SemeAd 2023
XXVI Seminários em Administração

07, 08, 09 e 10 de novembro de 2023
ISSN 2177-3866

TOGETHER WE ARE BETTER: STAKEHOLDER ENGAGEMENT AND ITS IMPACTS ON PUBLIC SCHOOL PERFORMANCE

JOÃO DANIEL PALMA RAMOS
CENTRO UNIVERSITÁRIO ÁLVARES PENTEADO (FECAP)

EDSON RICARDO BARBERO
CENTRO UNIVERSITÁRIO ÁLVARES PENTEADO (FECAP)

VINICIUS AUGUSTO BRUNASSI SILVA
CENTRO UNIVERSITÁRIO ÁLVARES PENTEADO (FECAP)

FABRICIO STOCKER
FUNDACAO GETULIO VARGAS/EBAPE

TOGETHER WE ARE BETTER:
STAKEHOLDER ENGAGEMENT AND ITS IMPACTS ON PUBLIC SCHOOL PERFORMANCE

1. Introduction

Stakeholder Theory (ST) has gained a central place in the mainstream of management theories (Laplume, Sonpar, & Litz, 2008). This theoretical framework has generated relevant academic production, with emphasis on the interaction between organizations and its stakeholders (Freeman, Kujala, Sachs & Stutz, 2017).

Among other topics, ST particularly highlights the importance of Stakeholder Engagement (SE) for value generation (Harrison & Wicks, 2013). SE refers to the process of involving and intensively interacting with individuals, groups, or organizations that have a "stake" in a particular organization (Kujala et al., 2022). This topic earned significant attention, especially since 2018 (Kujala, Sachs, Leinonen, Heikkinen, & Laude, 2022). However, despite the existence of empirical studies seeking to investigate the relationship between SE and Organizational Performance (OP), there are still theoretical gaps, such as the absence of studies on government organizations and the lack of empirical analyzes that consider non-financial performance measures (Kujala et al., 2022).

In the context of Brazilian governmental organizations, the social importance of public schools stands out, since improving the quality of Education is a great challenge for developing countries. Despite this relevance, there is a lack of studies that relate the ST with school management. Although there are studies on ST in the context of higher education in Brazil and globally (Chapleo & Simms, 2010; Langrafe, Barakat, Stocker, & Boaventura, 2020), there are few similar investigations focusing basic education (Conner, 2017; Leana & Pil, 2006).

In the literature on Education and Educational Management, there are studies that analyze the relationship between SE and school performance. These studies were carried out, however, outside the scope of the ST. In addition, such studies have the weakness of considering, typically, only one stakeholder and having analyzed only organizations in Europe, Asia, Africa or United States (Duflo, Dupas, & Kremer, 2015; Gertler, Patrinos, & Rubio-Codina, 2012; Gordon & Louis, 2009; Jimenez & Sawada, 1999; Taniguchi & Hirakawa, 2016).

That said, the general objective of the present study is to investigate the relationship between the performance of Brazilian public schools and the engagement of their stakeholders - that is, their teachers, students, parents, employees and local communities, as these are the publics

considered central (Birdthistle, Hynes, & Fleming, 2007; Leana & Pil, 2006; Nishimura, 2017; Van Puyvelde, Caers, Du Bois, & Jegers, 2012). The main hypothesis of this study, in line with the contributions of the ST, is that the greater the SE the better the schools' performance. In this study, the concept of OP is associated with the grades obtained by students in official Brazilian tests in Portuguese and Mathematics.

The research questions are: What are the relationships between SE in public schools and the results obtained by students? Are there differences when considering the short and long term? According to the ST, the results of SE would be even more intensively observed if the organization has temporal consistency over the years and, thus, continuously engages its stakeholders; although challenging, the engagement of everyone involved tend to effectively improve educational outcomes over the years. In addition, does the number of engaged stakeholders modify the results? Likewise, the issue of the number of engaged stakeholders refers to a recommendation of ST. According to this theoretical framework, organizational results would tend to be superior if there is SE beyond in just one or another engaged group. The results should be superior if the school promotes the engagement of all stakeholders involved with the organization. Finally, also in order to test some of the fundamentals of ST in Brazilian public schools, would there be any stakeholder whose engagement would be even more contributive to the results of the schools? This study tests those theoretical suggestions in five hypotheses detailed in chapter two.

This study innovates in two respects. The first is by studying the relationship between school performance and the engagement of all primary stakeholders in public schools, as current studies have analyzed the engagement of only one or at most two stakeholders (Conner, 2017; Leana & Pil, 2006). The second innovation resides in the analysis of the context of Brazilian public schools in the light of the ST, since no record of another study with these characteristics was found in the literature. Furthermore, the study responds to calls for additional investigations within the scope of ST that consider government organizations and with non-financial indicators (Kujala et al., 2022; Kumar & Pansari, 2016).

In addition, this study also subsidizes the still incipient Brazilian literature on education management, which is an urgent topic, given the relevance of public education and the well-known gap between general quality of Brazilian education and the developed world (Organization for Economic Cooperation and Development, 2021). Considering that SE is required by National Education Plan - under the epithet of “democratic management” in its

target number 19 - it is expected that this study will contribute to the adoption of increasingly better practices regarding the management of public schools. It is even expected that the present study will subsidize, with concrete quantitative elements, the development of the new national education plan that will be developed in 2024. This study, therefore, contributes both to the advancement of theories on the management of public organizations and seeks to impact the substantive reality of one of the most important sectors of society.

2. Theoretical Background and Hypothesis

The central idea of the ST is that the achievement of an organization's objectives depends on how well it manages its relationships with its stakeholders, which consist of groups that participate, affect or are affected by the realization of the organization's proposals (Freeman, 2007). In the light of ST, the results of an organization - notably in the long run - do not depend only on its resources and their use (Barney, 1991), but also on the pro-stakeholder vision and actions and the sustainability of relationships between stakeholders (Freeman, Dmytriyev, & Phillips, 2021). The evolution of ST towards the mainstream of organization theories took place mostly through theoretical production (Freeman et al, 2017) on topics such as the identification of stakeholders, discussions about the process of interaction between organizations and stakeholders (Freeman et al., 2017), on how companies react to pressure from stakeholders (Sulkowski et al., 2018) and on how to engage stakeholders with the organization (Mascena & Stocker, 2020).

The mechanism that connects the concepts of ST to the dynamics of an organization often occurs through the SE. This concept can be understood as the set of practices promoted by an organization to involve stakeholders positively in its activities. Such involvement includes balancing the interests of multiple stakeholders, in order to maximize the generation of value for all of them (Freeman & Phillips, 2002), and extends to the act of involving them to act cooperatively, to jointly create value for the organization and for themselves (Civera & Freeman, 2019). This situation provides an environment conducive to innovation (Loureiro, Romero, & Bilro, 2020) and to the adoption of long-term orientation by managers (Cheng, Ioannou & Serafeim, 2014), therefore resulting in advantages for the organization.

In addition, the existence of a two-way dialogue between the organization and its stakeholders is a prerequisite for the existence of engagement (Kujala et al., 2022; Mitchell, Mitchell, Hunt, Townsend, & Lee, 2020; Signori, 2017), with two-way dialogue being the mechanism that allows the organization to become aware of stakeholder expectations (Harrison, Bosse, &

Phillips, 2010) and vice versa (Signori, 2017). However, the pure existence of dialogue does not imply the existence of engagement, requiring the presence of other attributes, such as the alignment of values (Bundy, Vogel, & Zachary, 2018; Civera & Freeman, 2019) and an environment where all stakeholders have a voice, (Civera, De Colle, & Casalegno, 2019).

Some empirical studies were carried out with the aim of investigating associations between SE and OP. Mostly, these studies analyzed the relationship between SE and some financial performance variable (Kujala et al., 2022), finding evidence of a positive association between engagement and the market value of companies (Henisz, Dorobantu & Nartey, 2014), average annual gross revenue (Kumar & Pansari, 2016), return on equity (Ayuso Rodríguez, García-Castro, & Ariño, 2014), and access to capital (Cheng, Ioannou & Serafeim, 2014).

Other studies have analyzed the relationship between SE and other performance variables. Monteduro, Cecchetti, Lai and Allegrini (2021) analyzed the implementation of corruption risk management guidelines in public organizations by the Italian government and found a positive association between the extent of implementation of such guidelines and the involvement of stakeholders in the process. Ayuso, Rodríguez, García-Castro and Ariño (2011) found a positive association between SE and the existence of an innovation-oriented culture. According to these authors, the mechanism that links SE to the culture of innovation is the greater access to stakeholder knowledge.

Despite the existence of those studies, research on the relationship between SE and OP has limitations. One of them is the very concept of SE, which is typically fragmented and not unified (Kujala et al., 2022), so that the concepts considered in the various studies vary. Another limitation refers to the difficulty in measuring value for the entire set of stakeholders (Harrison & Wicks, 2013), which is why most studies consider the financial value generated (Kujala et al., 2022), whose main beneficiaries are only the shareholders. Finally, current research has limitations regarding the ways of measuring engagement, since there is a lack of engagement scales that apply to the different realities (Bowen, Hyams, Goodman, West, Harris-Wai, & Yu, 2017). Generally, SE is measured through proxies, such as questions in standardized questionnaires (Ayuso et al, 2011), stakeholder participation in organization projects (Monteduro et al., 2021), quantity of stakeholders with whom the organization relates (Ayuso et al., 2011), quality of information provided to stakeholders (Cheng, Ioannou & Serafeim, 2014), evaluation of the existence of cooperation in news published in the media (Henisz et al.,

2014) and the number of interactions between the organization and its stakeholders (Conner, 2017). However, those proxies do not necessarily entirely reflect SE (Bowen et al., 2017).

In the context of public schools, the literature considers teachers, students, parents, non-teaching staff and local communities as "primary stakeholders" (Birdthistle et al., 2007; Leana & Pil, 2006; Van Puyvelde et al., 2012). Few empirical studies have used the dynamics of public schools to analyze the relationship between SE and the performance of such organizations in the light of ST. Of such few studies, Conner (2017) and Leana and Pil (2006) stand out. Leana and Pil (2006) observed that the quality of relationships between teachers and between teachers and external stakeholders are positively associated with the performance of public schools. The study was carried out with teachers from 88 US public schools, using a scale developed by the authors. The analysis considered as a proxy for the quality of the relationship the existence of information exchange, trust and unity of vision. To measure the quality of the relationship, the fraction of teachers' time dedicated to activities outside the school was used. School performance was measured by student scores on standardized math and mother tongue tests.

Conner (2017) studied the context of 150 Native American schools and found that collaboration between Native school principals and communities is associated with meeting students' educational and cultural needs, as well as greater perceptions of trust between schools and the communities. The study relied on a questionnaire developed by the author, which considered the frequency of interaction between principals and members of the tribes as a measure of SE, and the perception of principals about the educational development of students, scope of their cultural and academic needs, quality of implementation of programs, trust and partnership with communities as measures of performance.

In the literature on Education, Educational Management and Public Economy, there are some studies that sought to analyze the relationship between the participation of stakeholders in public schools and their results. These studies analyzed educational contexts different from the Brazilian and considered only one stakeholder in their analyses. Gordon and Louis (2009) conducted a survey with US school teachers and found that these teachers' perception of parental influence on school decision-making is positively associated with student performance. Jimenez and Sawada (1999) analyzed the results of the government of El Salvador's Educo program, through which some schools came to be managed by elected committees of parents and students. This study suggests that schools participating in Educo showed greater improvement in student results on standardized tests and increased student

attendance in class compared to schools not participating in the program. Gertler et al. (2012) analyzed a similar program, implemented by the Mexican government, called AGE (*Apoyo a la Gestión Escolar*), and found an association between the participation of schools in the program and the reduction of failure rates.

Some authors have proposed hypotheses about the mechanism that causes parental participation to result in better academic performance at school. Duflo et al. (2015), after an experiment carried out in public schools in Kenya, proposed that the participation of parents in the hiring of teachers increases the quality of hired teachers and the better quality of teachers increases the performance of schools. Taniguchi and Hirakawa (2016), after research carried out in schools in Malawi, argue that the high participation of parents and communities is a consequence of the achievement of high academic performance, which, in turn, is a consequence of good leadership by principals. Good academic performance builds parental and community confidence in the school, resulting in increased levels of participation.

In the field of research called school engagement, there is relevant academic production (Campos, Schmitt, & Justi, 2020) and evidences of a positive association between students' engagement and their academic performance (Cho, Toste, Lee, & Ju, 2018; Kim et al., 2017). However, the concept of school engagement is restricted to involving students in their own learning process and does not necessarily presuppose involvement in organization activities (Civera & Freeman, 2019). Few studies have studied the relationship between student engagement in decision-making and school performance (Mager & Nowak, 2012; Mitra, 2004). Nonetheless, some studies have found evidence of a positive association between student participation and other variables related to the school environment and student development. Mitra (2004), in qualitative research, suggests that increasing the students' voice on matters related to school contributes to the development of important skills, such as leadership, teamwork and interpersonal relationships.

Education literature also brings insights into the relationship between teacher participation and collaborative action with school performance. Sarafidou and Chatziioannidis (2013) conducted a survey with 143 teachers from schools in Greece and inferred that their participation in decisions is a predictor of their job satisfaction and perception of self-efficacy. Ronfeldt et al. (2015) conducted a survey with 9,000 US teachers and found a positive association between the quality of collaboration between schoolteachers and student performance. A similar result was found by Reeves, Pun, and Chung (2017), who found that teacher collaboration in lessons

planning is positively associated with better student performance. Goddard et al. (2007) suggest that students perform better when they attend schools characterized by high teacher collaboration. Henderson and Mapp (2002) synthesize the previous researches and provides evidence for the positive impacts of family and community engagement on student achievements. Watkins (2005) examines the effects of parental involvement on children's academic achievement. It stresses the positive correlation between parental engagement and improved educational performance, including higher grades, test scores, and educational ambitions.

Having exposed the main theoretical contributions, it is now worth formulating the hypotheses of the study. The general hypothesis of the study is that the performance of schools is positively associated with the engagement of its stakeholders, in accordance with the fundamental precepts of Stakeholder Theory (Freeman, 2017; Freeman & Phillips, 2002). More than that, this study yearns to understand some nuances of this relationship. It seeks to understand whether there would be even better results if the school has long-term stakeholder engagement practices. In addition, another purpose is to understand if there are Stakeholders who play an even more relevant role and, thus, when engaged, would generate better results. Finally, the aim is to understand whether there is a significant positive relationship between the number of stakeholders engaged in schools and educational outcomes.

The pro-stakeholder view is related to achieving superior performance on an ongoing basis (Harrison, Bosse, & Phillips, 2010). A situation in which an organization achieves and maintains high performance over time is better than a situation in which the organization generates performance only occasionally. Therefore, it is possible to infer that the sustainability of the relationship between the organization and its stakeholders (Freeman et al., 2021) is related to the organization's long-term performance to a greater extent than stakeholder engagement is related to short-term performance. Thus, one hypothesis of this study is that the effect of stakeholder engagement is more prominent on school performance in the long term than in the short term. Regarding the number of engaged stakeholders, it is important to remember the premise that the existence of engagement depends on the existence of cooperation between stakeholders (Bridoux & Stoelhorst, 2016; Civera & Freeman, 2019). This implies the existence of a network of multiple engaged stakeholders. Therefore, the number of engaged stakeholders seems to be a better measure of engagement than the engagement of each individual stakeholder. Thus, another hypothesis of this study is that the greater the number of

engaged stakeholders, the greater the organization's performance. Finally, although identifying the stakeholder who can generate the more educational results in public schools could be a complex matter, one stakeholder group probably plays a more significant role in driving educational outcomes: teachers. There is a substantial body of research that supports the idea that teachers are a key stakeholder in generating educational results in public schools. Hattie (2003) synthesized over 800 meta-analyses on factors that influence student achievement. It concluded that the quality of teaching has a significant impact on student outcomes. Table 1 summarizes the hypotheses.

Table 1 - Hypothesis

Period of Analysis		Hypotheses
Short-Term	**H_1**	The engagement of each stakeholder (Students, Parents, Teachers, Workers and Community) is positively associated with the performance of schools in the short term (engagement in a certain year leads to positive results already in that year)
Shot-Term	**H_2**	The number of engaged stakeholders is positively associated with the performance of schools in the short term. That is, the more stakeholders the school engages, the higher the results will be.
Long-Term	**H_3**	The engagement of each stakeholder is even more positively associated with the performance of public schools (see H_1) when looking at long-term results. That is, if a school has consistency regarding stakeholder engagement over years, the educational performance is even higher than those observed in the short term.
Long-Term	**H_4**	The number of engaged stakeholders is positively associated with the performance of schools in the long term even more than what is observed in the short term (see H_2).
Both	**H_5**	Among the different primary Stakeholders, teachers should be those whose engagement leads to greater educational outcomes.

Note: The effect of a certain independent variable on the organization's results in the same year is considered as "short term". For the long-term analysis, the impact of the independent variable on the variation (Δ) between the first and last years of the sample is considered. Details of the mathematical structure is presented in chapter 3.

3. Research Design

3.1 General characterization, definition of variables and sampling

The present study is quantitative using secondary data collected from credible sources. Regarding the epistemological perspective, this research is positivist, since it emphasizes objectivity and the quantitative measurement of reality. The research was conducted systematically, with definition of hypotheses and collection of structured data. Therefore, nonetheless important, this study did not look for the subjective aspects of the educational experience, as it treated student performance only as that expressed in official results and, likewise, understood SE as expressed in formally completed questionnaires.

The data were provided by the National Institute of Educational Studies and Research *Anísio Teixeira* (INEP, its acronym in Portuguese), a federal agency responsible for educational data in Brazil. The data used to construct the SE indicators and control variables originated from the

so-called "*Prova Brasil*", a proficiency exam in Mathematics and Portuguese applied - every two years - in students of the final years of each elementary school stage: the 5th and 9th years. In addition to these tests, *Prova Brasil* also contains contextual questionnaires applied to students, teachers and school principals. *Prova Brasil* also provides information about the structure, resources and other aspects of each school. The construction of the SE indicators and some control variables used data from the teachers' and principal's questionnaires, while the school file provided data to the other control variables. Despite being carried out since 1990, *Prova Brasil* started to have a census character only in 2007. Another complicating factor is that the questionnaires had changes between editions of *Prova Brasil*. Fortunately, between 2013 and 2017 the questionnaires were identical, allowing this study to be carried out using data from 2013, 2015 and 2017.

As a measure of the OP of each school, the Basic Education Development Index (so called Ideb, in Portuguese) was used, in accordance with national (Karino & Laros, 2017) and international (Conner, 2017; Goldhaber & Ozek, 2019) trend of using indicators of mathematics and language tests (Gordon & Louis, 2009; Leana & Pil, 2006). The calculation of Ideb of a school consists of standardizing - in values from 0 to 10 - the average score of Mathematics and Portuguese of each school, followed by the division of this standardized score by the average time of conclusion of the students. Ideb is calculated in two educational stages: initial years of elementary education ($Ideb^{1-5}$) and its final years ($Ideb^{6-9}$). As dependent variables ($Performance_{it}$) the scores of each school *i* in the year *t* were used.

The dependent variables were all considered as dummy. The school's habit of involving students in solving absence problems was considered as a proxy for student engagement (S_{it}). To this end, a question from the directors' questionnaire was used, which asked how often teachers talked to students to minimize the occurrence of absences. If the director marked the answer "always or almost always", the value 1 was assigned to the S_{it} variable. The P_{it} variable, related to parental engagement, was also constructed based on parental involvement in minimizing student absences, using the question that asked how often parents were called to talk about the subject. The premise underlying the use of student absences as a proxy for student and parent engagement is supported by other studies (Mager & Nowak, 2012). However, the inclusion of these proxies could bring problems to the model since the performance of a school can be directly related to the attendance of students in classes (Moonie, Sterling, Figgs, & Castro, 2008). To minimize this possible problem, the control variable F_{it} was included in the

model, whose value is 1 if the functioning of school has been impaired due to excessive student absences and 0 otherwise. The construction of this control variable was also based on a question from the directors' questionnaire. The T_{it} teacher engagement variable was defined based on the perception of teachers' participation in school decisions. The variable was defined as the percentage of teachers who checked “always or almost always” for that question. The definition of teacher engagement variables is supported by other studies such as Ronfeldt et al. (2015) and Sarafidou and Chatziioannidis (2013).

To define the engagement variable of non-teaching staff (W*it*), we used the participation of those workers in the school council and the number of meetings held by the council during the year. The premise is that employee participation is related to their engagement. Although Brazilian legislation encourages the existence of school councils, the composition of the councils and their very existence may vary between schools. Therefore, the participation of non-teaching employees in school councils is an indicator that the school considers their voices. However, staff influence on school decisions through the school board is subordinate to the influence of the board itself. In other words, if employees participate in the school board but the board has little say in decision-making, employee participation through the board will suffer. Thus, one way of measuring the influence of the school board on school decisions is the number of school board meetings held during the year. In this way, it was considered as a proxy for employee engagement their participation in school councils that held at least 3 meetings in that year. Regarding the stakeholder community, there is no single definition. However, the term refers to the geographic community in which the school is located (Nishimura, 2017). Community engagement C_{it} was defined by the existence of voluntary work by the community for the benefit of the school, assuming the value 1 if there was any voluntary activity by the community and 0 otherwise.

In addition to analyzing the association between the engagement of each primary stakeholder and the schools' performance, the association between the number of engaged stakeholders and the schools' performance was also analyzed. For this purpose, the E_{jit} variables were defined, which assume the value of 1 if school *i* has engaged exactly *j* stakeholders in year *t*. As control variables, in addition to the variable that depicts the existence of potential erros due to excessive student absences, the average socioeconomic level of the students in the school and a dummy variable referring to the year in which the test was applied were considered. Seven socioeconomic levels (SEL) were considered based on the answers to the students'

questionnaires. A dummy variable was created for each of the three socioeconomic levels studied, so that for each school, in each year, the value 1 was assigned if the school belongs to a certain socioeconomic level and 0 otherwise.

Regarding sampling, different quantity of schools were studied in each of the different analytical techniques (see item 3.2). The database with the answers of school directors to the questionnaires of *Prova Brasil* from 2013 to 2017 contains 186,104 observations, with each observation representing a school each year. Of this total, 56,737 observations came from the 2013 edition, 55,693 from 2015 and 73,674 from 2017. After the extraction of schools without disclosed data or other missing information, the sample for the regression analyzes and least squares method resulted in 44,451 schools for $Ideb^{1-5}$ and 38,169 for $Ideb^{6-9}$. For the analyzes of logistic regressions with marginal effects, the sample was 26,246 schools. Given that all Brazilian public schools are equally exposed to data collection, the sample is considered highly relevant and representative of the entire population.

3.2 Statistical Analysis Techniques

This study used a series of statistical techniques to test the hypotheses: Pearson's simple correlation analysis, logistic regression with marginal effects test, regression analysis (for short-term effects) and least squares method (for the effects of long term). The logistic regression is a statistical modeling technique used to analyze the relationship between binary dependent variables and independent variables. It is commonly used when the dependent variable is categorical. As will be seen later in the text, the probability of a school being placed in the best quartiles of Ideb indicator was tested. Marginal effects provide information about how changes in the independent variables affect the probability of the dependent variable. In logistic regression, the marginal effects represent the change in the predicted probability of the dependent variable given a discrete (Dy/Dx) change in the independent variable, while holding all other independent variables constant. After the logistic regression model is projected, the marginal effects are determined using the partial derivatives of the predicted probabilities. The marginal effects provide information on how changes in the independent variables impact the calculated probabilities of the dependent variable. The equation of this probability is: *p = 1 / (1 + e^(-logit(p)))*.

The objective of the short-term analysis is to investigate the relationship between SE in each period and the performance of schools in the same period. For this purpose, panel data modeling was used, with the fixed effect. In this model, the intragroup transformation makes the time-

invariant effects null, reducing the number of control variables in relation to a grouped ordinary least squares model. Short-term analysis models are described by equations (1) and (2). In them, "Performance" it is the result of the school *i* in year *t*, S_{it} is the engagement indicator of students from school *i* in year *t*, P_{it} is the engagement indicator of parents from school *i* in year *t*. T_{it}, W_{it} and C_{it} are the indicators of engagement of teachers, workers and communities in the same token. E_{jit} are indicators of the number of stakeholders in the school *i* engaged in year *t* (with $0 \leq j \leq 5$). X_{kit} represents the group of control variables (detailed later), δ_i is the fixed effect of school *i* and φ_t is the fixed effect of year *t*.

$$\text{Performance}_{it} = \beta_0 + \beta_1 S_{it} + \beta_2 P_{it} + \beta_3 T_{it} + \beta_4 W_{it} + \beta_5 C_{it} + \Sigma\, \beta_{6k} X_{kit} + \delta_i + \varphi_t + \varepsilon_{it} \quad (1)$$

$$\text{Performance}_{it} = \beta_0 + \Sigma\, \beta_{1j} E_{jit} + \Sigma\, \beta_{2k} X_{kit} + \delta_i + \varphi_k + \varepsilon_{it} \quad (2)$$

The analysis of the effect of the SE on OP in the long term aims to analyze the relationship between SE in each period and the variation (Δ) of school performance in the period. The interval considered to calculate the dependent variable of OP variation comprises the period from 2011 to 2017. The variation of school performance ($\Delta_{Performance}$) refers to the difference between the Ideb of the 2017 and 2011. The purpose of the long-term analysis is to investigate the relationship between SE and school performance over a period. An ordinary least squares (OLS) model was used, with the variation (Δ) of the schools' performance between the beginning and the end of the period considered as a measure of performance. In equations (3) and (4), ΔPerformance is the variation in the school's performance during the considered interval. Other acronyms S, P, W, C etc. have identical nomenclature.

$$\Delta_{Performance} = \beta_0 + \beta_1 S + \beta_2 P + \beta_3 T + \beta_4 W + \beta_5 C + \Sigma\, \beta_{6k} X_k + \varepsilon \quad (3)$$

$$\Delta_{Performance} = \beta_0 + \beta_1 E + \Sigma\, \beta_{2k} X_k + \varepsilon \quad (4)$$

The table below summarizes how each hypothesis was tested in the study.

Table 2 – Hypothesis and statistical techniques

Hypothesis	Statistical techniques for hypothesis testing
H_1	Pearson correlations and regression analysis. If the correlation indicators and the regression coefficients are significant (different from zero) and positive, it will be possible to state that there are relationships between SE and OP
H_2	For the short term, the correlation analysis coefficients are examined for the different numbers of engaged stakeholders (E_0, E_1...E_5). Likewise, the aim is to observe whether the coefficients are significant and positive.
H_3	In the long-term analysis, it is observed whether engagement causes growth in Ideb. It will be observed whether such an impact is greater than the coefficients produced in the short term (H_1)
H_4	The results of the long-term analysis allow the quantification of the effect of continued stakeholder engagement with many stakeholders in improving the performance of schools over the years. In addition, logistic analysis with marginal effects will allow assessing the probability of a certain school with all engaged Stakeholders being in the upper part of the probability distribution.
H_5	The same logistical analysis with marginal effects will allow observing the different probabilities of presence in the upper quartiles if the stakeholder is varied.

4. Findings and Discussions

4.1 Descriptive Statistics

Table 2 presents the descriptive statistics Ideb in the years 2013, 2015 and 2017. The data show that the schools' performance grew continuously between 2013 and 2017, both in the first years of elementary school and in the last ones, suggesting that there was improvement in the performance of schools in the period. The $Ideb^{1-5}$ has a higher average than the $Ideb^{6-9}$ in all periods considered, and a higher standard deviation. In addition, there is a concentration of Ideb around the median, so that the interquartile range is contained in a range that varies from 15.8% ($Ideb^{6-9}$ in 2015) to 22.4% ($Ideb^{1-5}$ in 2013) of the sample size. While it is not central to the current analysis, it is worth noting that there are significant regional disparities in Ideb scores across different states and municipalities in Brazil. Generally, schools in wealthier regions tend to have higher scores compared to those in less affluent areas. It is important to note that, due to the cuts in the sample so that correlations are possible, the values in table 3 do not represent the census of Brazilian education. For the most wide information, it is recommended to consult official sources such as the Ministry of Education in Brazil.

Table 3 - Description of Ideb in the sample (short-term analysis)

Variable	Year	Average	Standard Deviation	Minimum Observed	1st quartile	Median	3rd quartile	Maximum Observed
$Ideb^{1-5}$	2013	5,15	1,14	1,30	4,30	5,30	6,00	8,90
	2015	5,51	1,06	0,80	4,80	5,60	6,30	9,80
	2017	5,77	1,08	2,10	5,00	5,90	6,50	9,90
$Ideb^{6-9}$	2013	4,23	0,83	1,50	3,70	4,30	4,80	7,50
	2015	4,42	0,83	0,90	3,80	4,50	5,00	8,50
	2017	4,57	0,87	1,30	4,00	4,60	5,20	8,50

Note. The table contains the descriptive statistics of the performance variables of the schools that make up the sample of models (1) and (2) (see Research Design chapter), of the short-term analysis, in the first and last years of fundamental education, for each one of the considered periods (2013, 2015 and 2017).

Table 3, below, shows the frequencies of the SE and the number of engaged stakeholders. The data shows that employee and community engagement scores are apparently the highest, while student engagement comes in the lowest numbers. However, the differences between the different stakeholders' engagement indicators are probably related to the diverse criteria used to construct each one of the variables (see Research Design). The present study did not aim to compare the levels of engagement between different stakeholders. This would require the construction of other engagement scales uniformly applicable to all Stakeholders. Therefore, Table 3 allows the comparative analysis of the engagement of a stakeholder in the different years and between the schools that offer the 1st to the 5th year with the schools that offer the 6th to the 9th year. It does not allow the comparative analysis of the engagement of different

stakeholders. In this sense, the data suggest that the engagement of students from 1st to 5th grade is greater than that of students from 6th to 9th grade, while employee engagement in schools that offer 6th to 9th grade is greater than in schools that offer the 1st to 5th year. In addition, there is an increase in community engagement between 2013 and 2017, in both groups of schools.

Table 4 - Average frequencies (percentage in decimal form) of the variables

	Ideb$^{1-5}$			Ideb$^{6-9}$		
Variable	2013	2015	2017	2013	2015	2017
S_{it}	0,36	0,40	0,39	0,31	0,33	0,34
P_{it}	0,44	0,48	0,47	0,43	0,47	0,45
T_{it}	0,45	0,47	0,47	0,45	0,46	0,47
W_{it}	0,62	0,64	0,61	0,69	0,69	0,65
C_{it}	0,60	0,62	0,67	0,61	0,63	0,67
E_0	0,05	0,04	0,04	0,04	0,04	0,04
E_1	0,17	0,15	0,15	0,17	0,15	0,15
E_2	0,28	0,26	0,26	0,29	0,28	0,27
E_3	0,26	0,27	0,28	0,27	0,28	0,29
E_4	0,17	0,19	0,18	0,16	0,18	0,17
E_5	0,07	0,08	0,08	0,06	0,07	0,08

Note. The table contains the frequencies of the independent variables. The table shows the stakeholders and the percentage (in decimal form) of those stakeholders that were considered "engaged". For example, 36% of schools offering education for the first five years (Ideb $^{1-5}$) have students (S_{it}) considered engaged. At the bottom of the table, it is depicted the number of engaged Stakeholders (E_n).

Table 5 contains correlations between the independent variables and the dependent variables. As shown there are positive correlations between the engagement indicators and schools' Ideb. The results also show first evidences of a positive relationship between the number of stakeholders engaged with the school's performance, as the correlation coefficient is negative when no stakeholder is engaged and is greater as more stakeholders are engaged.

Table 5 - Correlations between dependent and independent variables

	Stage Ideb$^{1-5}$			Stage Ideb$^{6-9}$		
Variable	2013	2015	2017	2013	2015	2017
S_{it}	0,13	0,14	0,14	0,10	0,10	0,11
P_{it}	0,12	0,15	0,13	0,10	0,12	0,14
T_{it}	0,13	0,12	0,11	0,10	0,12	0,09
W_{it}	0,15	0,17	0,19	0,19	0,17	0,16
C_{it}	0,09	0,10	0,10	0,10	0,11	0,12
E_0	**-0,10**	**-0,12**	**-0,11**	**-0,12**	**-0,11**	**-0,11**
E_1	**-0,13**	**-0,14**	**-0,16**	**-0,13**	**-0,15**	**-0,13**
E_2	**-0,06**	**-0,08**	**-0,06**	**-0,02**	**-0,07**	**-0,07**
E_3	0,06	0,05	0,06	0,06	0,07	0,07
E_4	0,12	0,12	0,11	0,10	0,11	0,10
E_5	0,11	0,14	0,12	0,10	0,11	0,11

Note: The table displays the correlations (Pearson) between the dependent and independent variables. In bold, see the number of engaged Stakeholders with negative relations (-) with Ideb when few publics are engaged (E_n with $n<3$). It is also noticed that all Stakeholders have positive correlations in all considered years and stages.

4.2 Logit Analysis with Marginal Effects

A logit analysis with marginal effects was used to understand the impact of the independent variables in a logistic regression model. As shown in table 6, the probability of a given school being among the best 75% of Ideb$^{1-5}$ if it only has students engaged (S_{it}=1) is 7.18% (Dy/dx). This data rises to 14.53% in the case of teachers engaging (T_{it}=1), 5.3% in the case of parent engagement, 6,4% in case of communities and 9,1% in the case of non-teaching workers. Table 6 shows outcomes in Ideb$^{1-5}$. The final equation for this analysis is $Y = P(Ideb1\text{-}5>75) = 0.45466$. This equation points out that if all stakeholders engage (dummy y=1), a certain school has a very significant 45.46% chance of being in the last quartile (25% best schools). There is no known study in the literature on School Management that points to such a high probability. It is worth noting that there are several factors that can contribute to a school having great educational outcomes. Variables such as teacher quality, curricula rigor, supportive climate (West et al., 2016), effective leadership (Leithwood et. al, 2004) and physical resources are attributes understood in the literature as explanatory elements. Despite this variety of influences, the aforementioned values reinforce the correlations (table 5) as it is also showing a high positive relationship between engagement and educational outcomes (see table 6). These findings is also in line with the result that the number of stakeholders engaged (E_n) strongly interferes in this relationship, and the more publics that engage, the better the results will be.

Table 6 - Marginal effects for the 3rd quartile (Ideb$^{1-5}$ >75%)

Variables	**Dy/dx**	**Std. Er.**	**z**
Students (S)	.0718298	.00535	13.44
Parents (P)	.053102	.00531	10.00
Teachers (T)	.1453534	.00812	17.89
Workers (W)	.0918648	.005	18.37
Community (C)	.0646542	.00504	12.83
All Stakeholders	$Y = P(Ideb^{1-5}>75) = \mathbf{0.45466}$		

Note: Each line represents SE of one stakeholder. This variable is categorical (1 for when engaged and 0 when not engaged). Dy/Dx represents the probability of a school being in the 3rd quartile. The Ideb considered higher than 75% results in 6.2. For example, if only students are engaged (S_{it}=1), the probability of the school being among the top 75% schools is 7.18. The probability goes to 45.46% if all Stakeholders are engaged (see equation).

This analysis of marginal effects also allows to calculate probabilities in different situations. As we want to know which of the stakeholders has the most significant effect on the SE > OP ratio, we indicate below the calculations in the situation in which there is the lowest probability. As can be seen, if teachers are not engaged, the equation leads to a probability of only 31.68% of the school appearing in the top 25% of the sample. Although not shown in Table 7, the probabilities are indicated here if the other Stakeholders are not engaged: Workers (36.27%),

Communities (39%) and parents (40.15%). As can be seen, professors are the public whose results are most influential (thus suggesting the acceptance of H_5).

Table 7 - Marginal effects for the 3rd quartile ($Ideb^{1-5}$ >75%) for those schools without teachers engaged.

Variable	Dy/dx	Std. Err.	z
Students	.0603054	.0045	13.41
Parents	.045033	.00446	10.10
Teachers* (non-engaged)	.1269035	.00621	20.43
Workers	.0763091	.00415	18.40
Community	.05449	.00423	12.88
All Stakeholders except teachers	$Y = P(Ideb^{1-5}>75) =$ ***0.3168***		

As shown in Table 8, the results are also consistent for $Ideb^{6-9}$. That is, the probability of a school with all stakeholders engaged being in the 3rd quartile is a high 44.14%. Although not shown in Table 8, once again teachers are the ones who most interfere in the SE>OP relationship, leading to a probability of 30.8% if they are not engaged.

Table 8 - Marginal effects after logit for the 3rd quartile ($Ideb^{5-9}$ >75%)

Variable	Dy/dx	Std. Err.	z
Students	.0574108	00558	10.29
Parents	.0678916	00525	12.92
Teachers	.1410997	00851	16.57
Workers	.0921521	00534	17.26
Community	.0797711	00512	15.57
All Stakeholders except teachers	$Y = P(Ideb^{5-9}>75) =$ ***0.4414***		

On the whole, logistic regression with marginal effects is a valuable tool for understanding the impact of predictors on binary or categorical outcomes as is this present study. It combines many characteristics as interpretability, flexibility, and hypothesis testing. It grants comprehensive analysis and insightful interpretation of the results.

4.3 Short-term Analysis

The short-term analysis brought evidence of an association between the engagement of each stakeholder and the performance of schools in the same school year, with such evidence being strong in the case of teachers and moderate in the case of other stakeholders. When the number of engaged stakeholders was considered as a measure of engagement, strong evidence of a positive association was found between such number and the performance of schools. Findings from short-term analyzes provide partial support for H_1 and consistent support for H_3.

Table 9- Panel regression coefficients for the analysis of the effect of SE on OP in the short term

Variable	Ideb$^{1-5}$	Ideb$^{6-9}$
S_{it}	**0,012***	0,008
P_{it}	**0,012***	0,004
T_{it}	**0,035*****	**0,072*****
W_{it}	0,011	**0,016***
C_{it}	0,010	**0,023*****
Number of Observations	44.451	38.169
Number of Schools	26.246	22.547

Note. Results of the panel regressions of the short-term analysis, containing the coefficients of the stakeholder engagement variables and the significance levels: 1%(***), 5%(**) and 10%(*).

Table 10 - Panel regression coefficients for the analysis of the effect of the number of stakeholders engaged (E_n) on the performance of schools in the short term

Variable	Ideb$^{1-5}$		Ideb$^{6-9}$	
E_0	**- 0.047**	*******	**-0,073**	***
E_1	**- 0,043**	***	**-0,054**	***
E_2	**-0,031**	***	**-0,031**	***
E_3	**0,028**	***	**0,060**	***
E_4	**0,048**	***	**0,069**	***
E_5	**0,045**	**	**0,084**	***
Number of Observations	44.451		38.169	
Number of Schools	26.246		22.547	

Nota. The table shows the results of the panel regressions of the short-term analysis, containing the coefficients of the variables for the number of engaged stakeholders (E_n) and the levels of significance: 1% (***), 5%(**) and 10%(*).

4.4 Long-term Analysis

The results of the long-term analysis allow the quantification of the effect of continued stakeholder engagement in improving the performance of schools over the years. Taking the model with the dependent variable ΔIdeb$^{1-5}$, the data in Table 15 indicate that a school that managed to engage all stakeholders in all three periods considered had on average, a gain in the Ideb variation of 0.357 in in relation to the other schools, a value that represents 45% of the average variation of the sample's Ideb$^{1-5}$. Contrary to what was inferred from the short-term analysis, which showed a marginal effect of SE on the performance of schools in the same school year, the long-term analysis suggests that the continuity of stakeholder engagement over time is of great relevance on improving school performance over time.

Table 15 - Regression coefficients for the analysis of the effect of the continuity of SE and the number of stakeholders engaged over time on the variation (Δ) of school performance

Variável	ΔIdeb$^{1-5}$		ΔIdeb$^{6-9}$	
Constante	**2,920**	***	**3,287**	***
S	**0,067**	***	**0,069**	**
P	**0,035**	*	**0,090**	***
T	**0,126**	***	**0,121**	***
W	**0,045**	***	0,009	
C	**0,084**	***	**0,062**	***
E	**0,127**	***	**0,136**	***
Adjust R^2	**0,357**			

Nota. The table shows the results of the regressions of the long-term analysis for three years, containing the coefficients of the SE variables, the number of engaged stakeholders and the levels of significance: 1% (***), 5%(**) and 10%(*).

4.5 Theoretical and Practical Implications

The results of this study indicate - expressively – significant positive relationships between SE and OP. Although the ST's literature has previously pointed to such positive associations in a general and theoretical way, no other study has presented the methodological options and context analysis of the present paper. Among others, the present study enriches contribution of Bovaird & Löffler (2009), Ansell & Gash (2008) and Bryson at al. (2013). These studies and others also provide empirical evidence and theoretical foundations for understanding the benefits of SE in public organizations in general. They strongly emphasize the positive impact of SE on decision-making, trust-building, collaboration, and policy outcomes. In addition, there are several other academic researchers and institutions that have studied the particular impact of SE on public school outcomes. The present study - although with many differences in data collection and methodological options - reinforces those studies. Epstein (2002), Bryk, & Schneider (2002) and Henderson et al. (2007) provide analyses for exploring stakeholder engagement and educational outcomes. All of them, in accordance with the present paper, explores the role of trust and other gains in schools and its impact on student achievement. They emphasizes the importance of SE and collaborative relationships in education.

Studying public schools in a country like Brazil - notably with the use of highly significant samples and reliable data - represents important social impacts. The Brazilian National Education Plan (PNE) for the years between 2014 and 2024 intends, in its objective number 19, that schools have a democratic management. This plan also encourages the formation and strengthening of student unions and parents' associations, ensuring them the adequate spaces and operating conditions in schools and encouraging their articulation with school councils, through their respective representations. Although the present research does not touch several aspects of this national plan, it brought relevant data in this sense. Thus, in terms of its impacts on substantive reality, it points to the need for schools to be, effectively, participatory spaces. That is, that they are no longer managed in an autocratic and centralized way by their directors, but that they have active councils, that encourage the effective participation of all teachers in pedagogical planning and that bring communities and students to the center of decision-making. Stakeholder engagement can lead to better outcomes for a public organization for several reasons. Engaging stakeholders probably allows that a varied range of perceptions, interests,

and capabilities are considered in the decision-making. This inclusivity helps avoid mistaken and biased decision-making and leads to a more well-rounded choice. Moreover, SE allows public organizations to gain greater comprehension of the demands and expectations of those who are directly affected by their actions. This finer understanding can facilitate the shaping of more effective strategies and proposals that are more aligned with stakeholder interests. In addition, when public schools actively involve stakeholders as discussed in this paper, it demonstrates a deeper commitment to transparency, openness, and accountability. This approach also fosters richer trust among all stakeholders, as they feel their voices are effectively heard and their concerns are truly considered. In this sense, increased trust and legitimacy can enhance the organization's reputation and credibility. Notably in difficult contexts like public schools in Brazil, SE fosters collaboration and encourages the sharing of ideas and local knowledge. Stakeholders like parents, teachers, students and others may offer valuable insights and innovative solutions. This collaborative environment can lead to more effective and innovative outcomes.

5. Conclusions

The conclusion of the present study - innovative in terms of sample extension, method of measuring outcomes and its country of application – both reinforces and extends previous findings in the literature shading new theoretical light. As expressed in both ST and Education studies, SE can have significant impacts on the learning performance in public schools. When those schools actively work in partnership with various stakeholders, such as parents, students, teachers and community, it can lead to several positive outcomes. Stakeholders can provide valuable participation, identify priority areas, and contribute to the development of better educational practices, ensuring that improvement efforts are impactful.

Broadly speaking, the study found evidence supporting the general hypothesis of the study. The performance of public schools is positively associated with the engagement of its stakeholders.

	Hypotheses	Result	Summary of evidences
H_1	The engagement of each stakeholder (Y_{it}) is positively associated with the performance of schools in the short term	Partially accepted	In addition to the Pearson correlations, the analysis of panel regression in the short term demonstrates that there is significance in teacher engagement both in $Ideb^{1-5}$ and in $Ideb^{6-9}$. However, it is not possible to state that there is such a relationship for employees and communities in $Ideb^{1-5}$ and for students and parents in $Ideb^{5-9}$
H_2	The number of engaged stakeholders is positively	Accepted	Pearson's correlations point to negative values for E_n with $n<3$ and positive values for $n>3$. The

	associated with the performance of schools in the short term.		panel regression coefficients in the short term showed significance. Notably, for $Ideb^{1-5}$, this significance appears from 4 engaged stakeholders or more. For $Ideb^{5-9}$, this occurs from 3 or more.
H_3	The engagement of each stakeholder is even more positively associated with the performance of public schools when looking at long-term results.	Accepted	The SE effect of each Stakeholder in the long term was, for most Stakeholders, greater than in the short term. That is, the SE significantly influences the growth of results along the years ($\Delta_{Performance}$). While the short-term effect of students resulted in significant 0.012, in the long term this same stakeholder presented a coefficient of 0.073 for $Ideb^{1-5}$ (in $Ideb^{5-9}$ it was 0.008 in the short term against 0.069 in the long term).
H_4	The number of engaged stakeholders is positively associated with the performance of schools in the long term even more than what is observed in the short term	Accepted	Using the model with the dependent variable $\Delta Ideb^{1-5}$, the findings indicate that a school that engaged all stakeholders in all three periods had a gain in the $Ideb^{1-5}$ variation of 0.357 in in relation to the other schools, a value that represents impressive 45% of the variation in performance.
H_5	Among the different primary Stakeholders, teachers should be those whose engagement leads to greater educational outcomes.	Accepted	The logistic analysis with marginal effects indicates that the Stakeholder that, once not engaged, most decreases the probability of a school appearing among the top 75% is precisely the teachers.

Although there were other studies dedicated to analyzing elements of SE with public schools, this study innovated by including, in its analyzes, all primary stakeholders. This study also contributes to the Brazilian literature on Education, which has gained relevance only in the last two decades (Karino & Laros, 2017), but still has a long way to go before reaching the level of developed countries. We also bring contributions to the Stakeholder Theory. The general theme of the study is not innovative, since there is a vast amount of previous production that has brought evidence of the existence of such an association. However, most of these studies analyzed for-profit organizations and used financial indicators as a proxy for performance. This study answered a call for more studies within the scope of Stakeholder Theory and the field of SE dedicated to analyzing non-profit organizations and considering non-financial indicators as proxies of performance (Kujala et al., 2022; Kumar & Pansari, 2016; Laplume et al., 2008; Phillips et al., 2003). This study also contributes to the discussion about policies to develop Brazilian public education. The study suggests that continuously engaging stakeholders to act cooperatively generate value, especially in the long term. The results of the analyzes suggest that the effect of continuing stakeholder engagement on improving school performance may be of the order of magnitude of 45% of the average variation in performance between 2011 and 2017. That is extremely relevant. Based on the finding of the present study it is possible to

assert that "we are better together": when all stakeholders (notably teachers) are engaged, there is significant improvement in educational results in public schools.

References

Ansell, C., & Gash, A. (2008). Collaborative governance in theory and practice. Journal of Public Administration Research and Theory, 18(4), 543-571 doi: https://doi.org/10.1093/jopart/mum032

Ayuso, S., Rodríguez, M. Á., García-Castro, R., & Ariño, M. Á. (2011). Does stakeholder engagement promote sustainable innovation orientation?. *Industrial Management & Data Systems*. doi: https://doi.org/b79ws5

Ayuso, S., Rodríguez, M. A., García-Castro, R., & Ariño, M. A. (2014). Maximizing stakeholders' interests: An empirical analysis of the stakeholder approach to corporate governance. *Business & society*, *53(3)*, 414-439. doi: https://doi.org/f54r98

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of managemen*t, 17(1), 99-120. doi: https://doi.org/gpm

Barr, J., & Saltmarsh, S. (2014). "It all comes down to the leadership" the role of the school principal in fostering parent-school engagement. *Educational Management Administration & Leadership, 42(4)*, 491-505. doi: https://doi.org/f592tp

Birdthistle, N., Hynes, B., & Fleming, P. (2007). Enterprise education programmes in secondary schools in Ireland: A multi-stakeholder perspective. *Education+Training, 49(4)*, 265-276. doi: https://doi.org/dcgk9z

Bridoux, F., & Stoelhorst, J. W. (2016). Stakeholder relationships and social welfare: A behavioral theory of contributions to joint value creation. *Academy of Management Review, 41(2)*, 229-251. doi: https://doi.org/gfs5gh

Bryson, J. M., Quick, K. S., Slotterback, C. S., & Crosby, B. C. (2013). Designing public participation processes. Public Administration Review, 73(1), 23-34 doi: https://doi.org/10.1111/j.1540-6210.2012.02678.x

Bovaird, T., & Löffler, E. (2009). Understanding public management and governance. Public management and governance, 2, 3-13.

Bowen, D. J., Hyams, T., Goodman, M., West, K. M., Harris-Wai, J., & Yu, J. H. (2017). Systematic review of quantitative measures of stakeholder engagement. *Clinical and translational science, 10(5)*, 314. doi: https://doi.org/jf6q

Bryk, A. S., & Schneider, B. (2002). Trust in schools: A core resource for improvement. Russell Sage Foundation.

Bundy, J., Vogel, R. M., & Zachary, M. A. (2018). Organization–stakeholder fit: A dynamic theory of cooperation, compromise, and conflict between an organization and its stakeholders. *Strategic Management Journal, 39(2)*, 476-501. doi: https://doi.org/gcv997

Campos, L. V., Schmitt, J. C., & dos Reis Justi, F. R. (2020). Um panorama sobre engajamento escolar: Uma revisão sistemática: *Revista Portuguesa de Educação, 33(1)*, 221-246.

Chapleo, C., & Simms, C. (2010). Stakeholder analysis in higher education: A case study of the University of Portsmouth. *Perspectives, 14(1)*, 12-20. doi: https://doi.org/bqwmqg

Cheng, B., Ioannou, I., & Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic management journal, 35(1)*, 1-23. doi: https://doi.org/gcx5wc

Cho, E., Toste, J. R., Lee, M., & Ju, U. (2019). Motivational predictors of struggling readers' reading comprehension: The effects of mindset, achievement goals, and engagement. *Reading and Writing, 32(5)*, 1219-1242. doi: https://doi.org/gg9zzp

Civera, C., De Colle, S., & Casalegno, C. (2019). Stakeholder engagement through empowerment: The case of coffee farmers. *Business Ethics: A European Review, 28(2)*, 156-174. doi: https://doi.org/gg6cp2

Civera, C., & Freeman, R. E. (2019). Stakeholder relationships and responsibilities: A new perspective. *Symphonya. Emerging Issues in Management*, (1), 40-58. doi: https://doi.org/jf6t

Conner, T. W. (2017). Exploring the diverse effects of stakeholder engagement on organizational performance. *The American Review of Public Administration, 47(6)*, 634-647. doi: https://doi.org/gbqgx7

Duflo, E., Dupas, P., & Kremer, M. (2015). School governance, teacher incentives, and pupil–teacher ratios: Experimental evidence from Kenyan primary schools. *Journal of public Economics, 123*, 92-110. doi: https://doi.org/f68tj3

Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., & Van Voorhis, F. L. (2002). School, family, and community partnerships: Your handbook for action (2nd ed.). Corwin Press.

Freeman, R. E. (2007). Managing for Stakeholders (Working Paper n. 1186402). Recuperado de https://ssrn.com/abstract=1186402

Freeman, R. E., Kujala, J., Sachs, S., & Stutz, C. (2017). Stakeholder engagement: Practicing the ideas of stakeholder theory. In *Stakeholder engagement: Clinical research cases (pp. 1-12)*. Springer, Cham.

Freeman, R. E., & Phillips, R. A. (2002). Stakeholder theory: A libertarian defense. *Business ethics quarterly, 12(3)*, 331-349. doi: https://doi.org/dpbfz9

Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and "the corporate objective revisited". *Organization science, 15(3)*, 364-369. doi: https://doi.org/btmrwg

Freeman, R. E., Dmytriyev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), 1757-1770. Doi: https://doi.org/gjkqj7

Gertler, P. J., Patrinos, H. A., & Rubio-Codina, M. (2012). Empowering parents to improve education: Evidence from rural Mexico. *Journal of Development Economics, 99(1)*, 68-79. doi: https://doi.org/dm5cfw

Goddard, Y., Goddard, R., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers college record, 109(4)*, 877-896. doi: https://doi.org/gppfwn

Goldhaber, D., & Özek, U. (2019). How much should we rely on student test achievement as a measure of success?. *Educational Researcher, 48(7)*, 479-483. doi: https://doi.org/ggx55h

Gordon, M. F., & Louis, K. S. (2009). Linking parent and community involvement with student achievement: Comparing principal and teacher perceptions of stakeholder influence. *American journal of education, 116(1)*, 1-31. doi: https://doi.org/cd96q5

Harrison, J. S., Bosse, D. A., & Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic management journal, 31(1)*, 58-74. doi: https://doi.org/d74h7f

Harrison, J. S., & Wicks, A. C. (2013). Stakeholder theory, value, and firm performance. *Business ethics quarterly, 23(1)*, 97-124. doi: https://doi.org/fz9xxd

Henderson, A. T., Mapp, K. L., Johnson, V. R., & Davies, D. (2007). Beyond the bake sale: The essential guide to family-school partnerships. The New Press.

Henisz, W. J., Dorobantu, S., & Nartey, L. J. (2014). Spinning gold: The financial returns to stakeholder engagement. *Strategic Management Journal, 35(12)*, 1727-1748. doi: https://doi.org/ggb67z

Jimenez, E., & Sawada, Y. (1999). Do community-managed schools work? An evaluation of El Salvador's EDUCO program. *The world bank economic review, 13(3)*, 415-441. doi: https://doi.org/gm5rp4

Karino, C. A., & Laros, J. A. (2017). Estudos brasileiros sobre eficácia escolar. *Examen: Política, Gestão e Avaliação da Educação, 1(1)*, 32-32. Recuperado de https://examen.com.br/rev/article/view/25/3

Kim, J. S., Hemphill, L., Troyer, M., Thomson, J. M., Jones, S. M., LaRusso, M. D., & Donovan, S. (2017). Engaging struggling adolescent readers to improve reading skills. *Reading research quarterly, 52(3)*, 357-382. doi: https://doi.org/gbpbgn

Kujala, J., Sachs, S., Leinonen, H., Heikkinen, A., & Laude, D. (2022). Stakeholder Engagement: Past, Present, and Future. *Business & Society*, 00076503211066595. doi: https://doi.org/jf6x

Kumar, V., & Pansari, A. (2016). Competitive advantage through engagement. *Journal of marketing research, 53(4)*, 497-514. doi: https://doi.org/gf7kkf

Langrafe, T., Barakat, S. R., Stocker, F., & Boaventura, J. M. G. (2020). A stakeholder theory approach to creating value in higher education institutions. *The Bottom Line, 33(4)*, 297-313. doi: https://doi.org/jf6z

Laplume, A. O., Sonpar, K., & Litz, R. A. (2008). Stakeholder theory: Reviewing a theory that moves us. *Journal of management, 34(6)*, 1152-1189. doi: https://doi.org/d8cfps

Lei n. 13.005, de 25 de junho de 2014 (2014). Dispõe sobre a aprovação do Plano Nacional de Educação – PNE, com vigência de 10 (dez) anos. Recuperado de http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l13005.htm

Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). How leadership influences student learning. The Wallace Foundation.

Leana, C. R., & Pil, F. K. (2006). Social capital and organizational performance: Evidence from urban public schools. *Organization science, 17(3)*, 353-366. doi: https://doi.org/dc9frf

Loureiro, S. M. C., Romero, J., & Bilro, R. G. (2020). Stakeholder engagement in co-creation processes for innovation: A systematic literature review and case study. *Journal of Business Research, 119*, 388-409. doi: https://doi.org/jf62

Mager, U., & Nowak, P. (2012). Effects of student participation in decision making at school. A systematic review and synthesis of empirical research. *Educational research review, 7(1)*, 38-61. doi: https://doi.org/dfczpj

Mascena, K. M., & Stocker, F. (2020). Gestão de Stakeholders: Estado da Arte e Perspectivas. Future Studies Research Journal: *Trends & Strategies, 12(1)*, 1-30. doi: https://doi.org/jf63

Mitchell, J. R., Mitchell, R. K., Hunt, R. A., Townsend, D. M., & Lee, J. H. (2020). Stakeholder engagement, knowledge problems and ethical challenges. *Journal of business ethics, 175*, 75-94. doi: https://doi.org/gntkdm

Mitra, D. (2004). The significance of students: can increasing" student voice" in schools lead to gains in youth development?. *Teachers college record, 106(4)*, 651-688. doi: https://doi.org/dbtkcv

Moonie, S., Sterling, D. A., Figgs, L. W., & Castro, M. (2008). The relationship between school absence, academic performance, and asthma status. *Journal of school health, 78(3)*, 140-148. doi: https://doi.org/bfn4tr

Monteduro, F., Cecchetti, I., Lai, Y., & Allegrini, V. (2021). Does stakeholder engagement affect corruption risk management?. *Journal of Management and Governance, 25(3)*, 759-785. doi: https://doi.org/jf65

Nishimura, M. (2017). Community participation in school management in developing countries. In *Oxford Research Encyclopedia of Education*. doi: https://doi.org/ggn6cs

Organisation for Economic Cooperation and Development - OECD (2021). Education at a Glance 2021. Paris: Autor. doi: https://doi.org/10.1787/b35a14e5-en

Phillips, R., Freeman, R. E., & Wicks, A. C. (2003). What stakeholder theory is not. *Business ethics quarterly, 13(4)*, 479-502. doi: https://doi.org/fz5mnc

Reeves, P. M., Pun, W. H., & Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education, 67*, 227-236. doi: https://doi.org/gpnfn7

Ronfeldt, M., Farmer, S. O., McQueen, K., & Grissom, J. A. (2015). Teacher collaboration in instructional teams and student achievement. *American Educational Research Journal, 52(3)*, 475-514. doi: https://doi.org/fcvs

Sarafidou, J. O., & Chatziioannidis, G. (2013). Teacher participation in decision making and its impact on school and teachers. *International Journal of Educational Managementm 27(2)*, 170-183. doi: https://doi.org/jf66

Signori, S. (2017). From "managing for stakeholders" to "managing with stakeholders": when stakeholders can help rescue a company. In *Stakeholder engagement: clinical research cases (pp. 167-192)*. Springer, Cham.

Sulkowski, A. J., Edwards, M., & Freeman, R. E. (2018). Shake your stakeholder: Firms leading engagement to cocreate sustainable value. *Organization & Environment, 31(3)*, 223-241. doi: https://doi.org/gd66fx

Taniguchi, K., & Hirakawa, Y. (2016). Dynamics of community participation, student achievement and school management: the case of primary schools in a rural area of Malawi. *Compare: A Journal of Comparative and International Education, 46(3)*, 479-502. doi: https://doi.org/jf68

Van Puyvelde, S., Caers, R., Du Bois, C., & Jegers, M. (2012). The governance of nonprofit organizations: Integrating agency theory with stakeholder and stewardship theories. *Nonprofit and voluntary sector quarterly, 41(3)*, 431-451. doi: https://doi.org/dq7xbz

West, M. R., Kraft, M. A., Finn, A. S., Martin, R. E., Duckworth, A. L., Gabrieli, C. F., ... & Gabrieli, J. D. (2016). Promise and paradox: Measuring students' noncognitive skills and the impact of schooling. Educational researcher, 45(1), 46-59. Doi: 10.3102/0162373715597298