

Vol 7 Issue 1 Oct. 2017

ISSN No : 2249-894X

*Monthly Multidisciplinary
Research Journal*

*Review Of
Research Journal*

Chief Editors

Ashok Yakkaldevi
A R Burla College, India

Ecaterina Patrascu
Spiru Haret University, Bucharest

Kamani Perera
Regional Centre For Strategic Studies,
Sri Lanka

Review Of Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

Regional Editor

Dr. T. Manichander

Advisory Board

Kamani Perera Regional Centre For Strategic Studies, Sri Lanka	Delia Serbescu Spiru Haret University, Bucharest, Romania	Mabel Miao Center for China and Globalization, China
Ecaterina Patrascu Spiru Haret University, Bucharest	Xiaohua Yang University of San Francisco, San Francisco	Ruth Wolf University Walla, Israel
Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Karina Xavier Massachusetts Institute of Technology (MIT), USA	Jie Hao University of Sydney, Australia
Anna Maria Constantinovici AL. I. Cuza University, Romania	May Hongmei Gao Kennesaw State University, USA	Pei-Shan Kao Andrea University of Essex, United Kingdom
Romona Mihaila Spiru Haret University, Romania	Marc Fetscherin Rollins College, USA	Loredana Bosca Spiru Haret University, Romania
	Liu Chen Beijing Foreign Studies University, China	Ilie Pintea Spiru Haret University, Romania
Mahdi Moharrampour Islamic Azad University buinzahra Branch, Qazvin, Iran	Nimita Khanna Director, Isara Institute of Management, New Delhi	Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai
Titus Pop PhD, Partium Christian University, Oradea, Romania	Salve R. N. Department of Sociology, Shivaji University, Kolhapur	Sonal Singh Vikram University, Ujjain
J. K. VIJAYAKUMAR King Abdullah University of Science & Technology, Saudi Arabia.	P. Malyadri Government Degree College, Tandur, A.P.	Jayashree Patil-Dake MBA Department of Badruka College Commerce and Arts Post Graduate Centre (BCCAPGC), Kachiguda, Hyderabad
George - Calin SERITAN Postdoctoral Researcher Faculty of Philosophy and Socio-Political Sciences Al. I. Cuza University, Iasi	S. D. Sindkhedkar PSGVP Mandal's Arts, Science and Commerce College, Shahada [M.S.]	Maj. Dr. S. Bakhtiar Choudhary Director, Hyderabad AP India.
REZA KAFIPOUR Shiraz University of Medical Sciences Shiraz, Iran	Anurag Misra DBS College, Kanpur	AR. SARAVANAKUMARALAGAPPA UNIVERSITY, KARAIKUDI, TN
	C. D. Balaji Panimalar Engineering College, Chennai	V.MAHALAKSHMI Dean, Panimalar Engineering College
Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur	Bhavana vivek patole PhD, Elphinstone college mumbai-32	S.KANNAN Ph.D , Annamalai University
Awadhesh Kumar Shirotriya	Awadhesh Kumar Shirotriya Secretary, Play India Play (Trust), Meerut (U.P.)	Kanwar Dinesh Singh Dept.English, Government Postgraduate College , solan
		More.....



AN ANALYSIS OF THE FUNCTION EXPENDITURE ON EDUCATION IN THE MUNICIPALITIES OF THE STATE OF RONDÔNIA, BRAZIL, WITH THE BEST FIRJAN INDEX OF MUNICIPAL DEVELOPMENT

Alexandre de Freitas Carneiro¹,
Josias da Silva Nogueira²,
Sérgio Candido de Gouveia Neto³,
José Arilson de Souza⁴, Elder Gomes Ramos⁵
and Alexandre Leonardo Simões Piacentini⁶

¹Doutorando pelo Programa Doctorado en Administración pela Universidad Nacional de Misiones - UNaM. Mestre em Administração pela Universidade Federal de Rondônia - UNIR. Professor do Departamento Acadêmico de Ciências Contábeis – UNIR/Vilhena.

²Bacharel em Ciências Contábeis Universidade Federal de Rondônia - UNIR/Vilhena.

³Doutor em Educação Matemática. Mestre em Ciências. Professor do Departamento Acadêmico de Ciências Contábeis - UNIR/Vilhena.

⁴Doutor em Desenvolvimento Regional e Meio Ambiente; Mestre em Administração. Professor do Departamento Acadêmico de Ciências Contábeis - UNIR/Vilhena

⁵Doutorando pelo Programa Doctorado en Administración pela Universidad Nacional de Misiones - UNaM Mestre em Administração pela FEAD Professor do Departamento Acadêmico de Ciências Contábeis - UNIR/Vilhena

⁶Doutorando pelo Programa Doctorado en Administración pela Universidad Nacional de Misiones - UNaM Mestre em Administração pela Universidade Federal de Rondônia - UNIR Professor do Departamento Acadêmico de Engenharia Florestal – UNIR/ Rolim de Moura

ABSTRACT :

This study aims at analyzing the applications of resources in the governmental function Education of the municipalities of the state of Rondônia, Brazil, according to the following research questions: which municipalities present more regularity in the expenditures on the governmental function Education?; what is the level of correlation among the expenditures on the Education function in the municipalities, from 2009 to 2014, and the level of tax revenue during the same period?; which municipalities invested the largest and the smallest amounts in the governmental function Education in comparison with the total of the expenditures executed?; what is the subfunction of higher prevalence in the municipalities investigated? The method is statistical with a descriptive approach. The data were collected in the websites of Siope, Sistin, Fimbra and of the Court of Accounts of the state of Rondônia. The 15 best municipalities ranked in the Índice Firjan de Desenvolvimento Municipal [Firjan Index of Municipal Development] were analyzed through descriptive and inferential statistics. The municipality that presented the best correlation was Vilhena and the worst, Teixeiraópolis. The municipality of Chupinguaia was the one that applied the largest amount in Education: 43.71% of its total budget. The study is of interest for public managers, especially for the municipal education councils, and for members of the society interested in the social control of the Basic Education.

KEYWORDS: Education; Function of Public Expenditures; Public spending; Municipalities.

1 INTRODUCTION

This study is included in the topic of public management within the scope of the 28 governmental functions, specifically the Education function, which is an important public service for the formation and development of the citizens. The subfunctions of Education are: Basic Education, Secondary Education, Vocational Education, Higher Education, Early Childhood Education, Youth and Adult Education and Special Education. Social expenditures related to this

function need to be more closely monitored, including through social control, through discussions and through controls via a social participation in the decisions regarding the public policies, expanding the range of action of the municipal education councils (Dias, & Matos, 2012).

Therefore, the research problem of this article is related to the applications of the resources in the government function Education in the municipalities of the state of Rondônia, Brazil, from 2009 to 2014. The study is justified due to the recognized importance of the topic of social control exercised by the citizen regarding the municipal education management. This control is exercised, for example, when society analyzes the patterns of public spending, checking whether they grow as the government revenue increases. In addition, in the last fifty years, in Brazil, there was a decrease in the inequality of the educational opportunities at the Basic Education level and a greater access to it, according to the research conducted by Ribeiro, Ceneviva and Brito (2015). This shift justifies further researches in order to verify the application of the resources in Basic Education, a mandatory subfunction for the municipalities.

This study can also support the evaluation and analyses carried out by the members of municipal education councils, as well as the redefinition of the public policies implemented by public managers in the elaboration of public budgets for the following years. According to Gohn (2011), the educational boards are recent innovations and constitute a real opportunity for a stronger social participation. Therefore, analytical researches in this field can be an important contribution. They can also enhance policy learning (Howlett, Ramesh, & Perl, 2013).

The main objective is to analyze the applications of the resources in the government function of Education in the municipalities of the state of Rondônia, from 2009 to 2014, and, specifically, to answer the following guiding questions: which municipalities present a higher regularity regarding their expenditures on Education?; what is the level of correlation among the expenditures incurred in the Education function, from 2009 to 2014, and the revenues obtained in the same period by the municipalities?; which municipalities destined more and less resources to the expenditures on the Education function, in relation to the total of expenditures executed?; and what is the most prevalent subfunction in the investigated municipalities? Besides this introduction, this article is divided into four other sections. In sections 2, 3 and 4, the theoretical basis covers, respectively, management and public policies in Education, public budgeting and previous studies; section 5 presents the research method; section 6, the description of the results; and, finally, section 7 presents a summary, analyses and conclusions.

2 PUBLIC MANAGEMENT AND PUBLIC EDUCATION POLICIES

The first article of the Lei de Responsabilidade Fiscal (LRF) [Fiscal Responsibility Law] states that such statute "establishes public finance rules aimed at the responsibility in fiscal management, under the protection of the chapter II of the title VI of the Constitution". The first paragraph 1 of such law presupposes that a management with fiscal responsibility must be planned and transparent, preventing the risks of the misappropriation of funds that lead to an unbalanced public fiscal balance, through obeying the targets established to the revenues and to the expenditures and complying with the limit conditions. The pillars of this statute are the planning, the control, the transparency and the accountability.

According to Oliveira (2012), the control of public policies is important in order to avoid excesses and clientelism on behalf of the governments. According to this author, if on one hand private companies adapt themselves to compete in such a crowded market with more and more demanding consumers, on the other hand, governments have the function of providing services to the population. The rules and controls are important, but they should be simple, easy to understand and less bureaucratic so that the efficiency and quality of the public services become priorities (Oliveira, 2012).

This regulatory landmark, the FRL, which aims at avoiding deviations in the use of the public resources, needs to be revised so that its focus is not only the formalities, which are excessive and hinder the administrative efficiency. Nowadays, the population demands a higher efficiency of the State when offering a good and efficient public service, while complying with the legislation (Oliveira, 2012).

There are two basic types of public policies: the distributive (Health, Education) and those related to

management, planning, control, organization, budget, finance, accounting, personnel, technology, logistics and legal aspects. Public management policies also include citizen services policies, such as the management for results (Oliveira, 2012). According to Oliveira (2012, p. 61), “public management encompasses all specific government policies, that is the reason why it is important to have a good and efficient public service.”

Public management policies enable the governments to have better ways of managing public resources and assessing their applications and results. It is not enough to have management policies compiled in a text; it is important to deploy and execute what was planned –and this depends on the capacity of each government (Oliveira, 2012).

The debate on public management is a subject that has not aroused considerable interest on behalf of the population in general, that tends to give more importance to policies such as Health and Education, whose impact on society’s everyday life is more evident (Oliveira, 2012). Oliveira (2012) claims that it is important that public interests be discussed publicly with the intention of serving citizens and companies with efficiency, quality and transparency. A very serious problem in Brazil is the lack of medium and long-term projects and investments, since politicians always think about of their own mandate and the strategies necessary to remain in power. Besides that, there is also the fact that society is short-sighted and wants to see quick results (Oliveira, 2012).

Secchi (2013) defines “public policies” as the ways proposed to face a public problem. In Brazil, it is not very clear to the people what public policies are. According to Secchi (2013), the “public policy” is related to the decisions and actions taken considering certain guidelines. There are debates concerning whose responsibility of establishing public policies it is. There are two approaches: the statist or state-centric, which claims that the State should be the only responsible for the establishment of public policies; and the multicentric or polycentric approach, which considers that not only the State, but also non-governmental organizations, private organizations, multilateral organizations and networks of public policy could be protagonists in the establishment of public policies (Secchi, 2013).

And what does it mean to implement public policies? According to Secchi (2013), when governments are silent about public problems, there is a lack of public policies aimed at solving such problems. For the resolution of a public problem, it is important to be aware of the economic attributions of the State. Giacomoni (2012) describes three economic functions of the State: a) allocative function, which aims at promoting adjustments to the allocation of the resources: the public goods offered are produced both by public agencies and private companies; b) distributive function, which aims at adjusting the distribution of the income, which is possible through the public budget; and c) stabilizing function, which is the most modern of the three functions, and, from the 1930s onwards, gained importance in combating the effects of the economic recession. The stabilization policy has the public budget as an important instrument.

Regarding the public policies, given the context dealt with in this study, it is important to inquire what quality in public education is. According to Chirinéa and Brandão (2015), the State understands that it is related only to knowledge and skills that can be measured through tests, as a quality benchmark, such as the Índice de Desenvolvimento da Educação Básica (IDEB) [Basic Education Development Index]. For such authors, this indicator does not take into account the peculiarities of each region, municipality and school, considering their contexts and specificities. It is therefore necessary to combine the external evaluations with the school’s self-assessment. This self-assessment may have as a parameter, among others, the scope of the present research. Table 1 presents the main Brazilian standards and rules directed to the public educational policies.

Table 1 – National Policy on Education.

Legislation	Content
Federal Constitution (1988)	Articles 205 to 214 A statute will establish the National Education Plan, with a multi-year duration, aiming at the articulation and development of Education at its various levels and at the integration of the actions of the public power that lead to: I - eradication of illiteracy; II – universalization of school attendance; III – improvement of the quality of teaching; IV – formation for the world of work; V - humanistic, scientific and technological promotion of the country.
<i>Lei de Diretrizes e Bases (LDB)</i> [National Law of Directives and Bases for Education]	Law number 9,394 (December 20 th 1996). Article 9 The Federal government will: I - elaborate the National Plan for Education, in collaboration with the states, the Federal District and the municipalities; Article 10 The states will: I - organize, maintain and develop the official bodies and institutions of their educational systems; <i>Sole paragraph.</i> To The Federal District will be valid the same competences of the states and of the municipalities. Article 11 The municipalities will be responsible for: I - organizing, maintaining and developing the official bodies and institutions of their educational systems, integrating them into the educational policies and plans of the Federal level and of the States; <i>Sole paragraph.</i> Municipalities may also choose to be integrated into the education system of the states or to form a single basic education system.
<i>Plano Nacional da Educação (PNE)</i> [National Plan for Education]	PNE (Law Number 10,172), approved on January 9 th 2001, carries out a diagnosis of the reality of the educational system in Brazil, in the different levels and modalities of teaching, and establishes some guidelines and goals to be achieved in a period of ten years, being a more permanent public policy. The <i>Plano de Desenvolvimento da Educação (PDE)</i> [Education Development Plan], presented to the country in April 2007 as a federal project, aims at promoting greater investments in Basic Education, Vocational Education and Higher Education. The plan has more than 40 actions that focus on varied aspects of Education in its various levels and modalities. It is a government plan that aims at implementing a public policy, the PNE.

Source: Research data (2016), emphasis added.

Howlett, Ramesh and Perl (2013, p. 120) discuss the concept of “policy learning” in the evaluation of public policies, which is a result of a “problem-solving attempt cycle”, of the “continuous analysis” and of “experimenting with solutions” (p.5). In the elaboration of public policies, the consequences of adjusting policy goals or techniques to new information should be evaluated, as the consequences of past policies on the basis of “attempt and error”, aiming at implementing and achieving the established objectives (Howlett et al. 2013). This means revising the educational policies at each financial cycle or financial year, after the actions that were implemented.

3 BUDGET AND PUBLIC EXPENDITURES ON EDUCATION

The Ordinance number 42/1999 updates the list of the expenditures for the functions related to the item I of the paragraph 1 of the article 2 and of the paragraph 2 of the article 8, both of the Law number 4,320, from March 17th 1964. This ordinance establishes the concepts of “function”, “subfunction”, “program”, “project”, “activity”, “special operations”, among others. Its article 1 states in paragraph 1: “The function is the higher level of aggregation of the various areas of expenditure that are related to the public sector”. In paragraph 3, the following definition of subfunction is presented: “it represents a partition of the function, aiming at aggregating a certain subset of public sector expenditure”. According to the paragraph 4, “subfunctions may be combined with functions other than those to which they are connected, in the form of the annex to this ordinance.”

The Ordinance number 42/1999 divided public expenditures into 28 functions: administrative, Health, Education, public safety, sanitation, social assistance, agriculture, work, energy, etc. The Education function is divided into the subfunctions shown in table 2.

Table 2 – Subfunctions of the function Education.

FUNCTION	SUBFUNCTION
12 Education	361-Basic Education
	362-Secondary Education
	363-Professional Education
	364- Higher Education
	365-Childhood Education
	366-Youth and Adult Education
	367- Special Education

Source: Ordinance 42/99, Brazilian Ministry of Planning, Budget, and Management.

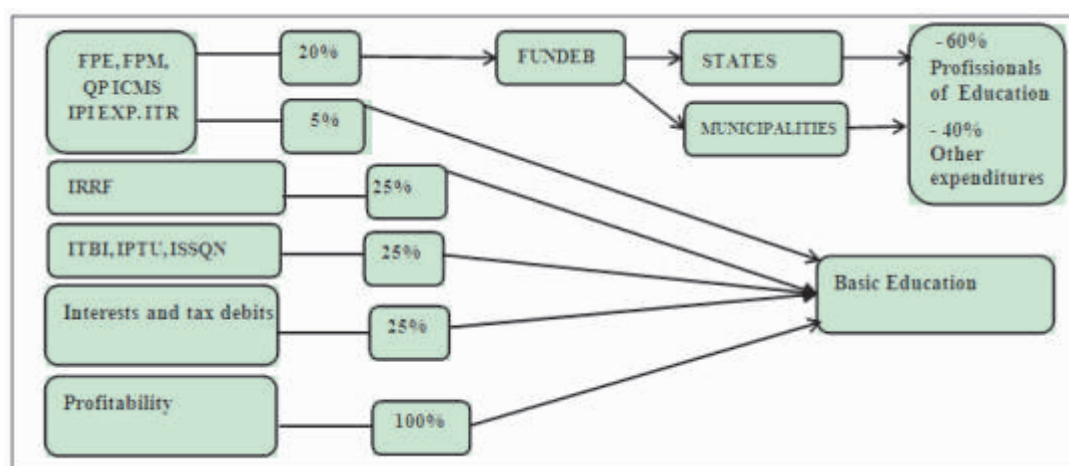
These functions and subfunctions are included in one of the LRF reports and in the annual public budget. Crepaldi and Crepaldi (2015) define the budget as a tool for planning the actions of the Executive, foreseen and authorized by the Legislature branch for a certain period. According to these authors, the public budget comprises all revenues and established and foreseen expenditures that the government is entitled to execute within the same financial year. Public expenditures are the monetary applications or the recognition of debts by the competent public agent, aiming at the public interest, authorized by the Legislature branch (Crepaldi, & Crepaldi, 2015). One of the budget classifications the expenditures is by economic categories, which are divided into current expenditures and capital expenditures. The first are related to costing and second, to investments.

According to Baleeiro and Machado Segundo (2015), regarding the public expenditures, the government should be inspired by the principle of the maximum social advantage and aim at “obtaining the maximum of efficiency and social convenience with the minimum of pecuniary sacrifice correspondent” (p. 88), when, for example, deciding to build or to expand schools.

These costs related to Education and investments are demonstrated in the budget execution report, according to the article 165 of the Federal Constitution, as well as in the balance sheets of the public power, as established in the article 72 of the LDB (Crepaldi, & Crepaldi, 2015). They are also shown in reports of the LRF. The Constitution, in its article 212, establishes that:

To the maintenance and development of Education, the Federal government will apply, annually, not less than eighteen per cent and the States, the Federal District and Municipalities, twenty five per cent of tax revenue, including the revenues originated from transfers.

Figure 1 shows how the sources of resources are distributed for the costing of the public services in Basic Education.

Figure 1 - Origins and applications of the resources in Education.

Source: Andrade, 2013, p. 220.

Captions: FPE - Fundos de Participação dos Estados [Funds Allocated to the States]; FPM – Fundos do Distrito Federal e dos Municípios [Funds Allocated to the Federal District and to the Municipalities]; QP ICMS – Imposto sobre Operações relativas à Circulação de Mercadorias [Tax on the Circulation of Goods and Transportation and Communication Services]; IPI Exp. Imposto sobre Produtos Industrializados - Exportação [Tax on Industrial Products - Exportation]; EXP. ITR - Imposto sobre a Territorialidade Rural [Tax on Rural Properties]; IRRF - Imposto de Renda Retido na Fonte [Withholding tax]; ITBI - Imposto de Transmissão de Bens Imóveis [Tax on the Transfer of Properties]; IPTU – Imposto Predial e Territorial [Municipal Property tax]; ISSQN - Imposto sobre serviços de qualquer natureza [Tax on any kind of services].

If there is no evidence of the application of the 25% of the public resources in Education, the State may intervene in the municipalities (CF/88, article 34, subsection VII), as well as there may be the rejection of the financial reports by the Court of Accounts (Andrade, 2013). It is important that the population pay attention to the taxes paid in order to obtain public services and assess their quality. The statements that determine the expenditures on the maintenance and the development of Education are standardized by Court of Accounts. According to Cury (2011, p. 125), “Fundeb [Fund for the Maintenance and Development of Basic Education and Enhancement of the Professionals of Education] has become a new policy necessary to correct the flaws of Fundef [Fund for the Maintenance and Development of Basic Education and Enhancement of Teaching] and provide for the opening of new forms of a federative cooperation regime”.

Tests and analyses carried out by Araújo (2016, p.88) confirm that the first five years of the existence of Fundeb, which replaced Fundef, “present a tendency to improve the indicators of territorial inequality and the data indicate that the responsibility for this improvement, at least in a more meaningful way, is related to federal redistributive policies”, that is, the shift of such policy for the Education funds. This implies the reduction of territorial inequalities in the educational area, once in Brazil there are several regional inequalities. Nonetheless, the most important improvement in the way of thinking about educational financing is the CAQi [Cost Student-Initial Quality], which was transformed into an expert report by the Conselho Nacional de Educação [National Council of Education] of the Câmara de Educação Básica [Chamber of Basic Education] (CNE/CEB number 08/2010), establishing the rules for the application of subsection IX of article 4 of the LDB (Araújo, 2016).

Specifically, what can be considered expenditures on the Maintenance and Development of Education (MDE), as well as what cannot be, is determined in articles 70 and 71 of the LDB, as shown in table 3.3.

Table 3 - Expenditures considered and not considered for public Education.

Article 70. Expenditures will be considered as of maintenance and development of Education those incurred in the pursuit of the basic objectives of educational institutions at all levels, including those aimed at the	Article 71. Education maintenance and development expenditures will not be considered those related to:
<p>I - remuneration and training of teaching staff and other professionals;</p> <p>II - acquisition, maintenance and construction of facilities and equipment necessary for teaching;</p> <p>III - use and maintenance of goods and services connected to Education;</p> <p>IV - statistical surveys, studies and research aiming at the improvement of the quality and the expansion of Education;</p> <p>V -maintenance of activities necessary for the functioning of the educational systems;</p> <p>VI - granting scholarships to students from public and private schools;</p> <p>VII - amortization and costing of credit operations to comply with this article;</p> <p>VIII - acquisition of school didactic material and maintenance of school transportation programs.</p>	<p>I - researches, when not linked to educational institutions, or when carried out outside educational systems, and which do not aim, primarily, to improve its quality or its expansion;</p> <p>II -subsidies to public or private institutions of assistance, support or culture;</p> <p>III - formation of special boards, for public administration, whether military or civil, including diplomatic ones;</p> <p>IV - supplementary programs related to nutrition, medicine or dentistry, pharmaceutical and psychological care, and other forms of social assistance;</p> <p>V - infrastructure works, even if carried out to directly or indirectly benefit the school system;</p> <p>VI - teaching staff and other professionals, when in deviation from their function or in an activity outside the maintenance and development of Education.</p>

Source: Law number 9.394/96 (LDB).

4 RECENT STUDIES

Some of the recent studies on the evaluation or analysis of public Education, mainly in Brazil, are summarized in table 4, alongside with their objectives and main findings.

Table 4 - Recent studies on the analysis of the public Education.

Authors	Objectives/research problem	Main findings
Scarpin <i>et al</i> (2012)	To analyze the efficiency of the public resources destined to Education in the municipalities of the state of Santa Catarina.	12% of the municipalities in Santa Catarina are efficient in their expenditures on Education, and the smaller municipalities tend to be the most efficient ones.
Borges and Pereira (2014)	To verify the influence of the fiscal education on the efficiency of management resources by the municipal public administration.	The following main hypothesis was rejected: the level of fiscal education of the citizen in a position of social control influences the efficiency of the public management and increases the level of transparency.
Sousa, W. D. <i>et al</i> (2015)	Evaluate the expenditures on Basic Education, analyzing the efficiency and effectiveness in the use of public resources destined to the municipalities of the state of Espírito Santo.	16 municipalities reached the maximum efficiency in the allocation of resources. There is evidence of a statistically significant relationship among the Human Development Index, the efficiency in the application of public resources and the achievement of the <i>IDEB</i> [Basic Education Development Index] goal.
Silva, A. B. <i>et al</i> (2015)	Identify the municipalities that presented the best and the worst levels of technical efficiency in the application of the public resources in Education.	5% of municipalities are technically efficient and 16% are really inefficient. There was a low level of efficiency. It was suggested a shift in the public policies and the selection of strategies to achieve the previously established goals.
Silva, M. C. <i>et al</i> (2015a)	To evaluate if the municipalities of São Paulo (SP), Rio de Janeiro (RJ) and Belo Horizonte (BH) were efficient when managing the resources destined to the Basic Education in order to implement changes or if those cities remained in social inertia during the years of the dissemination of the <i>IDEB</i> .	RJ and BH were efficient and in SP there was no effectiveness in the policy of Basic Education (social inertia) in the year of 2011.
Silva, M. C. <i>et al</i> (2015b)	To evaluate if the functional public policies implemented in the city of São Paulo, from 2002 to 2012, presented social effectiveness.	Considering the Education function, there was social effectiveness in 2005.
Theiss, V. <i>et al</i> (2015)	To analyze the allocation of economic resources and positive actions in the Education of Central, South American and Mexican countries.	Brazil is among the countries that have achieved a maximum efficiency. Cuba presented the lowest efficiency. There is a difference in the efficiencies in the allocation of economic resources in relation to the increase of positive externalities in the Education of the countries analyzed.
Santos, Gomes and Ervilha (2015)	To evaluate the performance of the government in the first phase of the <i>Plano Mineiro de Desenvolvimento Integrado</i> [Integrated Development Plan of Minas Gerais], considering the principles of equity and efficiency.	The state has moved forward, improving its efficiency and educational indicators.
Tarda and Rodrigues (2015)	To analyze the relationship between Education and economic growth in the administrative region of the city of Campinas, state of São Paulo.	The validity of the hypothesis was verified, evidencing the positive relationship of the physical capital, labor and Education expenditures with the gross domestic product (GDP).
Santos, Carvalho and Barbosa (2016)	To analyze the efficiency of the municipal expenditures on Education, considering the Basic Education, in the context of the municipalities of Seridó Potiguar, state of Rio Grande do Norte, in 2013.	There were three ranking of efficiency, showing the municipalities that were considered the most and least efficient in their expenditures on Education.
Silva Filho <i>et al</i> (2016)	To evaluate the efficiency in the allocation of the public spending on Education (Basic Education) in Army Military Schools from 2009 to 2011.	In 2009, 58.34% of the colleges were considered efficient and, in 2011, only 30%. The authors pointed out that the colleges that presented the greatest allocation in the resources did not necessarily prove to be efficient, indicating the need for a better resource management.

Source: Research data, 2016.

It was identified, in the studies, a tendency for the application of the Data Envelopment Analysis to evaluate the efficiency of the expenditures on public Education.

5 METHODOLOGICAL PROCEDURES

5.1 Characteristics of the method

Vergara (2016) proposed two criteria for the definition of the types of researches: the purposes and the means. This study is classified, according to its purposes, as descriptive and applied and, to the means, as documentary. The approach is mixed, but predominantly qualitative. A more qualitative approach is justified because of the focus is the interpretation rather than the measurement (Martins, & Theophilo, 2007). According to Gil, (2011) the method is the statistic and the design is the documentary research.

5.2 Data collection and data analyses

Data related to the public revenues and expenditures were collected at the websites of Siope, Sistrn, Fimbra and of the Court of Accounts of the state of Rondônia. The documents obtained for the analysis were the reports of the LRF, included in the Relatório Resumido da Execução Orçamentária (RREO) [Summarized Report of the Budget Execution]. Data analysis was carried out using the XLSTAT statistical tools, a Microsoft Excel add-in. Descriptive statistics were used to support a subjective interpretation (Vergara, 2016) and statistical inference: arithmetic mean, standard deviation, variance, correlation coefficient, Pearson correlation coefficient (r and r^2) and Student's t -test. The variations of the expenditures for the function Education and its subfunctions, in relation to totals of revenues and expenditures, were also analyzed. For the correlation analysis, the independent variables were the total revenue budget and the dependent variables, the expenditures on the Education function, since, according to Silva (2012, p.18), "the government levies in order to spend" and "it is expected that the government, when levying more, can also invest more in the fulfillment of its functions". Table 5 details the research questions.

Table 5 – Research questions.

- | |
|---|
| <ul style="list-style-type: none"> • Which municipalities in the state of Rondônia present the highest and the lowest regularity regarding the expenditures on the function Education? • What is the subfunction of the highest arithmetic mean and of the highest regularity? • What is the subfunction of lowest arithmetic mean and lowest regularity? • What is the level of correlation among the expenditures executed in Education of the municipalities from 2009 to 2014 and the public revenue during the same period? • Is there a general correlation among all the revenues and all the expenditures added to the municipalities (Student's t-test)? • Which municipalities presented the highest and lowest application of resources in the function Education in relation to the total public budget? |
|---|

Source: Elaborated by the authors.

In order to interpret the correlation coefficients, the scales were used according to table 6. To eliminate the effect of the inflation upon the public finances, the Índice Geral de Preços – Disponibilidade Interna (IGP-DI) [General Price Index - Internal Availability] was used, the same used by the Secretaria do Tesouro Nacional (STN) [National Treasury Secretariat] to update the values of the public financial statements (Silva, 2012), adjusted to the 2014 Brazilian currency (real).

Table 6 - Scales for the correlation analysis.

If $r_{xy} = 0$ →	There is no linear correlation among the variables.
If $r_{xy} = \pm 1$ →	There is total linear correlation among the variables.
If $-1,0 < r_{xy} < +1,0$ →	Partial correlation among the variables:
• If $0,9 < \text{or} = r_{xy} < 1,0$ →	high or excellent correlation
• If $0,8 < \text{or} = r_{xy} < 0,9$ →	good correlation
• If $0,6 < \text{or} = r_{xy} < 0,8$ →	average correlation
• If $0,4 < \text{or} = r_{xy} < 0,6$ →	low correlation
• If $0,0 < \text{or} = r_{xy} < 0,4$ →	bad correlation

Source: Martins and Domingues, 2011, p. 487.

5.3 Sample

The 15 best municipalities in the ranking of the Índice Firjan de Desenvolvimento Municipal (IFDM) [Firjan Municipal Development Index] were included in the survey sample. The Firjan System annually investigates the socioeconomic development of all the more than five thousand Brazilian municipalities in three areas: Employment and Income, Education and Health. Created in 2008, it is established exclusively based on public official statistics, available at the ministries of Labor, Education and Health (SISTEMA FIRJAN, 2014). Table 7 shows the 15 municipalities of Rondônia with the best indexes in the state's IFDM ranking. The 2011 data were published in 2014.

Table 7 – IFDM ranking of the municipalities of Rondônia.

Ranking IFDM National	State level	FU	Municipality	IFDM	Employment and income	Education	Health
456 th	1 st	RO	Vilhena	0.7856	0.7648	0.7759	0.8161
1106 th	2 nd	RO	Porto Velho	0.7325	0.8279	0.6458	0.7239
1116 th	3 rd	RO	Ariquemes	0.7318	0.6529	0.7148	0.8277
1227 th	4 th	RO	Cacoal	0.7242	0.6764	0.7080	0.7882
1496 th	5 th	RO	Chupinguaia	0.7065	0.6534	0.7289	0.7372
1689 th	6 th	RO	Pimenta Bueno	0.6958	0.6341	0.7588	0.6946
1827 th	7 th	RO	Ji-Paraná	0.6884	0.7453	0.6786	0.6413
2195 th	8 th	RO	Santa Luzia do Oeste	0.6666	0.6151	0.7046	0.6802
2618 th	9 th	RO	Jaru	0.6440	0.6447	0.6995	0.5877
2706 th	10 th	RO	Rio Crespo	0.6395	0.5746	0.5593	0.7847
2736 th	11 th	RO	Buritis	0.6383	0.5060	0.5849	0.8240
2737 th	12 th	RO	Teixeirópolis	0.6383	0.5058	0.7516	0.6575
2890 th	13 th	RO	Ouro Preto do Oeste	0.6299	0.5692	0.7203	0.6001
2995 th	14 th	RO	Itapuã do Oeste	0.6235	0.5940	0.5481	0.7286
3075 th	15 th	RO	Rolim de Moura	0.6185	0.5925	0.6952	0.5679

Source: Firjan Index, 2014.

6 ANALYSES AND RESULTS

6.1 Descriptive statistics

In order to answer the research questions presented earlier, the arithmetic mean, standard deviation and variance of the 15 municipalities were considered for data analyses. Table 8 shows the statistical data of the general Education function.

Table 8 – Education in the municipalities (in Brazilian reais).

MUNICIPALITIES OF RONDÔNIA	ARITHMETIC MEAN	STANDARD DEVIATION	VARIANCE
1 Santa Luzia do Oeste	3,528,625.90	315,290.40	99,408,037,213.36
2 Teixeiraópolis	4,152,198.13	579,416.29	335,723,242,316.76
3 Jaru	25,679,002.45	689,712.20	475,702,914,740.10
4 Rio Crespo	3,773,836.17	830,845.77	690,304,692,914.80
5 Buritis	18,992,497.13	858,871.21	737,659,748,846.41
6 Itapua do Oeste	7,297,200.63	925,494.67	856,540,392,452.86
7 Chupinguaia	8,807,837.76	1,523,645.33	2,321,495,094,497.89
8 Pimenta Bueno	16,248,862.43	1,771,635.59	3,138,692,649,502.44
9 Ouro Preto do Oeste	20,449,203.26	1,781,056.28	3,172,161,482,418.20
10 Rolim de Moura	19,533,253.96	2,538,242.00	6,442,672,439,961.90
11 Ji-Paraná	32,588,600.36	2,901,514.02	8,418,783,606,965.04
12 Cacoal	31,013,991.35	3,583,046.46	12,838,221,916,477.40
13 Ariquemes	56,180,214.69	3,881,738.34	15,067,892,558,273.60
14 Vilhena	40,375,598.49	5,646,871.70	31,887,159,990,389.60
15 Porto Velho	219,511,143.44	38,798,058.19	1,505,289,319,203,150.00
TOTAL	508,132,066.14	66,625,438.45	1,591,771,737,970,120.00

Source: Research data, 2016.

In order to answer which municipalities present more regularity regarding the expenditures on Education, it was verified which municipalities present the lowest standard deviation and variance. Santa Luzia do Oeste has the lowest standard deviation and the smallest variance, so it is the most regular in the application of resources in Education. Teixeiraópolis and Jaru are the second and third most regular, respectively. The capital Porto Velho is the least regular, although it has the best average resource applications.

Table 9 presents the arithmetic mean and standard deviation for the expenditures on each subfunction of Education in the municipalities.

Table 9 – Analysis of the function Education for each of its subfunctions (in Brazilian reais).

SUBFUNCTIONS	ARITHMETIC MEAN	STANDARD DEVIATION
Basic Education	407,791,960.17	45,167,166.76
Secondary Education	705,085.47	936,534.14
Vocational Education	127,642.33	---
Higher Education	993,759.42	623,469.96
Childhood Education	70,236,832.42	28,876,893.21
Youth and Adults	15,622,145.32	9,109,370.17
Special Education	3,317,500.22	1,833,637.99

Source: Research data, 2016.

The subfunctions Basic and Secondary Education were those that obtained the highest standard deviation and, therefore, are less regular. Among all the subfunctions, with the exception of the Basic and Secondary Education, the Youth and Adults subfunction is the one with the highest arithmetic mean and

Professional Education, the lowest. Youth and Adult Education achieved the highest standard deviation, and therefore, it was less regular. Higher education is more regular because it has the lowest standard deviation. Table 10 shows the municipalities with highest and lowest arithmetic means and standard deviation for each subfunction.

Table 10 - Description of which municipalities were more and less regular for each subfunction.

SUBFUNCTIONS	ARITHMETIC MEAN		STANDARD DEVIATION	
	HIGHEST	LOWEST	HIGHEST	LOWEST
Basic Education	Porto Velho	Santa Luzia do Oeste	Porto Velho	Santa Luzia do Oeste
Secondary Education	Cacoal	Rio Crespo	Cacoal	Rio Crespo
Vocational Education	Vilhena	Pimenta Bueno	---	---
Higher Education	Jarú	Vilhena	Ji-Paraná	Rio Crespo
Childhood Education	Porto Velho	Teixeirópolis	Porto Velho	Santa Luzia do Oeste
Youth and Adults	Porto Velho	Teixeirópolis	Porto Velho	Pimenta Bueno
Special Education	Ariquemes	Teixeirópolis	Porto Velho	Teixeirópolis

Source: Research data, 2016.

The Santa Luzia do Oeste was the most regular municipality regarding expenditures on Basic and Secondary Education, since it was the one that presented the lowest standard deviation. Porto Velho was the one that applied the highest amount of resources in these subfunctions, but it was the less regular, since it presented the highest standard deviation.

6.2 Inferential statistics

In this section, the correlation among the expenditures executed in the Education function and the executed revenues in the same period are presented. Table 11 shows the correlation and the Pearson coefficients for the municipality of Vilhena.

Table 11 – Correlation index–Vilhena (in Brazilian reais).

Education function and revenues -currencies of 2014		
Vilhena		
YEAT	EXPENDITURES	REVENUES
2009	32,004,222.37	132,155,658.21
2010	35,511,849.08	150,586,089.07
2011	40,505,834.58	172,887,238.88
2012	43,209,886.70	181,324,981.63
2013	43,944,529.47	195,508,644.80
2014	47,077,268.74	199,054,741.57
SUM	242,253.591	1,031,517,354
Correlation coefficient		
r and r ²	0.9749	95.03%

Source: Research data, 2016.

The correlation coefficient (Pearson's r) was 0.9749 and the coefficient of determination (r^2) was 95%. The correlation is positive and high. It can be noted that, as the revenues increase, there is also an increase in expenditures on Education in the same rate. The r^2 shows that 95% of the variations of the expenditures on Education can be explained by the variations in the revenues. Vilhena, besides being the best in the ranking of the state for Firjan index, is the best in the three areas considered: Employment and Income, Education and Health. Vilhena has also presented the best level of correlation. Table 12 shows the results of the municipalities that were considered.

Table 12 – Correlation indexes of the municipalities.

MUNICIPALITIES	ANALYSIS OF THE CORRELATION BETWEEN EXPENDITURES AND REVENUES		
	COEFFICIENTS		Interpretation of the correlation coefficient
	Correlation	Determination	
Vilhena	0.9749	95.03%	High
Porto Velho	0.8901	79.22%	Good
Ariquemes	0.5457	29.78%	Low
Cacoal	0.8056	64.90%	Good
Chupinguaia	0.2658	7.06%	Bad
Pimenta Bueno	0.8697	75.63%	Good
Ji-Paraná	0.9670	93.51%	High
Santa Luzia D'Oeste	-0.6146	37.78%	Average/negative
Jaru	0.8244	67.97%	Good
Rio Crespo	0.8798	77.40%	Good
Buritis	0.6876	47.28%	Average
Teixeirópolis	-0.1784	3.18%	Bad/negative
Ouro Preto do Oeste	0.8403	70.61%	Good
Itapuã do Oeste	0.9171	84.10%	High
Rolim de Moura	0.7009	49.13%	Average

Source: Research data, 2016.

Two municipalities presented a negative correlation. Teixeiraópolis had a correlation coefficient (Pearson's r) of -0.1874 and a determination (r^2) of 3.18%. This is a bad and negative correlation. It can be noted that, as the revenues increase, there is no increase in the expenditures on the Education function in the same rate. The r^2 shows that only 3% of the variances in the expenditures on Education can be explained by the variations in the revenues, in the opposite direction.

Considering the municipalities that presented a positive correlation, Chupinguaia presented the lowest score. Three inland municipalities presented a higher score than the capital of the state, Porto Velho. According to Martins and Domingues (2011), the fact of presenting a low correlation should not rule out the study variables. For those authors (2011, p.487), "a low linear correlation coefficient indicates only that there is not a great similarity of linear behavior among the study variables". Therefore, other types of relations among the variables, such as the Student's t -test, should be considered. However, to apply such test, there should be a greater number of samples (greater number of years) or it should be ensured that the population has a normal distribution (Levin, & Fox, 2004).

The ranking of the municipalities with the the best correlation among the revenues and expenditures on Education is the following: Vilhena, Ji-Paraná, Itapuã do Oeste, Porto Velho, Rio Crespo, Pimenta Bueno, Ouro Preto do Oeste, Jaru, Cacoal, Rolim de Moura, Buritis, Ariquemes, Chupinguaia, Teixeiraópolis and Santa Luzia do

Oeste.

Table 13 presents the results of Student's t-test. In such test, there was the addition of all expenditures to all revenues, in an attempt to verify if there is a general correlation among these variables. It was verified that there is a correlation in all the analyzed years.

Table13 - Result of the t-test for the correlation among the expenditure variables.

Year	Number	Degree of freedom	t tabulated	t calculated	Conclusions
2009	15	13	2.16	26.250	t calculated > t tabulated – there is correlation
2010	15	13	2.16	33.690	t calculated > t tabulated – there is correlation
2011	15	13	2.16	39.114	t calculated > t tabulated – there is correlation
2012	15	13	2.16	41.629	t calculated > t tabulated – there is correlation
2013	15	13	2.16	38.928	t calculated > t tabulated – there is correlation
2014	15	13	2.16	50.986	t calculated > t tabulated – there is correlation

Source: Levin and Fox, 2004. t-test–Confidence interval of 95% with 5% error (0.25 for more or less).

6.3 Ranking of Education budget

Table 14 presents information about the resources that the municipalities of Rondônia applied in the expenditures on Education in relation to the total of the general budget in 2014. The table also shows which municipalities presented highest and lowest resources in order of percentage.

Table 14 - Application in the Education function in relation to the General Budget – 2014 (in Brazilian reais).

ORDER	MUNICIPALITIES	BUDGET	EDUCATION	%
1	Chupunguaia	R\$ 25,472,637.86	11,134,866.78	43.71
2	Itapuã do Oeste	R\$ 20,057,944.00	8,390,244.85	41.83
3	Rio Crespo	R\$ 12,500,000.00	4,496,384.16	35.97
4	Ariquemes	R\$ 176,792,884.00	58,759,698.42	33.24
5	Buritis	R\$ 57,366,283.13	18,518,372.12	32.28
6	Ouro Preto do Oeste	R\$ 66,098,925.25	21,197,482.10	32.07
7	Jaru	R\$ 81,389,146.56	25,720,043.12	31.60
8	Teixeirópolis	R\$ 14,129,266.46	4,376,781.02	30.98
9	Pimenta Bueno	R\$ 63,489,000.00	18,136,486.61	28.57
10	Rolim de Moura	R\$ 92,726,506.86	23,577,101.55	25.43
11	Vilhena	R\$ 191,139,171.54	47,077,268.74	24.63
12	Santa Luzia D'Oeste	R\$ 15,124,200.00	3,373,461.56	22.31
13	Cacoal	R\$ 158,381,000.00	35,300,213.69	22.29
14	Porto Velho	R\$ 1,218,553,812.00	257,128,169.58	21.10
15	Ji-Paraná	R\$ 183,365,151.26	36,371,574.15	19.84
SUM		R\$ 2,376,585,928.92	573,558,148.45	24.13

Source: Research data, 2016.

Proportionately, the municipalities that applied more were the ones with a smaller budget, such as Chupunguaia and Itapuã do Oeste, which applied 43.71% and 41.83%, respectively, of their total budget. Porto Velho has a better budget, but, proportionately in relation to the total budget, is the one of the

municipalities that applied the least, alongside with the bigger municipalities, with the exception of Ariquemes, that applied 33.24%. Rio Crespo presents the lowest budget, but is third in the applications in Education.

It is verified that to have a greater portion of application in Education in relation to the general budget does not mean that the municipality will present a good correlation of the same applications in relation to the revenues. Vilhena had been presenting the best scores, but in this ranking occupies the 11th position.

7 SUMMARY, ANALYSIS AND FINAL CONSIDERATIONS

The objective of this research was to analyze the applications of resources in the government function Education of the municipalities of the state of Rondônia, from 2009 to 2014. The answers to the research questions are summarized in table 15.

Table 15 – Summary of the answers to the research questions.

QUESTIONS	ANSWERS
Which municipalities in the state of Rondônia present the highest and the lowest regularity regarding the expenditures on the function Education?	Santa Luzia do Oeste is the most regular and Porto Velho, the least.
What is the subfunction of the highest arithmetic mean and of the highest regularity?	Basic Education is the one with the highest mean and Higher Education is the most regular.
What is the subfunction of lowest arithmetic mean and lowest regularity?	Professional Education is the one with the lowest mean and Basic Education is the one with the lowest regularity.
What is the level of correlation among the expenditures executed in Education of the municipalities from 2009 to 2014 and the public revenue during the same period?	Three municipalities had positive and high correlation; six presented positive and good correlation; two had positive and average correlation; one obtained positive and low correlation; one presented positive and bad correlation; one presented negative and average correlation; and one obtained negative and very bad correlation.
Is there a general correlation among all the revenues and all the expenditures added to the municipalities (Student's <i>t</i> -test)?	There is correlation in all the years analyzed.
Which municipalities presented the highest and lowest application of resources in the function Education in relation to the total public budget?	Chupinguaia is the one that applied the most in Education in relation to its total public budget and Ji-Paraná the one that applied the least.

Source: Research data, 2016.

After collecting and compiling the data, it is noticed that the smaller municipalities were the ones that applied the most in Education in relation to their total budget. Chupinguaia and Itapuã do Oeste stand out, which applied 43.71% and 41.83% of the total budget. A study by Scarpin et al (2012) showed that smaller municipalities tend to be more efficient.

Having a higher amount of application in Education in relation to the general budget does not mean that the municipality will present a good correlation. Teixeiraópolis, which applied 30.98% of its budget in Education, presented negative and bad correlation; Vilhena, which applied 24.63% of the total budget in Education, was the one that had the best correlation, positive and high.

The municipalities have proportionately applied their total budget. This does not mean that they were efficient or that they correlated well with their revenue. Silva Filho et al (2016) emphasize the need for a better resource management. However, for the resources applied in Education to become a public service of quality and efficiency, the implementation and execution of public policies, projects, strategies and good investments are important. It is what the population expects of a good management by the politicians: that the projects and public policies have social effectiveness and mean changes for the better. The country has somewhat advanced in recent years, but it is important that this advancement does not stop or go back.

Given the social and economic crisis the country has been facing, with a fragilized economy and an increasing unemployment, through an efficient management of the expenditures, with good projects and public policies, Education could have a better development. Developed countries did so, having been investing heavily in Education for decades now. An educated population enables more chances of the country to have better, more

competent public managers, and, thus, the chances of a better management will be higher.

It is hoped that this study will assist managers in evaluating and analyzing the elaboration of public policies. The practical recommendations are for the observance of the principle of the maximum social advantage, according to Baleeiro and Machado Segundo (2015), and of the principle of the policy learning, according to Howlett et al. (2013).

It is also recommended a research of the content of the actions in the expenditure function Education of the years analyzed and the following, expanding the analysis of all municipalities, as well as a statistical research with the objective of analyzing the efficiency of these resources according to the Data Envelopment Analysis method.

REFERENCES

- Andrade, N. A. (2013). Contabilidade pública na gestão municipal: métodos com base nas normas brasileiras de contabilidade aplicadas ao setor público (NBCASP) e nos padrões internacionais de contabilidade. São Paulo: Atlas.
- Araújo, L. (2016). O CAQi e o novo papel da União no financiamento da educação básica. Jundiaí: Paco Editorial.
- Baleeiro, A., & Machado Segundo, H. B. (2015). Uma introdução à ciência das finanças: 19. ed. Rio de Janeiro: Forense.
- Brazil. (2007). Law number 9.394, December 20th 1996. Estabelece as diretrizes e bases da educação nacional. Brasília.
- _____. (1999). Ministério do Planejamento, Orçamento e Gestão - MPOG. Portaria n.º 42, de 14 de abril de 1999. Available at: <ftp://ftp.fn.de.gov.br/web/siope/leis/P42_MPOG_14-04-1999.pdf>. Accessed: 15 feb. 2017.
- Borges, E. F., & Pereira, J. M. (2014). Educação fiscal e eficiência pública: um estudo das suas relações a partir da gestão de recursos municipais. Revista de Educação e Pesquisa em Contabilidade, Brasília, 8(4), 437-453.
- Chirinea, A. M., & Brandão, C. F. (2015). O IDEB como política de regulação do Estado e legitimação da qualidade: em busca de significados. Ensaio: aval. pol. públ. Educ. [online]. 23(87), 461-484.
- Crepaldi, S. A., & Crepaldi, G. S. (2013). Orçamento público: planejamento, elaboração e controle. São Paulo: Saraiva.
- Cury, C. R. J. (2011). Federalismo político e educacional. In: Ferreira, N. S. C. (org.). Políticas públicas e gestão da educação: polêmicas, fundamentos e análises. 2. ed. Brasília: Liber Livro Editora.
- Dias, R., & Matos, F. (2012). Políticas públicas: princípios, propósitos e processos. São Paulo: Atlas.
- Giacomoni, J. (2012). Orçamento público. 16. ed. São Paulo: Atlas.
- Gil, A. C. (2011). Métodos e técnicas de pesquisa social. 6. ed. São Paulo: Atlas.
- Gohn, M. G. (2011). Conselhos gestores e participação sociopolítica. 4. ed. São Paulo: Cortez. (Coleção questões de nossa época; v. 32).
- Howlett, M., Ramesh, M., & Perl, A. (2013). Política pública: seus ciclos e subsistemas: uma abordagem integral. Trad. Francisco G. Heidemann. Rio de Janeiro: Elsevier.
- Levin, J., & Fox, J. A. (2004). Estatística para ciências humanas. São Paulo: Pearson Education.
- Martins, G. A., & Theófilo, C. R. (2007). Metodologia da investigação científica para ciências sociais aplicadas. São Paulo: Atlas.
- Martins, G. A., & Domingues, O. (2011). Estatística geral e aplicada. 4. ed. São Paulo: Atlas.
- Oliveira, R. (2012). Gestão pública: democracia e eficiência: uma visão prática e política. Rio de Janeiro: FGV.
- Procopiuck, M. (2013). Políticas públicas e fundamentos da administração pública: análise e avaliação, governança e redes de políticas, administração judiciária. São Paulo: Atlas.
- Ribeiro, C. C., & Ceneviva, R., & Brito, M. M. A. (2015). Estratificação educacional entre jovens no Brasil: 1960 a 2010. In: ARRECTHE, M. (org.). Trajetórias das desigualdades: como o Brasil mudou nos últimos cinquenta anos. São Paulo: Editora Unesp; CEM.
- Santos, Y. D., Carvalho, J. R. M., & Barbosa, M. F. N. (2016). Análise da eficiência dos gastos com educação no ensino fundamental nos municípios do Seridó Potiguar. Revista Ambiente Contábil, Natal, 8(2), 287-308.

- Santos, A. C., Gomes, A. P., & Ervilha, G. T. (2015). Eficiência e desigualdade em educação no estado de Minas Gerais: uma análise da primeira etapa do PMDI. *Planejamento e Políticas Públicas*, 45.
- Scarpin, J. E., Macêdo, F. F. R. R., Staroski Filho, L., & Rofrigues Junior, M. M. (2012). Análise da eficiência dos recursos públicos direcionados à educação: estudo nos municípios do Estado de Santa Catarina. *Revista Gestão Públicas: Práticas e Desafios*, Recife, 3(6).
- Secchi, L. (2013). *Políticas públicas: conceitos, esquemas de análise, casos práticos*. 2. ed. São Paulo: Cengage Learning.
- Silva, A. B. et al. (2015). Accountability para a gestão de verbas da educação pública em municípios brasileiros: análise com envoltória de dados (DEA). *Revista Iberoamericana de Contabilidad de Gestión*, 8(26).
- Silva Filho, G. M. et al. (2016). Análise da eficiência nos gastos públicos com educação fundamental nos colégios militares do exército em 2014. *Revista Evidenciação Contábil & Finanças*, João Pessoa, 4(1), 50-64.
- Silva, M. C. (2012). *Demonstrações contábeis públicas: indicadores de desempenho e análise*. São Paulo: Atlas.
- Silva, M. C. et al. (2015a). Avaliação da função educação nos municípios de São Paulo, Rio de Janeiro e Belo Horizonte: mudança ou inércia social. *ConTexto*, Porto Alegre, 15(29), 17-29.
- Silva, M. C. et al. (2015b). Avaliação de políticas públicas funcionais do município de São Paulo. 2002 - 2012. *Revista de Administração e Contabilidade*, Feira de Santana, 7(3), 66-85.
- Sistema FIRJAN. Índice FIRJAN de Desenvolvimento Municipal (2014). Available at: <<http://www.firjan.org.br/ifdm/>>. Accessed: 05 mar. 2017.
- Souza, W. D. et al. (2015). Análise dos gastos na alocação dos recursos públicos destinados ao ensino fundamental dos municípios do Espírito Santo. In: IX Congresso ANPCONT, Anais... Curitiba – PR, Associação Nacional de Programas de Pós-Graduação em Ciências Contábeis.
- Tarda, K. B., & Rodrigues, R. V. (2015). A influência dos gastos em educação no crescimento econômico da Região Administrativa de Campinas. *Estudo & Debate*, Lajeado, 22(2), 07-31.
- Theiss, V. et al. (2015). Eficiência na alocação dos gastos públicos na educação. *Revista de Gestão e Contabilidade da UFPI*, 2(1), 4-17.
- Vergara, S. C. (2016). *Projetos e relatórios de pesquisa em administração*. 16. ed. São Paulo: Atlas.

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Books Review for publication, you will be pleased to know that our journals are

Associated and Indexed, India

- ★ Directory Of Research Journal Indexing
- ★ International Scientific Journal Consortium Scientific
- ★ OPEN J-GATE

Associated and Indexed, USA

- DOAJ
- EBSCO
- Crossref DOI
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Review Of Research Journal
258/34 Raviwar Peth Solapur-
413005, Maharashtra
Contact-9595359435

E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com