available in a way that produces communication and makes social control of public policies possible.

From the conception of digital and open government, in which the focus is on the citizen and on the openness of public data, active transparency has the power to break this informational barrier, especially for the activity of social control.

The current situation stems mainly from the fact that the current paradigm for the development of digital portals maintained by municipalities is based on the outdated premise of e-gover-
nment, in its most embryonic phase, in which active transparency should be restricted only to the minimum set required by the legislation.

In this sense, even if there is no legislative change, in the sense of expanding access to information, in the active modality, this does not mean that the municipalities cannot, voluntarily, expand its content.

Such attitude, in fact, would demonstrate the concern with promoting citizenship and encouraging social control, besides supporting the government with the mark of transparency, provided that, besides the access to information, the conditions to produce communication between rulers and ruled are observed.

As a matter of fact, historically, technologies do not wait for the modification of the legislation to be implanted, but always end up indicating new paths, as it happened with the transportation service by application, for example, which forced the regulation of this new modality that was already in use in many cities in the country.

Thus, in view of the premises listed above, it can be inferred that the digital portals of the analyzed municipalities do not produce transparency based on the idea of communication, to make social control of public policies materially possible in the areas of health and education.

Therefore, in the next topic we intend to explore how the digital transparency portals can be expanded and restructured, based on the digital and open government paradigm, as well as to detail the legal, technical, and operational guidelines necessary for their development, to meet the informational conditions for performing social control of public policies.

2.3 THE NEED TO EXPAND AND RESTRUCTURE TRANSPARENCY BASED ON LEGAL, TECHNICAL, AND OPERATIONAL GUIDELINES: ASSUMPTIONS FOR A PROPOSAL OF DIGITAL AND OPEN GOVERNMENT for performing SOCIAL CONTROL OF PUBLIC POLICIES

Social control is one of the major goals to be achieved by the fulfillment of access to information and transparency. In fact, both social control and access to information and transparency are developed in a background paradigm, i.e., it is not possible to discuss them without thinking about the State model, the government regime, the constitution of the public administration and its bodies, as well as the very characterization of citizens and civil society, which are the very recipients of information, to enable the exercise of social control. (BITENCOURT, 2019, p. 68)

Well, since the 2000s and with the advance of software engineering, the use of the Internet has intensified and started to add resources from browsers, through which people could access from their computers innovative services and products (SOMMERVILLE, 2011, p. 8), ranging from access to written information, scientific or journalistic, for example, videos and music, government information to the use of online classroom platforms, digital popular participation and digital commerce,
The object of software engineering is the development of software, which can be understood as computer programs and associated documentation, and its product can be intended for a specific customer or for a general market (SOMMERVILLE, 2011, p.4):

"As well as these software products, the development of Web browsers capable of running small programs and doing some local processing led to an evolution in corporate and organizational software. Instead of writing the software and installing it on users’ computers, the software was deployed on a Web server. This made it much cheaper to change and update the software because there was no need to install the software on each computer. It also reduced costs, because user interface development is particularly expensive. Consequently, wherever possible, many businesses have switched to Web interaction with their company’s software systems.

The next stage in the development of Web systems was the notion of Web services. Web services are software components that are accessed over the Internet and provide specific and useful functionality. Applications are built by integrating these web services, which can be provided by different companies. In principle, this connection can be dynamic, so that the application can use different web services every time it is run.

In recent years, the idea of 'software as a service' has developed. It has been proposed that software will not normally run on local computers, but on ‘cloud computing’ accessed over the Internet. If you use a service like webmail, you are using a cloud-based system. A computing cloud consists of many interconnected computing systems, which are shared among several users. Users do not buy the software but pay according to usage or have free access in exchange for advertisements that are displayed on their screens. (SOMMERVILLE, p. 8-9)

However, the process of applying technology to law does not happen by chance. It takes dialogue, understanding, planning, and a lot of testing for the application not to have the opposite effect to the one desired, and to add value to the legal activity or environment.

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27 The existing complexity in the design of the modern State is undeniable, with factors that impede the participation of individuals in decision making, due to the bureaucracy and hierarchy existing in its administrative structure. Moreover, society also remains increasingly complex, to the point of being called information or knowledge society, since information is revealed as the driving force of change and the most important fuel in modern production systems, as well as the intense use of information technology in digital form has generated the overcoming of hierarchical and verticalized administrative structures towards horizontalized power relations, which is coined network society (ROVER, 2009, p. 19-20).
The software\textsuperscript{28} is equally present in the legal environment, creating platforms for judicial processes, automation for trials, legal document generator, intelligent reading of legal requests, interaction between citizen and State, transparency of public information, intelligent search for jurisprudence and theses.

Thus, it is important to point out that the process of forming any software and anywhere that it will be used stems from a methodological process composed of a few steps.

According to Pressman and Maxim (2016, p. 17), there are five steps that comprise the generic process methodology for software engineering:

a) Communication: being the first stage, it involves the initial dialog with those involved for understanding the objectives and gathering the requirements for the development of the software's features and necessary functions;

b) Planning: nothing more than the creation of a plan or map to be followed by the technical team for the elaboration of the project, to foresee the technical tasks, the probable risks, the required resources, the resulting products, and the work chronogram;

c) Modeling: at this point, the software engineer performs what is called a model, which is nothing more than a sketch of what is imagined to be the final product, which can be detailed according to the need. The objective at this stage is to understand the whole in terms of its architecture and how the pieces will fit together, as well as other characteristics;

d) Construction (or Coding): here the execution of what was designed in the previous stages begins. This is the stage when the creation of the software's source code (from the programming languages) and the necessary tests to eliminate eventual errors in the codification take place;

e) Delivery: is the final stage, in which the final product - the software - is delivered to its recipient, who evaluates it and provides feedback, based on the evaluation.

It is noted that although there is the character of succession between the steps, for many projects, these steps are applied continuously and interactively, with each interaction resulting in a software increment, which will contribute a part of its features and functions, becoming more and more complete (PRESSMAN; MAXIM, 2016, p. 18).

Technologies are increasingly present in the daily life of the legal environment, both in the governmental and private spheres, in such a way as to consecrate the era of digital law.

Such finding is present in the various spheres of state power. In the Executive Branch, especially regarding the structure of the Public Administration, the use of technological resources to per-

\textsuperscript{28} Increasingly, the use of software has been incorporated into the most varied aspects of human life, as well as people's interest in its features and functionality. Moreover, considering that software today is in everything from consumer electronics to medical equipment and weapons systems, the activity of designing it has become an indispensable activity (PRESSMAN; MAXIM, 2016, p. 14)

In this line, software engineering can be defined from a set of methods or practices and a framework of tools that make possible the development of complex systems, of high quality and meeting the needs of those who will use the product (PRESSMAN; MAXIM, 2016, p. 14).
form governmental functions and in the relationship with society, in what has been called electronic
government (RUEDIGER, 2002, p. 30) and, currently, digital government, is increasingly perceived.

The notion of digital government makes it possible to open governmental activity to the level
in which citizens can follow what is done, collected, and spent, to contribute to the improvement of
citizenship and the democratic process itself.

For example, Schiefler, Cristóvam and Peixoto cite the possibility of using Artificial Intelligen-
tce to create an Administrative Case Law Center by managing information about precedents in admi-
nistrative matters (SCHIEFLER; CRISTÓVAM; PEIXOTO, 2020)

In addition, Da Silva and Rover (2017, p. 341) highlight successful experiences of its imple-
mentation in several countries, from the application of information and communication technologies
(ICTs), to include citizen participation and more efficiently serve citizens who seek to collaborate with
the identification of problems, solutions and priorities in the management of public money.

Along the same path, in the Judiciary, the first records for the advent of technology applied to
judicial case came from Law no. 10,259 of July 12, 2001, which deals with the Special Courts in the
scope of the Federal Courts and brought in its article 8, paragraph 2, the possibility for the courts to
institute protocol by means of electronic petitioning, or yet, in article 14, paragraph 3, the trial of re-
qusts for uniformity by means of an electronic session.

However, the real change in the traditional Brazilian procedural paradigm, based on physical
processing, for the institutionalization of digital processing took place after Law 11.419 of December
19, 2006, which dealt with the computerization of the judicial process and established the beginning
of technology applied to the Brazilian Judiciary, with changes in the Brazilian procedural norms.

Since then, innovations have been constant, from the digital case processing systems adopted
by the Courts of Justice to the use of programming to create algorithms that can contribute to the ef-
ficiency and improvement of case duration.

Another example of the application of technology to Law is the case of the use of Artificial
Intelligence (AI) within the Judiciary, whose best known examples are the Socrates project, within the
Superior Court of Justice (STJ), and Victor, within the Supreme Federal Court (STF).

Similarly, in the Legislative Branch, it is possible to verify the use of technologies in favor of
Law, whether to make the full content of laws, decrees, and other normative acts publicly available on
the World Wide Web, or to monitor and interact during the process of creating laws by means of live
sessions, or even sending suggestions on bills, in what has been called digital democracy or cyberde-
mocracy.

As an example, we can cite the case of the House of Representatives, which provides an elec-
tronic portal <http://www.edemocracia.leg.br/> with tools for society to interact and follow the legis-
lative process, as well as the success case of the Participa.br application29.

29 It is true that one must evaluate, in this context, the real impact of these electronic participations (e-participation)
In addition, in another electronic site of the Chamber of Deputies <https://www.camara.leg.br/transparencia> there is information about some expenses made by the agency, in a facilitated and organized language, contributing to true transparency and enabling social control over public spending.

It can be seen, therefore, that the Executive, the Judiciary, the Legislative, and the Law already use programming languages and software engineering to produce efficiency, savings, automation, and debureaucratization.

Now, specifically regarding the social control of public policies, for the existence of true transparency and access to information, one must overcome the mere existence of electronic portals devoid of organized information, without simplifying the form of access, standardization of mechanisms and systematization of data (BITENCOURT, 2019, p. 174).

In my line of thought, Vieira (2010, p. 303), in an analysis about the use of technologies in the scope of health rights councils, makes important reflections about the use of technologies for the improvement of democracy and participatory citizenship:

a) electronic democracy has in health democracy a space to be explored, and public resources should be destined to the development of technologies that enable its implementation in all health councils in Brazil, forming an interaction network about Brazilian public health;

b) in municipal health councils, the use of electronic democracy instruments cannot be limited to the dissemination of information, but should provide effective channels of interaction;

c) given the existence of local family health councils, the instruments of e-democracy can strengthen the relationship between these more localized spaces of popular participation and the Municipal Health Council;

d) this interaction can occur, as an example, through the availability of Council meeting agendas on the internet, allowing users to contribute in advance with the points that will be debated and interacting with council members, thus enabling a greater theoretical contribution to the council members’ decision-making process and legitimacy to demand that the Government enforces these decisions.

Software engineering has powerful tools to produce transparency according to such aspects, from the combination of web programming languages, modeling techniques, software architecture,
and the intelligent use of algorithms, to turn information into communication.

It is possible, in this way, to contribute to transforming information into communication and, therefore, generate transparency and contribute to the exercise of social control30.

Considering the resources resulting from technology, the information and data era, to talk about transparency without mentioning the amount of information available, the way this information is structured, as well as the language and access, seems to be inconsistent with the current democratic order, based on publicity, citizen participation, transparency, and control.

There are several initiatives that seek to improve the culture of transparency based essentially on the passive form and, based on technology, expand it under the aspect of active transparency, that is, with the data available on electronic portals.

In this sense, the Open Data project of the municipality of Porto Alegre/RS stands out, which aims to promote public transparency by making available a database with permission for use and reuse in open format (.csv).

The initiative contributes greatly to the improvement of digital social control, since it allows the analysis of large amounts of data in seconds, through the application of programming language, extracting information, trends, and deviations that help control the conduct of public policies and the handling of state resources.

According to Victorino et al. (2017, p. 239), in work that analyzed the issue of Big Data in Public Administration, “the disclosure of government data in an open and connected way increases the transparency of public administration and can provide numerous benefits to governments and citizens.”

In this vein, Cristóvam and Hahn (2020, p. 22) point out that the data-driven public administration paradigm also needs to explore the determinants of trust, of which include data protection, reliability, fairness, integrity, and responsiveness and openness to ensure the progress and maintenance of data openness and proves even more challenging to restore if its instruments are flawed, insufficient, or not aimed at the duty of integrity.

Such is the case of the Operação Serenata de Amor project, which uses artificial intelligence to audit public accounts and assist in social control regarding reimbursements made by the Quota for performing Parliamentary Activity (CEAP).

Another project is LicitaConCidadão (Citizen Bidding), in the scope of the Audit Court of the State of Rio Grande do Sul, instituted through Resolution n. 1050/2015, which contributes to the conform...
trol and access to data and documents related to bidding in the state and municipalities of Rio Grande do Sul.

Initiatives like these contribute to the expansion of electronic portals and to a governmental culture based on active transparency, based on software engineering, and while it enables the transformation of transparency into communication, it contributes to the exercise of social control and social audits.

Constitutional Amendment no. 108, of August 26, 2020, included article 163-A in the Constitutional Text, which obliges the Union, the States, the Federal District, and the Municipalities to make available their accounting, budgetary, and fiscal information and data, according to the periodicity, format, and system established by the central accounting body of the Union, to ensure the traceability, comparability, and publicity of the data collected, which must be disclosed in an electronic medium of broad public access.

Complementary Law no. 101, of May 04, 2000, known as the Fiscal Responsibility Law - LRF, establishes, in its article 48, sole paragraph, item III, contained in section I, chapter IX, entitled Fiscal Management Transparency, that fiscal transparency must be ensured through the adoption of an integrated financial administration and control system that meets the minimum quality standard established by the Federal Executive Branch.

It should be noted that the LRF, as a rule of public finances, based on chapter II of title VI of the 1988 Federal Constitution, is of mandatory compliance by all entities of the federation.

In this sense, based on this provision of the LRF, Decree No. 7185 was issued on May 27, 2010, which provides for the minimum standard of quality of the integrated system of financial administration and control, within each entity of the Federation.

According to its article 2, the integrated system must allow the release in real time of detailed information on the budget and financial execution of the managing units, referring to the revenue and expenditure, with the minimum opening of data, as well as the timely accounting record of acts and facts that affect or may affect the entity’s assets, in an electronic medium that allows broad public access, thus understood by the Internet, without any user registration requirements or use of passwords for access (BRASIL, 2020).

Chapter II of the mentioned Decree deals with the technological requirements of the transparency system analyzed here, and although it refers more specifically to fiscal issues, operational and technical guidelines can be extracted for the proposal of general transparency of the digital and open government as a platform for social control of public policies.

Article 4 of the Decree (BRASIL, 2020) informs that, without prejudice to additional characteristics in the scope of each entity of the Federation, the system must meet the following technological requirements of minimum quality standard:
a) To make available to the citizen information from all the Federation Entity’s Powers and agencies in a consolidated manner;
b) Allow data storage, import and export;
c) Have mechanisms that enable the integrity, reliability, and availability of the registered and exported information.

The Decree also establishes, in its article 6, inserted in chapter II, which deals with the Generation of Information for the Electronic Medium of Public Access, that the system must allow the integration with the electronic medium that enables broad public access, assuring the society the access to the information about the budgetary and financial execution, which will be made available in the scope of each entity of the Federation, and this availability must assure:

a) the application of technological solutions that aim to simplify citizen service processes and procedures and provide better conditions for sharing information;

b) compliance, preferably, with the set of recommendations for accessibility of Brazilian government sites and portals, in a standardized and easy-to-implement manner, according to the Electronic Government Accessibility Model (e-MAG)°;

Finally, Article 7 of this Decree establishes a minimum content of information about the budget and financial execution to be made available in a broad form and of public access, without prejudice to individual rights and guarantees constitutionally established, namely:

a) regarding the expenses: the amount of the commitment, settlement and payment (stages of public expenditure); the number of the corresponding execution process, when applicable; the budget classification, specifying the budget unit, function, subfunction, nature of the expenditure and the source of funds that financed the expenditure; the individual or legal entity that is the beneficiary of the payment, including disbursements of operations independent of the budget execution, except in the case of payroll and social security benefits; the bidding procedure performed, as well as its exemption or unenforceability, when applicable, with the number of the corresponding process; and the goods supplied or service provided, when applicable;
b) regarding the revenues: the values of all revenues of the managing unit, comprising at least their nature, related to: forecast; launching, when this is the case; and collection, including those related to extraordinary resources (stages of public revenue) (emphasis added).

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° The Electronic Government Accessibility Model (e-MAG) was established by Ordinance No.0 3, May 7, 2007, of the Secretariat of Logistics and Information Technology of the Federal Government.
It is also worth highlighting Article 5 of the same Decree, which deals with the system’s interoperability requirement and emphasizes the need to meet, preferably, the e-PING - Electronic Government Interoperability Standards architecture standards\(^{32}\), which provides for the minimum set of premises, policies, and technical specifications that regulate the use of Information and Communication Technology (ICT) in the Federal Government, establishing the conditions for interaction between the branches and spheres of government and with society in general.

The interoperability requirement can be characterized as the “ability of diverse systems and organizations to work together (interoperate) to ensure that people, organizations, and computer systems interact to exchange information effectively and efficiently” (BRASIL, 2012, p. 6).

It is important to highlight the administrative interoperability method, which is widespread in Europe and which, in summary, “presupposes that national Public Administrations and Union institutions are connected to each other, having common databases and digital bridges of transition that enhance their communications” (ABREU, 2019, p. 206-207).

Interoperability differs from mere integration, because in the latter the connection of two or more systems is made through technological dependence between them, while in the former there is a communication process without the generation of a technological dependence between them. In some cases, integration may be recommended as the best solution (BRASIL, 2012, p. 7).

The agencies and entities that are members of the System for Administration of Information Technology Resources (Sisp) must comply with e-Ping when planning the contracting, acquisition and updating of technology systems and equipment. The adoption of the e-Ping by the other branches of government and other federal entities is optional, according to Ordinance No. 92 of December 24, 2014, which establishes the e-PING. (updated by Ordinance No. 41 of September 3, 2019, published in the DOU of September 25, 2019).

Among the general policies (BRASIL, 2020) that guide the work of e-PING, the following can be highlighted\(^{33}\):

- a) the preferential adoption of open standards: that is, whenever possible, open standards will be adopted in the technical specifications, and proprietary standards may be exceptionally accepted in the following conditions: in a transitory way, in legacy technology solutions; or, in the absence of an open standard, in which proprietary standards may be adopted until an open standard is available;

- b) the use of public software or free software: the implementation of interoperability standards must prioritize the use of public software and/or free software, in accordance with the standards de-

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\(^{32}\) The e-PING had its first version prepared in December 2004 and was established as a standard by SLTI/MP Ordinance No. 5, of July 14, 2005, which provides for the mandatory use for federal government agencies within the Executive Branch. For federal government agencies, Brazilian Executive Branch, the adoption of the standards and policies contained in e-PING is mandatory (Ordinance SLTI/MP No. 92, December 24, 2014) (BRASIL, 2018, p. 4).

\(^{33}\) Without prejudice to these goals, situations in which it is necessary to consider information security and integrity requirements will be respected.
fined in the scope of the Sisp;

c) the existence of market support: all the specifications contained in e-Ping contemplate solutions widely used by the market. The goal to be achieved would be the reduction of costs and risks in the design and production of services in information systems;

d) transparency: the Access to Information Law (LAI) reinforces the use of interoperability in the search for data publicity, since with more available information it is possible to minimize the number of citizen interactions with the government;

e) security: interoperability in the provision of e-Government services must consider the level of security required by the service.

In addition, the e-PING reference document addresses some dimensions that involve the general policies for ensuring interoperability, of a technical, semantic, and organizational nature:

Figure 23 - Interoperability Dimensions

Source: BRAZIL, 2015.
Table 12 - Interoperability dimensions according to e-Ping standard

<table>
<thead>
<tr>
<th>TECHNICAL DIMENSION</th>
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<tbody>
<tr>
<td>1. Broaden access to information systems: as a means of access, all government information systems should be accessible by means of any technology that proves to be the most appropriate among the available technologies, at the level of security required by the service.</td>
</tr>
<tr>
<td>2. Scalability: the selected specifications must be able to meet changes in system demand, such as changes in data volumes, number of transactions or number of users. The established standards must not be a restrictive factor, and must be able to support the development of services that meet needs from more localized ones, involving small volumes of transactions and users, to nationwide demands, with the processing of large amounts of information and the involvement of many users.</td>
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<tr>
<th>SEMANTIC DIMENSION</th>
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<tbody>
<tr>
<td>1. Development and maintenance of ontologies and other information organization resources: to facilitate the cross-referencing of data from different sources of information, when used by other organizations within the public administration, by civil society organizations or by the citizen, resources such as controlled vocabularies, taxonomies, ontologies and other information organization and retrieval methods should be used. Such resources can be developed collaboratively by people with expertise in the specific area and/or in specific modeling methodologies, and the results should be shared, reused, and made available in a repository of e-government vocabularies and ontologies.</td>
</tr>
<tr>
<td>2. Development and adoption of a data modeling standard for Government: based on simple, objective and easily usable notation, the modeling should: highlight the current and necessary integrations between data; support the interactions of the government in its various departments and agencies; support alignment with government business processes; promote improvement in public management; and serve as an interoperability architecture for the Government.</td>
</tr>
<tr>
<td>3. Development and adoption of a data and information dissemination policy: a policy that promotes the incorporation of the concept of Open Data (OpenData) must be adopted to guide the incorporation of processes for making public data available, thus allowing adequate transparency and its better use by society, aligned with the specific guidelines of the e-PING architecture so that we have the effective interaction of the Government with society.</td>
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<tr>
<th>ORGANIZATIONAL DIMENSION</th>
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<tbody>
<tr>
<td>1. Administrative simplification: The application of the e-PING aims to contribute so that the interactions of the government with society are performed in a simple and direct way, without prejudice to the legislation in force.</td>
</tr>
<tr>
<td>2. Promoting collaboration between organizations: through integration between institutional objectives and business processes of organizations with different internal structures and internal processes.</td>
</tr>
<tr>
<td>3. Guarantee of information privacy: all bodies responsible for offering e-Government services must guarantee the conditions for preserving the privacy of citizen, company and government body information, respecting and complying with the legislation that defines access and disclosure restrictions.</td>
</tr>
</tbody>
</table>

Source: Adapted by the author based on the e-Ping standard document (BRASIL, 2020).

In addition, the development of the system for transparency of public information must observe web standards of digital government.

In this sense, the federal government has developed, as part of its electronic government program, the project Web Standards in Electronic Government - e-PWG, which constitutes “recommendations for best practices grouped in the format of primers with the aim of improving communication and the provision of information and services provided by electronic means by the organs of the Federal Government” (BRASIL, 2020). Although it is performed at the federal level, it serves as a reference for the other entities of the federation.
The primers are divided by subject: coding, administration, usability, webwriting, and content design and architecture, and aim to: a) establish quality standards for use, design, information architecture, and navigation; b) establish a flow of creation, development, and maintenance in the management of government sites; c) consolidate accessibility; and d) create artifacts according to the standards established by the W3C.

For the research presented here, the primer on usability is of interest, as it refers to the way in which the information and services provided by the Public Administration are developed and maintained in accordance with the expectations and needs of the citizen, and for the citizen to use them fully and satisfactorily.

As argued in topic 2.3 of this study, transparency goes beyond the mere provision of information and presupposes the idea of communication, which includes the understanding of the message by its recipient, in which the citizen seeks public information to perform social control.

Thus, it can be said that transparency must respect usability to ensure communication. However, there is certainly a challenge in establishing the form and resources to be used for this purpose.

In this context, the usability primer seeks to propose a guide on the application of usability in public administration sites in a clear and uncomplicated manner. That is, it provides usability recommendations in a practical and applicable way, as well as guidelines on how to perform usability tests.

But what, in fact, is usability? The primer cited defines it as “the study or application of techniques that provide ease of use of a given object, in this case, a site. The usability seeks to ensure that any person can use the site and that it works as expected by the person” (BRASIL, 2010)

Usability has the following objectives: a) ease of use; b) ease of learning; c) ease of task memorization; d) productivity in task execution; e) prevention, aiming at error reduction; and f) individual satisfaction.

In the case of public transparency, the user is the citizen, and the object is the pages, information, and services made available electronically by the Public Administration.

The interface of the pages, thus understood by the medium in which the person intervenes, dialogs, and modifies, must be easy to learn, simple, direct, and friendly, so as to make the citizen inclined to make use of it.

The primer mentions that it is necessary to know, understand, and work with the people who represent the current and potential users of the product, as well as to consider their levels of education, familiarity with the electronic medium, and age groups as preponderant factors.

The usability primer guidelines are: a) context and navigation; b) information load; c) autonomy; d) errors; e) design; f) wording; consistency and familiarity, and each guideline is divided into several recommendations, which can be seen in the table below:
### Table 13 - e-PWG Usability Guidelines and Recommendations

<table>
<thead>
<tr>
<th>Guideline 1 - Context and Navigation</th>
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<tbody>
<tr>
<td>1.1. clear home page</td>
</tr>
<tr>
<td>1.2 Logical and easy site structure</td>
</tr>
<tr>
<td>1.3 Structuring the information in a logical and intuitive way for the citizen</td>
</tr>
<tr>
<td>1.4. The most important content before the fold (^{34})</td>
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<tr>
<td>1.5. visual identity elements always located in the same place</td>
</tr>
<tr>
<td>1.6. The search tool present on every page</td>
</tr>
<tr>
<td>1.7. the most used visible pages, sections or services</td>
</tr>
<tr>
<td>1.8. Do not use transition pages</td>
</tr>
<tr>
<td>1.9 Documentation, tutorial and help</td>
</tr>
<tr>
<td>1.10. Special file formats and downloading</td>
</tr>
<tr>
<td>1.11. Do not use pop-up windows or open links in new windows</td>
</tr>
<tr>
<td>1.12. Simple search and then, advanced search</td>
</tr>
<tr>
<td>1.13. Search box result</td>
</tr>
<tr>
<td>1.14. Friendly forms</td>
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### Guideline 2 - Information Load

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<tbody>
<tr>
<td>2.1 Don’t clutter the home page with too much information</td>
</tr>
<tr>
<td>2.2 Eliminate unnecessary elements from the page</td>
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<tr>
<td>2.3 Eliminate unnecessary steps in service and form filling</td>
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<tr>
<td>2.4 For longer texts, offer the option to download the document</td>
</tr>
<tr>
<td>2.5. Only ask for the necessary damage</td>
</tr>
<tr>
<td>2.6 Do not ask the citizen to convert data, measures or values</td>
</tr>
<tr>
<td>2.7 Citizen should not need to memorize data</td>
</tr>
<tr>
<td>2.8. Use vertical or horizontal screen scrolling only if necessary</td>
</tr>
<tr>
<td>2.9. Common sense in the number of available filters and options</td>
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### Guideline 3 - Autonomy

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<tbody>
<tr>
<td>3.1 Keep the back button function of the navigator</td>
</tr>
<tr>
<td>3.2 Do not create pages that open and run full screen</td>
</tr>
<tr>
<td>3.3 Allow the citizen to bookmark (favorite) any page of his interest</td>
</tr>
<tr>
<td>3.4 Do not use expressions such as &quot;compatible with&quot; &quot;best seen in resolution&quot;.</td>
</tr>
<tr>
<td>3.5 Enabling the citizen to interrupt or cancel the processing or transaction</td>
</tr>
<tr>
<td>3.6 It is the citizen's control over navigation</td>
</tr>
<tr>
<td>3.7 Do not use self-installing plugins</td>
</tr>
<tr>
<td>3.8 Allow copying of document excerpts</td>
</tr>
<tr>
<td>3.9 When possible, offer page customization</td>
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</tbody>
</table>

\(^{34}\) The “fold” is a term that originated in journalism. It is the act of folding the newspaper in half to make it easier to read. In the case of web pages, the fold is the first scroll. On all pages, the most important content and navigation should be above the fold (BRASIL, 2010)
4 - Errors

| 4.1. Portal actions must be reversible |
| 4.2. Warn of any unavailability (e.g.: changing servers) |
| 4.3 In forms, show the desired format |
| 4.4 In forms, only leave in the field the desired number of characters |
| 4.5. Error messages should be brief and explanatory |
| 4.6 Don’t clear the entire form because of an error |

**Guideline 5 - Design**

| 5.1. use a standard page design |
| 5.2 Grouping and hierarchizing, in a clear way, the information areas |
| 5.3 Use blank space to separate different content or subjects |
| 5.3. use neutral backgrounds that do not compromise the purpose of the site |
| 5.4 Avoid the use of scroll boxes or pull-down menus in main and persistent navigation |
| 5.5. Design must be at the service of information |
| 5.6 Site design elements should not work to benefit a particular aesthetic |
| 5.7. Use animation with common sense |
| 5.8 Content that is pleasant to read |
| 5.9 Left-aligned text |
| 5.10. Consistent color and font scheme |
| 5.11. Respect the connection speed of the target audience |
| 5.12. Consciously use plug-ins and multimedia |

**Guideline 6 - Drafting**

| 6.1. use clear and familiar language |
| 6.2 The objective text |
| 6.3 Dividing the text into topics |
| 6.4. informative and visually prominent headlines |
| 6.5. explanatory and unique page title |
| 6.6. use simple and clear terms as menu labels |
| 6.7 Correct grammar |
| 6.8 Use Emphasis and Bold |
| 6.9. avoid the use of capital letters |

**Guideline 7 - Consistency and Familiarity**

| 7.1. use conventions |
| 7.2 Use date format and units of measure in accordance with the standard normally used in the institution or country |
| 7.3 Planning the structure of the site/portal according to the context of the tasks performed by citizens |
| 7.4 Facilitating site navigation |
| 7.5. refer to forms the contact links |

Source: Adapted by the author based on the e-PWG Usability Recommendations and Guidelines (BRASIL, 2010).
In this context, the modeling of the digital and open government portal, including the way transparency will be manifested, must consider several legal and technical guidelines.

In addition, operational guidelines must be checked, which also concern the content and the way in which the information is transmitted or laid out on the portal.

The guidelines for public transparency are related and converge, because, after all, they have a common point: producing communication. The operational part, however, is of special concern in this field.

As for the content, the present research brings its contribution, certainly not exhaustive, regarding the information requirements in the areas of health and education, which are agglutinated in appendix E, which contains 33 items to be observed in the health area and 37 in education.

Bitencourt (2019, p. 160) mentions, regarding health, transparency regarding “procedures performed by the municipality, the medications available in the municipality’s pharmacies, the queue of procedures by the Unified Health System, besides so much other information that makes citizens' lives easier.”

As to the way the information is available, the situation found in the portals of the municipalities associated with AMESC in the previous topic was reported, in which the absence of information necessary for social control, the lack of organization or thematic systematization of what is available, the non-use of technological resources to facilitate the understanding and/or reduce the barriers of technical language, and filters or options that are not updated or unavailable were verified.

Along these lines, Bitencourt (2019, p. 160) corroborates the finding and makes a general criticism of the Access to Information Law, to the extent that there are no provisions in its text that address the way to execute the information relating to the minimum core of active transparency, leaving “excessive freedom of each federative entity about how such information may be constructed and organized”, so that each public entity uses its own portal model and choose the way it will organize the content, which, in practice, makes it difficult for the citizen to understand the organization of information, often arranged without any criteria or methodology35.

In addition, Bitencourt (2019, p. 162) brings other findings regarding the current state of municipal digital transparency portals:

a) No distinction between mandatory and non-mandatory percentages;
b) inexistence of differentiation between targeted percentages of expenditures to public agencies and private institutions;
c) lack of explanation of the criteria by which certain expenditure forecasts are

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35 According to Bitencourt (2019, p. 160), “there is no uniformity in computer systems or even information programs of easy access, such as versions of the simplified portals to download through apps. As each Municipality, State and even Union can choose the systems and ways to make the information available, the difficulties already start by the form of exposition of its contents and are followed by the different commands and ways to organize the information”.

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in one or another heading;
d) lack of explanation of the effective destination of the resource, since there is only reference to the destination institution;
e) no option for visualization without technical language;
f) lack of standardization as an obstacle to the understanding of the administrators.

She (BITENCOURT, 2019, p. 163) also contributes some operational guidelines that collaborate with the improvement of digital transparency, from the idea of communication, and can be applied to any object or content:

a) there are options for the user to have access to the data in a translated form for the layman;
b) adoption of a system that makes information available within the same standard;
c) the query can find the raw data;
d) the portal explains the criteria for the classification of items;
e) specifications are required within the headings, not merely general indications of values and percentages spent on health and education;
f) oblige the portals to display a comparative table of what is foreseen in the budget and what has been spent;
g) oblige individuals to detail the destination of the resources received, in the same portal of the Municipality;
h) discriminate how much was performed in public agencies and how much was sent to private entities.

The search for transparency is an ongoing task. There is certainly no ready formula for a digital and open government model that meets transparency and serves as a platform for social control of public policies.

In this search, Bitencourt (2019, p. 166) collates guiding principles for the development of digital portals to prioritize and promote public transparency, which are:

1) principle of maximum disclosure, it should cover as much information and bodies as possible and should also reach as many individuals as possible;
2) of the obligation to publish, that is, your conduct must be proactive in making all information available;
3) promotion of Open Government, with the creation of more transparent governmental processes and procedures;
4) limitation of exceptions, going in the opposite direction of the culture of secrecy;
5) simplified procedures, that is, simple and easy to understand for the common citizen who seeks access and must be processed quickly and in plain language;
6) primacy for free of charge, because people should not be prevented from making requests for information because of the cost.

Therefore, based on the new technologies, it is necessary to reformulate transparency based on the idea of communication in the context of a digital and open government and, consequently, to contribute to the improvement of the information made available in an active way by the public power and, thus, to make social control of public policies materially possible.

In this sense, this research sought to contribute with the assumptions for this reformulation, which can be summarized as follows, which should be observed by the public transparency digital portals:

a) To allow the control, in real time, of information and data related to public revenues and expenses;

Although the legislation already provides for such a condition, it is important to emphasize that it is not enough just to make the numbers available, but that transparency needs to communicate the citizens about the progress of the public accounts.

Thus, in addition to the links to access the corresponding supporting documents, explanations in simplified language about the real situation of the budget execution must be accompanied, using graphs, tables to facilitate understanding by society.

b) To make available to the citizen information from all the Federation Entity’s Powers and agencies in a consolidated manner;

In the same way, the consolidated data must be accompanied by links that show the consolidations made, in addition to the adoption of an accessible language for society, starting, of course, from a middle-man standard, not to border on extremism, making use of all technological and didactic resources to expose the information.

c) Have mechanisms that enable the integrity, reliability, and availability of the registered and exported information.

The importance of data protection and security is fundamental to preserve the intimacy of users, as well as to avoid invasions or even damage to public data.

d) Comply with the requirements established by the e-PING standards;
Priority must be given to the opening of public data, public interoperability and its dimensions, understood as the integration, by digital means and in a public way, of technological solutions developed by society within the scope of social control;

The e-Ping standards are not currently provided for in legislation that is mandatory for all entities of the Federation. However, digital portals should use these standards to harmonize with the requirements of transparency and openness of public data, and thus enable social control.

e) Meet the E-MAG digital government accessibility standard;
f) Observe the e-PWG usability guidelines and recommendations;

These guidelines contribute to the realization of transparency, in the perspective of communication, since they seek to ensure that the digital portals ensure the understanding of the information, make navigation intuitive for users on these websites, organize the information, and encourage the adoption of plain language.
3. CONCLUSION

The present research involved the survey of information requirements for the proposed re-
formulation of active municipal transparency, in the context of digital and open government, based
on the informational needs for performing social control of public policies in the areas of health and
education.

In the first chapter, the necessary theoretical contribution was made to understand the demo-
cratic paradigm for performing social control of high-intensity public policies.

The hegemonic model of representative democracy stemming from the adoption of the Liberal
State and the establishment of bourgeois society during the 18th and 19th centuries has been wearing
out for some time, and its legitimacy has begun to be questioned in the way representation has been
performed.

It was seen that the roots of this crisis are multifactorial and include the constant mismatch
between campaign promises and the reality after the election, corruption in the political arena, the
impovery of part of the population, generating even more inequality, the complexity of social
problems and the lack of technical expertise to address them, lack of legitimacy in the discourse re-
garding the forms of political action, and the influence of the media.

In the democratic scenario, this crisis has been verified by the political apathy of the voters and
the feeling of non-representativeness of the citizens in relation to the political class, which has resulted
in several social and street movements, on or through the internet, such as the Indignados movement
that has spread around the world with the common clamor for a real democracy.

At the same time, non-hegemonic models have resumed the discussion about the way people
interact and communicate with the State in the democratic game. Among them, participatory demo-
cracy emerges as a path towards a real approximation with society and a way to give more intensity
to the democratic system, not as a substitute for the representative model, but as a necessary comple-
ment.

The Brazilian Magna Carta, promulgated in 1988, established citizenship as the foundation of
the Republic, with participation and control playing essential roles in the proper functioning of the
State, democracy, and public administration, based on the concept of citizenship and participatory
democracy.

The Brazilian Public Administration has historically gone through some transformations in
its organizational model, which began with the patrimonialism model, went through the bureaucratic
model, and finally, culminated in the managerial model.

The managerial model of Public Administration, also known as New Public Management
(NPM), adopted after the 1995 Master Plan for Reform of the State Apparatus (PDRAE), inspired by
Osborne and Gaebler’s contributions, went through three distinct phases: pure managerialism, consu-
merism, and, finally, public service orientation (PSO).
It was noted that this last phase has as its main characteristics the focus on the citizen, as the subject of rights and duties, as well as bringing the concept of accountability and transparency to the public management scenario.

From this point on, we began to study how the Public Administration exploits this notion of accountability based on the institutional controls defined in CF/88, focusing on jurisdictional, administrative, and parliamentary control, internally or externally, which exercise preventive, concomitant, or repressive control over the Public Administration.

In addition, it was pointed out how social control is inserted in the administrative and social structure, and its main characteristics and forms of manifestation were analyzed.

In this scenario, it was emphasized that participatory democracy presents several facets, and, in the research performed, the one of social control was of interest, thus conceptualized by the real possibility of the citizen, based on transparency and access to information, to cause the substitution of one decision for another.

Social control is closely linked to public policies, because through its exercise, at all stages of the cycle, from formulation to evaluation, greater legitimacy and efficiency is conferred to the results of the objectives, goals, and guidelines set by the plans, programs, and actions within the set of public policies.

Public policies are the way in which society’s problems are solved, and social control is the way in which the citizen interacts, inspects, and questions the solutions defined for these problems.

Starting in the second chapter, the way in which technologies have impacted democracy, government, and public transparency is presented.

The way the world and people interact and communicate is certainly different from it was years ago and will certainly undergo new changes. The advent of information and communication technologies along with the invention of the internet has brought new possibilities and with it, new challenges to be faced.

The production of data is increasing significantly with each passing year, and we are becoming more and more connected, at least at the technological and network level.

The research conducted demonstrated the historical context of the advent of the internet and technologies and related its effects on the so-called digital democracy, analyzing it from the beginning of its first writings to the present day.

In addition, it is related how the technological increase has been absorbed by the Brazilian Public Administration in a broad sense, in what was called, at first, electronic government, and is now more correctly called digital government.

Based on this, the concept of public transparency dealt with in this work is discussed, based on the idea of communication, that is, being transparent is much more than making information public, it is making this information understood by the addressee, in this case, the citizen or society.
Thus, public transparency, externalized on the web, especially using digital portals, needs to go beyond the mere availability of information and be concerned with how this information reaches the public, in an organized manner, with simple and standardized language.

Considering this theoretical framework, the third chapter begins to analyze how social control is inserted in the context of new technologies and how transparency from the idea of communication in the context of a digital and open government can contribute to the improvement of the information made available in an active way by the government and, thus, make social control of public policies materially possible.

To this end, the information requirements for the development of municipal transparency necessary for the social control of public policies in the areas of health and education were surveyed.

The information requirements were raised from the joint analysis of both the legislation, especially the LAI and the LRF and their regulations, and, in an empirical way, obtained by the operational audit processes in the areas of health and education performed at the municipal level by the Santa Catarina State Audit Court - TCE/SC and were summarized in the table in “Appendix E” of the research in question.

Since this is an empirical-based study, we did not attempt to exhaust all the information needed for social control of public policies in the health areas, but rather to bring an initial informative framework, based on practice and not just on theory, for the actual improvement of transparency and, therefore, the concrete possibility of social control, not losing sight of the fact that transparency is a continuous activity that is constantly being improved.

This empirical survey, therefore, should not be seen as something exhaustive or watertight, but rather as a guideline, both for the development of digital transparency portals and for social controllers.

Therefore, based on the survey, we initially proceeded with a comparative analysis of the legislation applicable to public transparency to verify the existence or not of a requirement regarding the active transparency of this information.

Subsequently, the official digital portals maintained by the municipalities associated with the Association of Municipalities of the Extreme South of Santa Catarina - AMESC were evaluated to verify and compare whether the information gathered was available on their respective sites.

It was shown that most of the information collected and necessary for social control was not present in the digital portals of the municipalities, nor was the active availability of these documents required.

In addition, of the information that was required, little was organized by public policy categories or areas to facilitate citizen understanding.

There was no access to all the necessary documents; moreover, when there were, some were outdated or were presented in an extremely technical way, and thus could not be considered transparent, for lacking the attribute of comprehensibility.
From the research performed, some conclusive notes were made to confirm the central hypothesis of this research, that the digital portals maintained by the municipalities of AMESC do not comply with all the information requirements raised, so that they do not produce, for the most part, true transparency, thus understood by the possibility of generating communication between administrators and those administered. And this is because:

a) Municipalities tend to comply, in general, only with the access to information as to the list of information provided in the legislation that disciplines its active availability, but this does not mean that they produce transparency based on the idea of communication.

It was verified that the portals do not systematize this information in a way that the access is intuitive for users, which could be solved, for example, with a better thematic organization; they do not use a simplified language when dealing with information of a more technically robust order, such as those related to accounting or the public budget, using, for example, the generation of graphs, tables, or even the explanation of the most relevant points for society; they do not detail or allow the detailing of the information for the level of access of documents and records that support the numbers and results presented.

Thus, it can be said that the digital portals referring to the analyzed municipalities, despite fulfilling, for the most part, part of the information requirements raised, do not fully produce the expected transparency, to materially enable the exercise of social control of public policies.

b) The information contained in the legislation regarding the availability of its access in an active way does not satisfy the information needs of the exercise of control over public policies, considering the empirical analysis of the activities performed by the Santa Catarina State Court of Auditors in the areas of health and education and, therefore, does not materially enable social control.

As stated, the empirical analysis conducted during this research, with the survey of the information required by the operational audits conducted by the Santa Catarina State Court of Audit in the areas of health and education at the municipal level, due to several factors that would hinder it, did not intend to establish a standard of information required for all the digital portals in the country to be considered transparent.

The intention of the research was simply to demonstrate, in an empirical way, that only the information required by the applicable legislation, in an active way, even if the issue of not producing transparency due to the absence of communication was left aside, does not materially enable social control of public policies.

The survey of the information requirements based on the experience of the Santa Catarina Court of Auditors was much more in the guiding or exemplifying sense for the social control of public policies in the areas of health and education than in the deterministic or taxing sense.

If the Court of Auditors under analysis were to change to another State, or if the Union Court
were taken as a parameter, this list would certainly change to a lesser or greater extent, because each audit process, even if they are in the same area of public policy, has its own issues, methodologies and demands.

It is worth repeating that there is no control without the necessary information and documents for the correct verification of what is being controlled. Thus, the research contributed, at this point, to highlight the fact that the legislation should be broader as to the information to be promptly made available by the municipalities and to guide possible paths or information requirements for this expansion.

c) Municipalities tend to actively make available on their digital portals, in their great majority, only the set of information required by law, and, as seen, this list does not meet the material conditions for the control of public policies.

As said, from the empirical study performed on the operational audit processes in the areas of health and education, at the municipal level, conducted by the TCE-SC, which aimed only to survey the information requirements with the purpose of guiding the realization of social control of public policies in these areas.

Considering these information requirements, of an orientative nature, it was noticed that the municipalities, in general, do not make this information available on their digital portals, which, many times, are only available for the internal use of the Public Administration, but, if they were made public, they would contribute to the exercise of social control.

It is thus clear that there is a need to rethink both the content and the way in which municipal public transparency is structured, in the digital realm, or cybertransparency, based on the concept of digital and open government, so that we can effectively leave the culture of obscurantism of public information, and, therefore, make possible the social control of public policies.

d) The digital portals maintained by the analyzed municipalities were developed from a programming pattern based on outdated electronic governance, not focused on the citizen and on the openness of public data, thus making it impossible to make the information available in a way that produces communication and makes social control of public policies possible.

From the conception of digital and open government, in which the focus is on the citizen and on the openness of public data, active transparency has the power to break this informational barrier, especially for the activity of social control.

The current situation stems mainly from the fact that the current paradigm for the development of digital portals maintained by municipalities is based on the outdated premise of e-government, in its most embryonic phase, in which active transparency should be restricted only to the minimum set required by the legislation.

In this sense, even if there is no legislative change, in the sense of expanding access to information, in the active mode, this does not mean that the municipalities cannot, voluntarily, expand its content.
Such attitude, in fact, would demonstrate the concern with promoting citizenship and encouraging social control, besides supporting the government with the mark of transparency, provided that, besides the access to information, the conditions to produce communication between rulers and ruled are observed.

As a matter of fact, historically, technologies do not wait for the modification of the legislation to be implanted, but always end up indicating new paths, as it happened with the transportation service by application, for example, which forced the regulation of this new modality that was already in use in many cities in the country.

It is evident, therefore, that a reformulation of public transparency at the municipal level is necessary.

In this sense, this research sought to contribute with the assumptions for this reformulation, which can be summarized as follows, which should be observed by the public transparency digital portals:

a) To allow the control, in real time, of information and data related to public revenues and expenses;

Although the legislation already provides for such a condition, it is important to emphasize that it is not enough just to make the numbers available, but that transparency needs to communicate the citizens about the progress of the public accounts.

Thus, in addition to the links to access the corresponding supporting documents, explanations in simplified language about the real situation of the budget execution must be accompanied, using graphs, tables to facilitate understanding by society.

b) To make available to the citizen information from all the Federation Entity’s Powers and agencies in a consolidated manner;

In the same way, the consolidated data must be accompanied by links that show the consolidations made, in addition to the adoption of an accessible language for society, starting, of course, from a middle-man standard, not to border on extremism, making use of all technological and didactic resources to expose the information.

c) To have mechanisms that enable the integrity, reliability, and availability of the registered and exported information.

The importance of data protection and security is fundamental to preserve the intimacy of users, as well as to avoid invasions or even damage to public data.

d) Comply with the requirements established by the e-PING standards;

Priority must be given to the opening of public data, public interoperability and its dimensions, understood as the integration, by digital means and in a public way, of technological solutions developed by society within the scope of social control;

The e-PING standards are not currently provided for in legislation of mandatory compliance
for all entities of the Federation. However, digital portals should use these standards to harmonize with the requirements of transparency and openness of public data, and thus enable social control.

e) Meet the E-MAG digital government accessibility standard;
f) Observe the e-PWG usability guidelines and recommendations;

These guidelines contribute to the realization of transparency, in the perspective of communication, since they seek to ensure that the digital portals ensure the understanding of the information, make navigation intuitive for users on these websites, organize the information, and encourage the adoption of plain language.

There is, therefore, much to be advanced in terms of public transparency and social control. Technologies can and do contribute greatly to its improvement, based on the notion of digital and open government discussed here.

It is up to us, the citizens, to seek and demand the improvement of the digital portals, because it is through them that public information is revealed and public activity is controlled.
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