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Technical Report

A study of the effects of NAME on student achievement in Brazil

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Executive Summary

This research effort, conducted in 2017, analysing 2015 student assessment data, attempted to determine whether grade 5 and 9 NAME students have higher rates of performance on Prova Brasil (mathematics and Portuguese). A quasi-experimental design was applied, where NAME schools were matched with similar schools that did not implement NAME.

Overview of NAME

NAME is a learning system for public-school students from kindergarten to the ninth grade designed to meet the requirements of laws and guidelines created by the Brazilian Government. The curriculum covers the subjects of Portuguese, math, science, history, geography, alphabetization, English, and arts. Preparation materials for the main Brazilian external academic exams, ANA (reading, writing, and math) and Prova Brasil (Portuguese and math), are also provided.

Intended Outcomes

Though the NAME curriculum covers a range of subject areas, this study focuses on academic achievement in Portuguese and mathematics. Specifically, Portuguese and mathematics achievement at grades 5 and 9 as measured by the Prova Brasil are the outcomes this research investigates.

Research Question

The following research question is assessed in this study:

Do grade 5 and grade 9 students exposed to the NAME learning system from 1st and 6th grade, demonstrate higher achievement in Portuguese and mathematics, compared to a matched group of schools' students not exposed to NAME, as measured by national achievement assessments?

Key Findings

Results of the analyses indicated that in 2015, 5th and 9th grade students in NAME schools scored statistically significantly higher than comparison school students in both mathematics and Portuguese.

1. Fifth grade students who had received NAME since first grade, from schools already using NAME, outscored students from similar schools (matched on 2009 IDEB, 2013 SES, and 2015 school complexity) by 4 points on the Prova Brasil Portuguese assessment and 11 points on the Prova Brasil math assessment in 2015.
2. Ninth grade students who had received NAME since sixth grade, from schools already using NAME, outscored students from similar schools (matched on 2011 IDEB, 2013 SES, and 2015

school complexity) by 3 points on the Prova Brasil Portuguese assessment and 6 points on the Prova Brasil math assessment in 2015.

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Introduction

As a learning system for public schools in Brazil, Núcleo de Apoio a Municípios e Estados (NAME) is a solution dedicated to students from low-income backgrounds, whose parents cannot afford private school fees. In Brazil, it is very common for higher income families to enroll their children in private schools. The public educational system for K-12 has a very bad reputation due to low investment in public education and typically lower student achievement. This study investigates whether students in public schools implementing NAME demonstrate higher achievement on the 2015 national standardized exam, Prova Brasil, compared to students in public schools not implementing NAME.

Background

In education in Brazil, a Sistema de Ensino (i.e. learning system) is an integrated business solution designed for educational institutions and their educational environment, which optimizes teaching and learning through diagnosis, customization, implementation and monitoring of a particular set of dynamic educational resources and tools. NAME began in 1999, establishing pedagogical partnerships with public schools in a few cities in the state of São Paulo. Based on the success of the set up in those locations, today NAME has expanded to cover all the Brazilian regions, in 89 municipalities, with over 114,000 students.

NAME's commitment is to provide K-9 students of public municipalities the most advanced pedagogical, technological and administrative resources, always seeking to offer quality public education. The program consists of rendering services through the use of didactic material according to the Law of Basic Education Guidelines, the National Curriculum Parameters and the National Curriculum References, together with pedagogic consultancy, continued distance education, support service to inclusive education and also education technologies.

Description of NAME

Respecting laws and guidelines defined by the Brazilian Government, NAME provides a learning system from kindergarten to the ninth grade for primary and secondary public schools. NAME is contracted by the municipalities through a bidding process. Each bid reflects the need of the municipality as defined by the Secretary of Education. The contract is annual and may be renewed each year. Aware of the diversity of educational proposals in a country of continental dimensions and committed to quality education for all, NAME provides educational solutions that can be tailored to different orientations of education departments.

NAME can be implemented in three segments of primary education: kindergarten, Elementary 1 (Fundamental 1: first to fifth grades), Elementary 2 (Fundamental 2: sixth to ninth grades). For each of

these three segments and at all ages, students and teachers receive didactic materials (books, activities books, notebooks, etc.) covering, according to the curriculum, knowledge on cultural, artistic, environment, sciences, math, reading, Portuguese and technologies. The delivery cycle of these resources is bimestrial. The collection includes teacher guides and student books and notebooks for Portuguese, math, science, history, geography, alphabetization, arts, and English language (optional). The collections also include specific preparation books for the main external academic exam: ANA (reading, writing, and math) and Prova Brasil (Portuguese and math).

The Elementary 1 curriculum is organized so that all students are literate by the end of the third grade. During fourth and fifth grades, the learning of the previous years is consolidated and expanded. The curriculum is fully aligned with the proposals of PNAIC (National Pact for Literacy at the Right Age). The materials offer individual assessment sheets for teachers to monitor student learning in all subjects. The Elementary 2 curriculum is organized by skills and abilities, giving priority to reading and writing in all subjects and ensuring literacy in all areas.

NAME also offers an effective program of evaluation of learning so that the skills are evaluated based on predefined matrices. An action plan for improvement of school work is created based on the results from the evaluation, which is focused on improving the academic achievement of students. The evaluation of learning for various grade levels includes:

1. First to ninth grades: diagnostic evaluations with application guide and correction
2. First to ninth grades: assessments related to bimonthly content
3. Third grade: simulated ANA
4. Fourth and eighth grades: Simulated Prova Brasil
5. Fifth and ninth grades: Rewarded Prova Brasil Mock test

NAME also provides two digital platforms to support the process of teaching and learning:

1. NAME Online, with 55,000 pages of content distributed in various areas of knowledge from news, biographies, simulated the interactive activities, animations, to games, videos and encyclopedia, and
2. Digital NAME for curriculum and classroom management.

Together with these print resources, NAME provides solutions and services for educational and pedagogical support and professional development. One of the great advantages of the education system is to support educators, both in teacher training, and in supporting the development of lessons. Therefore, in addition to in-person educational events and visits to schools, educators have an online learning platform: NAME Interactive. NAME provides support services for an inclusive education

program with didactic procedures guidance, indication of pedagogical mediations, clarification of doubts about inclusion, and referrals suggestion.

The schools of the municipality reach a minimum level of implementation up to the end of the first year of adoption. The full potential of impact on learner outcomes is reached when students complete the learning cycle until the application of the national exam:

After 5 years in the first elementary (1st to 5th grade), and after 4 years in the second elementary (6th to 9th grade). The students in these cases studied during the whole segment in the same methodological and pedagogical context.

The Present Study

The outcomes investigated in this study are 2015 Portuguese and mathematics achievement for students in grades 5 and 9. The research question addressed in this study is: Do grade 5 and grade 9 students exposed to the NAME learning system demonstrate higher achievement in Portuguese and mathematics, compared to a matched group of students not exposed to NAME, as measured by national achievement assessments?

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Method

A quasi-experimental design with matching was implemented to study whether there were differences in student achievement among students in their fifth and ninth grades of education between students exposed to NAME and a comparison group of students who were not exposed. Decisions to use NAME are made at the municipality level.

NAME School Selection

A total of 73 schools from 22 municipalities were eligible for inclusion in the study. All NAME municipal schools included in this study implemented NAME for at least five years before 2015 for Elementary 1 schools (1,233 students) and four years before 2015 for Elementary 2 schools (1,984 students). This allowed for those students tested in 2015 (i.e., 5th and 9th graders) to have used NAME for the entirety of their Elementary 1 or Elementary 2 schooling. On average, NAME municipalities in this study had been implementing NAME for eight years before 2015.

The majority of the Elementary 1 (i.e., 21 of 27 or 78%) and Elementary 2 schools (i.e., 24 of 27 or 89%) were from Sao Paulo. Only two NAME Elementary 1 schools were designated as Rural (i.e., 2 of 27 or 7%) and all 27 Elementary 2 NAME schools were designated as urban. One of the rural schools was from Sao Paulo and one was from Minas Gerais.

Comparison School Selection

A matched comparison group of schools was selected at a ratio of 5 to 1. Comparison schools were drawn from the entire population of schools from the same state as the NAME school. Further, five schools were matched to each NAME school based on location (rural, urban), socio-economic level, school complexity, and prior IDEB score (except in one case at ES2, where only two proper matches were found). Matching was completed exclusively at the school level (see Table 1 and Table 2).

Table 3 and Table 4 show the school counts for each level of socioeconomic status. Table 5 and Table 6 show the school counts for each level of school complexity. The school complexity scale has six levels, each defining a combination of increasing enrollment, grade level coverage and shifts (see Table 7).

An IDEB score (The Basic Education Development Index) is calculated for each school in Brazil. The score is based of the average students' Portuguese and mathematics achievement assessment scores (Prova Brasil) along with the progression rate for the schools' 5th and 9th grade students. The index is separated into ten full point units, and these units are separated into tenths, resulting in a hundred point scale. When an exact IDEB match did not exist, as was the case for the Elementary 1 school

sample, a matching school was randomly selected from candidates within one point. The comparison group included 135 Elementary 1 schools (8,545 students) and 132 Elementary 2 schools (11,320 students). Of the 132 matched Elementary 1 schools, 90 (or 68%) had an exact IDEB match (i.e., to 0.1 point) with the NAME school. Table 8 and Table 9 provide the sample IDEB statistics for matched groups.

Even though matching on prior school IDEB score was not exact in all cases at 5th grade, the difference between the groups was not statistically significant and only 0.125 (0.16 standard deviations, Mean NAME IDEB = 6.085, Mean Comparison IDEB = 5.960, see Table 8). This results meets the What Works Clearinghouse (WWC) standards for baseline equivalence. The WWC does, however, require including IDEB in the 5th grade statistical models to adjust for the remaining differences after matching (i.e., 0.05 < 0.16 SDs < 0.25). (What Works Clearinghouse Standards Handbook Version 4.0, p14)

Participants

A total of 73 NAME schools from 22 municipalities were eligible for inclusion in the study. These schools fully implemented NAME with their Elementary 1 students since 2011 (i.e., 1st through 5th grade) or with their Elementary 2 students since 2012 (i.e., 6th through 9th grade). Eleven Elementary 1 and six Elementary 2 schools did not have 2009 or 2011 IDEB Indices and thus could not be matched, this brought the list of eligible NAME schools down to 28 Elementary 1 and 28 elementary 2 schools.

The analytic sample was comprised of Brazilian students in grades 5 and 9 attending public schools who took the Prova Brasil exam in 2015. In 2015 there were 1,908 5th grade students and 2,944 9th grade students listed as attending NAME schools. Of these, 1,665 and 2,363 students had scores on the Prova Brasil respectively. Eleven Elementary 1 and six Elementary 2 schools did not have 2009 or 2011 IDEB Indices and thus could not be matched, bringing the samples down to 1,255 and 2,018. Lastly, one Elementary 1 and one Elementary 2 school did not have close IDEB matches, when also considering the other matching factors. These NAME schools also could not be matched, bringing the NAME samples down to a final sample of 1,233 5th grade and 1,984 9th grade student Prova Brasil scores.

A matched comparison group of schools was selected at a ratio of 5 to 1. Comparison schools were drawn from the entire population of schools from the same state as the NAME school. The comparison group included 135 Elementary 1 schools (8,545 students) and 132 Elementary 2 schools (11,320 students). All 27 participating Elementary 1 NAME schools had 5 available matches. One of the 27 participating Elementary 2 NAME schools only had two available matches resulting in the 132 Elementary 2 comparison matched schools. See Table 1 and Table 2 for a summary of the matching process.

Data Collection

Three publicly available data sources released by INEP were merged and analyzed for this study: 2015 School Educational Indicators, School IDEB Index, and 2015 student Prova Brasil achievement scores. School data from the 2015 educational indicators and IDEB was used to find matching schools. The characteristics used for matching included school locale (urban, rural), school complexity (6 levels), and school socioeconomic level (7 levels). Prior school IDEB score was also used, 2009 for Elementary 1 schools and 2011 for Elementary 2 schools. Individual student 2015 Prova Brasil scores for mathematics and Portuguese from 2015 were analyzed to compare the groups' achievement.

School socioeconomic level is calculated as an average of the schools students across all grade levels and is presented as seven levels ranging from very low to very high (see Table 3 and Table 4). The school complexity scale has six levels, each defining a combination of increasing enrollment, grade level coverage and shifts (see Table 5 and Table 6). An IDEB score (The Basic Education Development Index) is calculated for each school in Brazil. The score is based of the average students' Portuguese and mathematics achievement assessment scores (Prova Brasil) along with the progression rate for the schools' 5th and 9th grade students. The index is separated into ten full point units, and these units are separated into tenths, resulting in a hundred point scale. Table 8 and Table 9 show the IDEB sample statistics.

Outcome Measures

Portuguese and math achievement data from the 2015 administration of Prova Brasil were analyzed as the outcome measures in this study. The Prova Brasil is administered every two years to students in grades 5 and 9 in public schools in Brazil that have at least 20 students. In 2015 only 0.4% (n=22) of the municipalities did not have results reported (INEP, 2015). The Portuguese language section focuses on reading while the mathematics section emphasizes problem solving (National Institute of Educational Studies and Research Anísio Teixeira (INEP), 2016). All students in the dataset had math and Portuguese scores.

Test books are created using a system called incomplete blocks which allows a large number of items to be included on the assessment without each student having to answer a large number of items. For the 5th grade assessment, seven blocks of 11 items were compiled for a total of 77 possible items for each subject area. Each test booklet consisted of two blocks, resulting in 21 different test booklets with 22 Portuguese items
and 22 mathematics items. At the 9th grade, each block had 13 items for a total of 91 possible questions for each subject area. Each test booklet at the 9th year had 26 Portuguese and 26 mathematics items.

Scores on the assessments fall along a proficiency scale that ranges from 0 to 500. These scores are divided into nine levels on a scale that ranges from 125 to 350 for grade 5 math, 150 to 350 for grade 5 Portuguese, 200 to 425 for grade 9 math, and 200 to 400 for grade 9 Portuguese. The scale was developed using Item Response Theory (IRT) modeling. The scale is divided into proficiency levels that occur at 25 point increments.

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Results

Research Question: Do grade 5 and grade 9 students exposed to the NAME learning system from 1st and 6th grade, demonstrate higher achievement in Portuguese and mathematics, compared to a matched group of schools' students not exposed to NAME, as measured by national achievement assessments?

An independent samples orthogonal contrast was used to statistically test the difference in the matched group means. In addition, since students are nested within schools, the bootstrap technique was used, randomly resampling with replacement from within schools to produce accurate statistical tests (i.e., robust to misspecification of the stochastic model, efficient and consistent). The analysis may be thought of as a comparison between NAME and matched schools, where the contribution from each school is weighted by the number of available student scores and how those scores are related to each other.

After comparing the group means, NAME students statistically significantly outperformed their matched peers at both 5th and 9th grade in both Portuguese and math. Details of the statistical difference and degree of impact is discussed in the sections below. It should be noted that prior school IDEB score was entered into the Elementary 1 school statistical models to further remove any remaining group difference after matching. This is in accordance with current recommendations from the What Works Clearinghouse.

Results at each grade level are presented below.

Grade 5

On the mathematics portion of Prova Brasil, grade 5 NAME students (n=1,233) scored an average of 250.67 after adjusting for prior school IDEB, whereas matched comparison students (n=8,545) scored an average of 239.60 (SD=46.63). NAME students significantly outperformed comparison students by 11.07 points ($p < .01$, see Table 10).

Likewise, on the Portuguese portion of Prova Brasil, grade 5 NAME students scored an average of 227.32 after adjusting for prior school IDEB, whereas matched comparison students scored an average of 222.93 (SD=46.05). NAME students again significantly outperformed comparison students by 4.39 points ($p < .01$, see Table 11).

Grade 9

On the mathematics portion of Prova Brasil, grade 9 NAME students (n=1,984) scored an average of 261.40 and matched comparison students (n=11,370) scored an average of 255.32 (SD=45.59). NAME students significantly outperformed comparison students by 6.09 points ($p < .01$, see Table 12).

Similarly, on the Portuguese portion of Prova Brasil, grade 9 NAME students scored an average of 254.87 while matched comparison students scored an average of 252.12 (SD=48.66). NAME students again significantly outperformed comparison students by 2.74 points ($p = .02$, see Table 13).

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Discussion

This study retrospectively analyzed 2015 Prova Brazil student test scores from matched NAME and comparison schools. The

Key Finding 1: Fifth grade students who had received NAME since first grade, from schools already using NAME, outscored students from similar schools (matched on 2009 IDEB, 2013 SES, and 2015 school complexity) by 4 points on the Prova Brasil Portuguese assessment and 11 points on the Prova Brasil math assessment in 2015.

Similarly,

Key Finding 2: Ninth grade students who had received NAME since sixth grade, from schools already using NAME, outscored students from similar schools (matched on 2011 IDEB, 2013 SES, and 2015 school complexity) by 3 points on the Prova Brasil Portuguese assessment and 6 points on the Prova Brasil math assessment in 2015.

Generalizability of Findings

The results from this study should be generalizable to students from Brazilian public schools similar to the NAME schools. Specifically, urban schools with an average medium to high socioeconomic level, but that are also complex in their size and structure, could expect positive impacts on student achievement as measured by the state sponsored exams.

Limitations

Because this study is retrospective, there is limited information on how NAME materials were implemented in the schools. There may be differences between high implementers and low implementers, which were not possible to determine from the data available. Assessing the extent to which schools are implementing various resources effectively and whether there are dramatic differences in implementation may provide greater insights into the effectiveness of the program.

Ideally, to evaluate effectiveness one would conduct a prospective study, where baseline measures can be established and sample representativeness can be assured, prior to the implementation of the intervention. Given that there is a new version of the curriculum that has been launched in 2016, now would be the ideal time to do a prospective study with municipalities that are just beginning to use this new version of NAME. By working directly with municipalities and schools, a baseline of achievement can be established prior to 2017. To establish this baseline may mean working with schools to obtain grades or other assessment data that could be used as a proxy pretest since Prova Brasil is only given at grades 5 and 9.

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Tables

Table 1. Elementary 1 NAME Schools Matching Process

27 ES1 NAME schools matched to 135 comparison schools (5 matches per NAME school)
28 ES1 NAME schools have IDEB 2009 scores
11 ES1 NAME schools have no IDEB 2009 scores, these are excluded
14 ES1 NAME schools have more than 5 exact matches
When more than 5 exact matches are available, the 5 matches were chosen randomly without replacement
1 NAME school had 5 exact matches available
1 NAME school had 4 exact matches available
1 NAME school had 3 exact matches available
2 NAME schools had 2 exact matches available
4 NAME schools had 1 exact match available
5 NAME schools had no exact match on IDEB 2009
When IDEB 2009 tolerance was set $\pm$1.0, 27 schools had 5 matches
90 of 135 matches were exact matches, including IDEB (to 0.10 points)
1 ES1 NAME school did not match within 1.0 IDEB points (ID# 3111-4928), this school was excluded
IDEB 2009 group comparison
135 comparison schools, mean = 5.960, SD = 0.6744
27 NAME schools, mean = 6.085, SD = 0.7824
162 Included Matched Schools, range [4.2, 8.2], mean = 5.981, SD = 0.6925
10,213 MG and SP Schools, range [0.2, 9.0], mean = 5.313, SD = 0.7729
Group Mean Difference = 0.1252, ES = 0.162, p = 0..393
All matches exact on State, Local (urban v rural), School Complexity, and Socioeconomic Status

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Table 2. Elementary 2 NAME Schools Matching Process

27 ES2 NAME schools with 132 exact matching schools (up to 5 exact matches per NAME school)
28 ES2 NAME schools have IDEB 2011 scores
6 ES2 NAME schools have no IDEB 2011, these schools are excluded
25 ES2 NAME schools have more than 5 exact matches
When more than 5 exact matches are available, the 5 matches were chosen randomly without replacement
1 ES2 NAME school had 5 exact matches
1 ES2 NAME school had 2 exact matches
1 NAME school had no close match on IDEB 2011 (ID# 35014874), this school was excluded
no match within 3.0 points
MG and SP IDEB 2011 ranged from 0.3 to 7.2

Table 3. Socio-economic Status 2011-13 Grade 5

	High		Middle		High Middle	
Study Group	Count	% Within	Count	% Within	Count	% Within
School Did Not Use NAME	15	11.1	15	11.1	105	77.8
NAME Complete School	3	11.1	3	11.1	21	77.8

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Table 4. Socio-economic Status Grade 9

Study Group	High		Middle		High Middle	
	Count	% Within	Count	% Within	Count	% Within
School Did Not Use NAME	15	11.4	15	11.4	102	77.3
NAME Complete School	3	11.1	3	11.1	21	77.8

Table 5. Level of Complexity Grade 5

Study Group	Level 1		Level 2		Level 3		Level 4		Level 5	
	Count	% Within	Count	% Within	Count	% Within	Count	% Within	Count	% Within
School Did Not Use NAME	15	11.1	65	48.1	15	11.1	5	3.7	35	25.9
NAME Complete School	3	11.1	13	48.1	3	11.1	1	3.7	7	25.9

Table 6. Level of Complexity Grade 9

Study Group	Level 3		Level 4		Level 5	
	Count	% Within	Count	% Within	Count	% Within
School Did Not Use NAME	60	45.5	55	41.7	17	12.9
NAME Complete School	12	44.4	11	40.7	4	14.8

Note: The groups were matched exactly on school complexity level, the difference between the groups is caused by the incomplete factorial resulting from one NAME school only having 2 available matches.

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Table 7. School Management Complexity Indicator Level Descriptions

Level 1	Less than 50 students, working in single shift and step and presenting the Kindergarten or Early Years or Elementary as higher step.
Level 2	Sized between 50 and 300 registrations, operating in two shifts, offering up to 2 stages and presenting the Kindergarten or Early Years as higher step.
Level 3	Sized between 50 and 500 registrations, operating in two shifts, with 2 or 3 steps and presenting the Final Years (Elementary II) as higher step.
Level 4	Sized between 150 and 1000 registrations, operating in 2 or 3 shifts, with 2 or 3 steps, with High School / Vocational or adult education as highest stage.
Level 5	Porte between 150 and 1000 enrollment, operating in three shifts, 2 or 3 with steps having adult education as highest stage.
Level 6	Top-sized 500 registrations, operating in three shifts, with 4 or more steps, with adult education as highest stage.

Table 8. IDEB 2009 Group Statistics Grade 5

Study Group	Number of Schools	Mean	Std. Deviation	Mean Difference	P-Value
School Did Not Use NAME	135	5.960	.6744	-.1252	.393
NAME Complete School	27	6.085	.7824		

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Table 9. IDEB 2011 Group Statistics Grade 9

Study Group	Number of Schools	Mean	Std. Deviation
School Did Not Use NAME	132	4.324	.7073
NAME Complete School	27	4.348	.7282

Note: The groups were matched exactly on school IDEB score, the difference between the groups is caused by the incomplete factorial resulting from one NAME school only having 2 available matches.

Table 10. Matched Group Statistics and Model Parameters for Grade 5 Math

Parameter	N	Mean	Std. Deviation
School Did Not Use NAME	8,545	239.60	46.63
NAME Complete School	1,233	250.67	47.15

					95% Confidence Interval	
Parameter	B*	Bias	Std. Error*	P-Value*	Lower*	Upper*
Intercept	205.028	0.020	4.392	0.001	196.915	214.004
IDEB 2009	7.670	0.004	0.688	0.001	6.223	9.006
Group Mean Difference	11.067	-0.051	1.424	0.001	8.492	13.673

**Note: These estimates are bias corrected bootstrap estimates. Bootstrap estimates are based on 1000 samples*

Means and Group Mean Difference are statistically adjusted for IDEB 2009

NAME mean = comparison mean + group mean difference

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Table 11. Matched Group Statistics and Model Parameters for Grade 5 Portuguese

Parameter	N	Mean	Std. Deviation
School Did Not Use NAME	8,545	222.93	46.06
NAME Complete School	1,233	227.32	44.62

					95% Confidence Interval	
Parameter	B*	Bias	Std. Error*	P-Value*	Lower*	Upper*
Intercept	185.539	-0.098	4.328	0.001	176.950	193.935
IDEB 2009	7.021	0.021	0.673	0.001	5.706	8.416
Group Mean Difference	4.388	-0.035	1.256	0.002	1.975	7.046

**Note: These estimates are bias corrected bootstrap estimates. Bootstrap estimates are based on 1000 samples*

Means and Group Mean Difference are statistically adjusted for IDEB 2009

NAME mean = comparison mean + group mean difference

Table 12. Matched Group Statistics and Model Parameters for Grade 9 Math

Parameter	N	Mean	Std. Deviation
School Did Not Use NAME	11,370	255.32	45.59
NAME Complete School	1,984	261.40	47.08

Parameter	B*	Bias	Std. Error*	P-Value*	95% Confidence Interval	
					Lower*	Upper*
Intercept	261.402	0.038	1.038	0.001	259.476	263.557
Group Mean Difference	6.085	-0.036	1.128	0.001	3.971	8.290

**Note: These estimates are bias corrected bootstrap estimates. Bootstrap estimates are based on 1000 samples*

Table 13. Matched Group Statistics and Model Parameters for Grade 9 Portuguese

Parameter	N	Mean	Std. Deviation
School Did Not Use NAME	11,370	252.12	48.66
NAME Complete School	1,984	254.87	49.58

Parameter	B*	Bias	Std. Error*	P-Value*	95% Confidence Interval	
					Lower*	Upper*
Intercept	254.867	0.026	1.104	0.001	252.649	257.069
Group Mean Difference	2.744	-0.015	1.177	0.022	0.357	5.182

**Note: These estimates are bias corrected bootstrap estimates. Bootstrap estimates are based on 1000 samples*