

CPRE

CONSORTIUM FOR POLICY RESEARCH IN EDUCATION

TEACHERS COLLEGE

COLUMBIA UNIVERSITY



Year-Two Interim Report: State Curricula and the BNCC Standards

September, 2020

Consortium for Policy Research in Education (CPRE)

The Consortium for Policy Research in Education (CPRE) brings together education experts from renowned research institutions, including Teachers College, Columbia University; the University of Pennsylvania; Harvard University; Stanford University; the University of Michigan; the University of Wisconsin-Madison; and Northwestern University. CPRE was launched in 1985 as the first national federally funded R&D center for state and local education policy. Since then, CPRE has studied the design, implementation, and effects of hundreds of policies and programs and is widely considered to be among the premier university-based research organizations focused on education policy and evaluation. CPRE researchers and staff at Teachers College (CPRE-TC) are continuing this long tradition by conducting rigorous research and evaluation that aims to improve elementary and secondary education through increased educational effectiveness, equity, and access.

To learn more about CPRE-TC, visit our website at www.tc.columbia.edu/cpre

©2020 Consortium for Policy Research in Education at Teachers College, Columbia University. All errors of either fact or interpretation are solely those of the authors.

Table of contents

<i>Introduction and Background</i> _____	2
<i>Methods</i> _____	3
<i>Results</i> _____	6
Supplemental Information _____	10
Contextualization of BNCC Standards by the States _____	12
Inclusion of the BNCC Subject-Specific Competencies in State Curricula _____	13
<i>Conclusions and Discussion</i> _____	14
Reproducing the BNCC Standards in State Curricula _____	14
Supplementing and Contextualizing Copied Standards _____	16
Future Direction of Research _____	17
<i>References</i> _____	20

Year-Two Interim Report: State Curricula and the BNCC Standards

Introduction and Background

In 2018, the Consortium for Policy Research in Education (CPRE) at Teachers College, Columbia University, launched a five-year study of the implementation of the K-5 Base Nacional Comum Curricular (National Common Curricular Base; BNCC), Brazil's first mandatory national curriculum standards. The broad aim of the study is to examine and document the complicated landscape of BNCC implementation, with the narrower goal of identifying factors that support or undermine a coherent implementation. In our baseline year, we focused on the BNCC theory of action and gathered early information on curriculum development, teacher training, textbook alignment, and assessments, what the Lemann Foundation refers to as the four pillars of BNCC implementation. Our initial efforts included the collection and analysis of BNCC-related documents as well as interviews with over 150 education stakeholders from the federal down to the school level.

During this past year, we continued to interview various stakeholders, selected our case study states (Maranhão, Mato Grosso do Sul, and São Paulo) and municipalities, and developed a national teacher survey to capture changes in teaching practices associated with the BNCC. We also undertook a deep comparative analysis to understand how the states incorporated the BNCC into their own curricula. More specifically, we sought to gain insights into the following questions: To what extent did states include the BNCC standards in their curriculum, and how did they contextualize the standards to account for their unique local contexts? To what degree did states introduce pedagogical instructions and the subject-specific BNCC competencies into their new curricula?

In this report, we share the findings from these curriculum analyses. We start by describing the methods we used to compare and contrast the state curricula. We then share the results of our analysis. Finally, we present potential explanations for our results, discussing why states may have made key decisions regarding the content and design of their curriculum and why those decisions matter. We conclude with an overview of the next steps in our research.

Methods

In this section we describe the approach we employed to compare the newly created state standards to the BNCC standards. We examined the third and fifth grade Math and History standards for all 27 states, which provided an analytic sample of 2,462 unique state standards. In addition to the fact that our broader study is focused on the early grades, we selected these grades and subjects because they differ across several dimensions, leading states to potentially take different approaches as they created their own standards. For example, states may have considered Math as requiring less contextualization than History. Fifth grade is also evaluated by SAEB (Sistema de Avaliação da Educação Básica - *Basic Education Evaluation System*) while third grade is not involved. Although SAEB scores are not directly associated with financial sanctions or consequences, given that they determine municipality and state IDEB (Development Index of Basic Education) scores, poor performance could invite public criticism. Given this, we might expect the state standards for the tested grade and subject, fifth-grade Math, to correspond most closely with the BNCC, while states may have felt they had more freedom to adapt the non-tested grade and subjects.

We drew on previous research¹ to develop measures of BNCC/state curriculum alignment and, leaning on guidance provided from the Ministry of Education (MEC), considered whether states were going beyond the BNCC standards to contextualize the standards, add supplemental information to guide instruction, or incorporate the competencies into their curricula. We first categorized each state standard according to its similarity to the same BNCC standard. If there were no substantive difference between it and the parallel BNCC standard, we considered them to be the **Same Standard**. If the state standard included minor word alterations, switched the order of words, or rephrased the standard slightly, we still considered it to be the same. For example, the BNCC standard EF03MA28 reads as follows: “Conduct research involving categorical variables in a universe of up to 50 elements, organize the data collected using lists, single or double entry tables and represent them in simple column graphs, with and without the use of digital technologies.” The state of Piauí’s standard is identical, except that it qualified that the research should be “local.” We consider Piauí’s to be the same as the BNCC standard.

¹ Porter, Polikoff, & Smithson, 2009; Porter, McMaken, Hwang, & Yang, 2011; Achieve, 2017; Norton, Ballinger, & Ash, 2016

Other state standards were simplified or reduced in comparison to the parallel BNCC standard, which we refer to as **Reduced Content**. For example, the BNCC standard EF05HI02 reads "Identify the mechanisms of organization of political power, seeking to understand the idea of the State and/or other forms of social order." The corresponding Maranhão standard EF05HI02 was simplified to "Identify the mechanisms of organization of political power, seeking to understand the idea of the State." Conversely, some state standards provided more content or information than the corresponding BNCC standard, resulting in our category **Additional Content**. This additional content often consisted of additional verbs, further explication, or both. For example, the BNCC standard EF03HI07 reads: "Identify similarities and differences between communities in your city or region, and describe the role of the different social groups that form them," São Paulo added "respecting and valuing diversity" to the end of this standard, which we interpret as Additional Content. Overall, all standards were categorized as either Same Standard, Reduced Content, or Additional Content.

Second, some states did not include a particular BNCC standard in their state curriculum and/or split a single BNCC standard into multiple standards, which we refer to as **Deleted Standard** and **Split Standard**, respectively. Two additional categories, **Contextualization** and **Supplemental Information**, come from MEC guidance published in the Criteria for Reading State Curricula (Critério de Leitura dos Currículos dos Estados²). This document includes a seven-element rubric that allows states to determine whether their curriculum "needs revision" and is missing key elements; "is aligned to the BNCC"; or "goes beyond the BNCC" and reflects not only the BNCC standards, but provides additional content and guidance such as local contextualization, and/or methodological and pedagogical strategies. These two categories were used in combination with the previous categories and are not mutually exclusive. In other words, one state standard could be categorized as Additional Content, Contextualization, and Supplemental Information. Table 1 summarizes the categories used in our analysis of specific state curricular standards.

² Available at http://basenacionalcomum.mec.gov.br/images/implementacao/5_Criterios_de_Leitura_Rubrica_VALIDADO.pdf

Table 1. Definitions of Standards Categories

Category	Definition
Same standard	No substantive modifications were made to a BNCC standard
Removed Content	Removed a concept or skill from an existing BNCC standard
Additional Content	Added a concept, skill, or more information to an existing BNCC standard ³
Deleted Standard	Deleted an existing BNCC standard
Split Standard	Split one BNCC standard into multiple standards
Contextualization	Incorporated cultural, social and economic aspects of the state in either the local standard or the related supplemental information
Supplemental Information	Added supplemental information to the standards such as pedagogical suggestions

In addition to categorizing each standard, we performed a high-level analysis of the subject-specific introductory texts that states included in their curricula—what we refer to as “preambles”—to understand the extent to which states incorporated the subject-specific BNCC competencies into their curricula. The competencies, which more clearly indicate what all students should be able to do, are defined as: the activation of knowledge (concepts and procedures); skills (practices, cognitive and socio-emotional skills); attitudes related to the complex demands of everyday life; the full exercise of citizenship; and preparation for the workforce. Importantly, the competencies, which are the same across all K-8 grades within a single subject, likely require substantial change to teacher instructional practice. For example, the following Math competency encourages teachers to go beyond rote learning: “Develop logical reasoning, the spirit of research and the ability to produce convincing arguments, using mathematical knowledge to understand and act in the world.” Similarly, this History competency expects that teachers will facilitate deeper student engagement with curricular content: “Elaborate questions, hypotheses, arguments and propositions in relation to specific documents, interpretations and historical contexts, using different languages and media, exercising empathy, dialogue, conflict resolution, cooperation and respect.” The BNCC standards are meant to be

³ In a small number of cases, content or skills outside of existing BNCC standards were added to a state’s curriculum (particularly in Acre). These cases are included in this category.

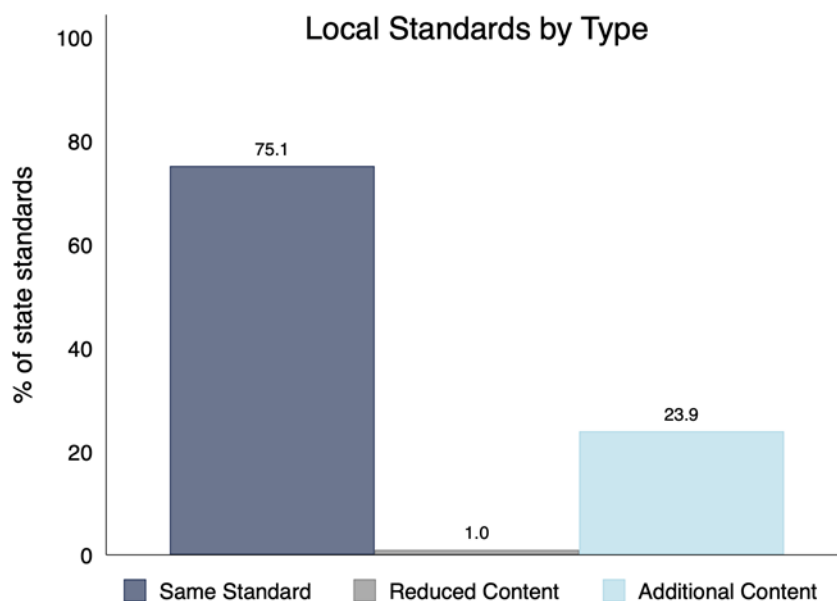
viewed through these competencies. A state curriculum that included only the standards and neglected the competencies would be missing a vital element of the BNCC. Indeed, according to MEC criteria, including the competencies in the subject-specific preambles is necessary to meet the “Aligned to BNCC” rating for the Integral Development element.

Overall, our analyses comparing the BNCC and state standards, combined with our description of supplemental information, contextualization, and subject-specific competencies, provides a more holistic view of how states incorporated the BNCC into their state curriculum. These integrated analyses also provide guidance as we seek to understand the processes states took to develop their curriculum and how they envisioned their curriculum influencing classroom instruction. In the next section, we present the results of these analyses.

Results

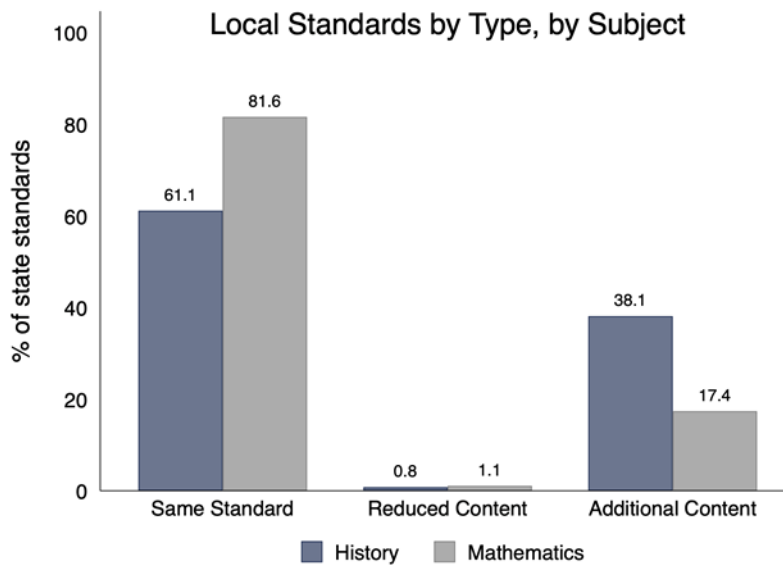
In this section we present the results of our analyses addressing each of our research questions. We begin by describing the extent to which states included the specific BNCC standards into their curricula. Our analyses suggest that overall, the vast majority of state standards (75%) came directly from the BNCC, while roughly one-quarter of the state standards incorporated additional content to a BNCC standard (see Figure 1). Almost no BNCC standards were deleted from states’ curricula.

Figure 1. Overall Categorization of State Standards



There is, however, considerable difference across Math and History in the degree of correspondence between the BNCC and the state standards. We find that 61% of History and 82% of Math state standards were identical to the BNCC standards (see Figure 2).⁴ In History, we find somewhat less commonality between the fifth grade state and BNCC standards, compared to the third grade state and BNCC standards (see Figure 3). In Math, however, there is very little difference across grades (see Figure 4).

Figure 2. Categorization of Local Standards by Subject (History and Math)



⁴ These results for Math closely mirror those reported by similar studies in the U.S. For example, one study found that 73.5% of state Math standards in nine of 50 U.S. states were identical to those in the Common Core State Standards (Norton, Ballinger, & Ash, 2016). The U.S. Common Core does not include standards for History.

Figure 3. Classification of History Standards, by Grade-Level (3rd and 5th)

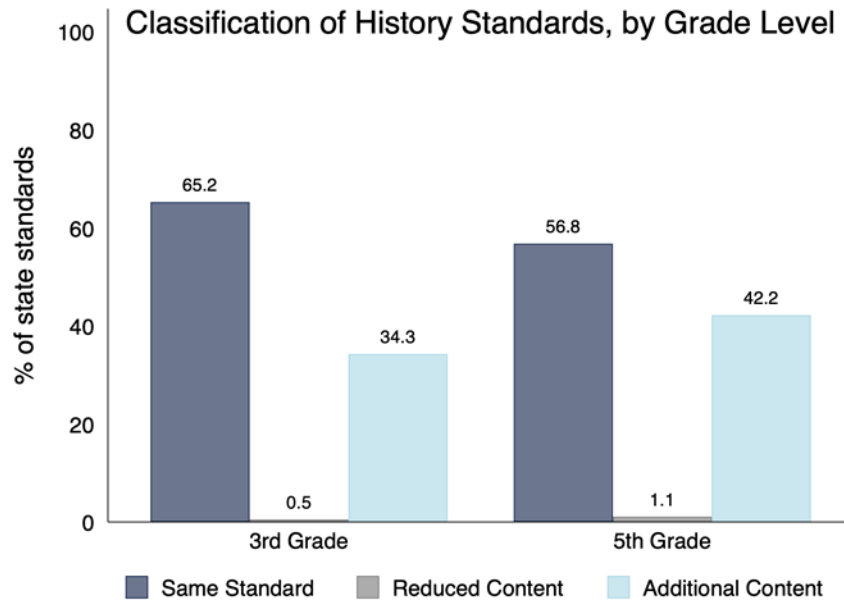
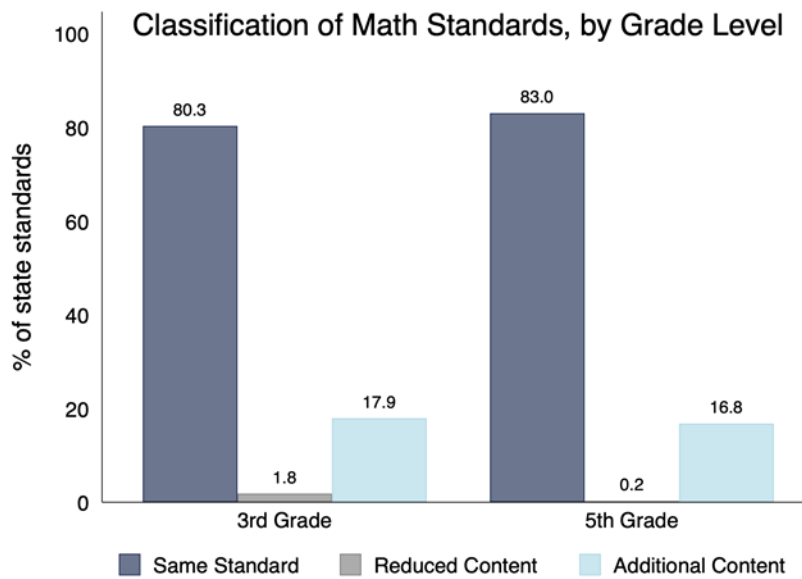


Figure 4. Classification of Math Standards, by Grade-Level (3rd and 5th)



In addition to differences across subjects, we also find considerable variation across states in the extent to which they reproduced the BNCC standards in their own curricula (see Figures 5 and 6). For example, the majority of standards in 22 states were identical to those in the BNCC, with many states reproducing verbatim as much as 80% or more of their standards

from the BNCC. Only five states copied fewer than 40% of their standards from the BNCC: Acre, Distrito Federal, Espírito Santo, Goiás, and Rio Grande do Sul, all of which largely added content, rather than incorporating new or different standards. Further, Distrito Federal, Acre, Goiás and Rio Grande do Sul deviated most in their curricula design and content, both in terms of inserting new standards, splitting BNCC standards into several other standards, or restructuring/renaming the standards.

Figure 5. Classification of History standards (3rd and 5th grades), by State

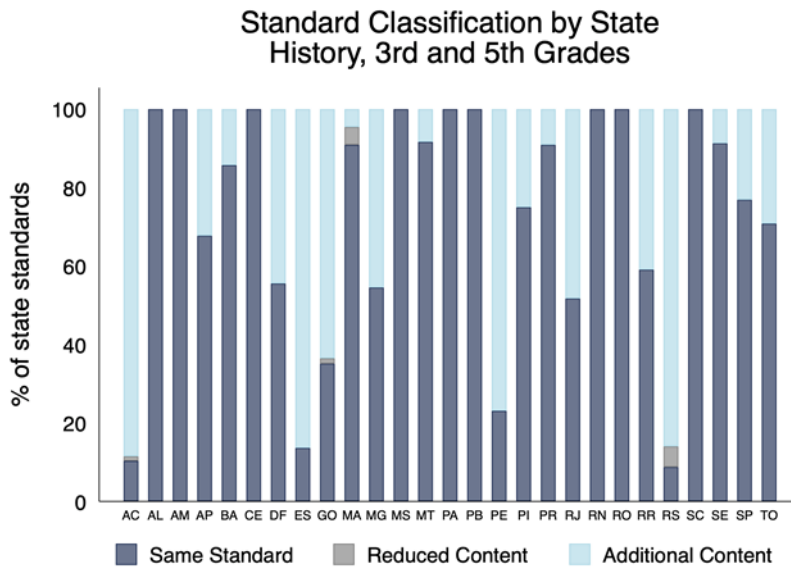
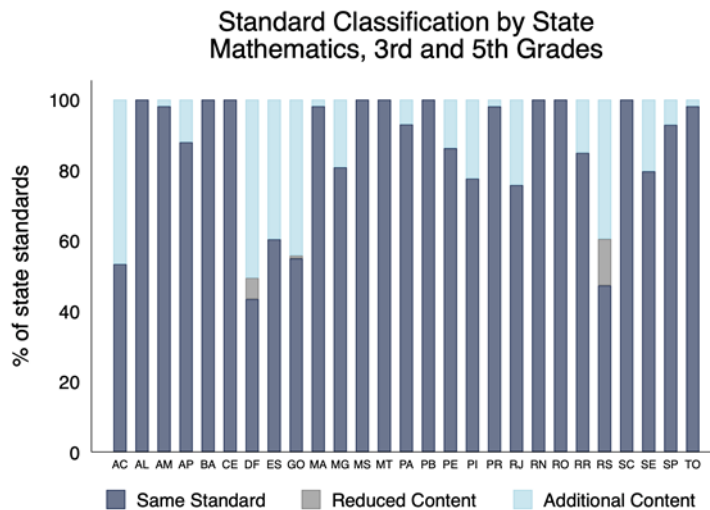


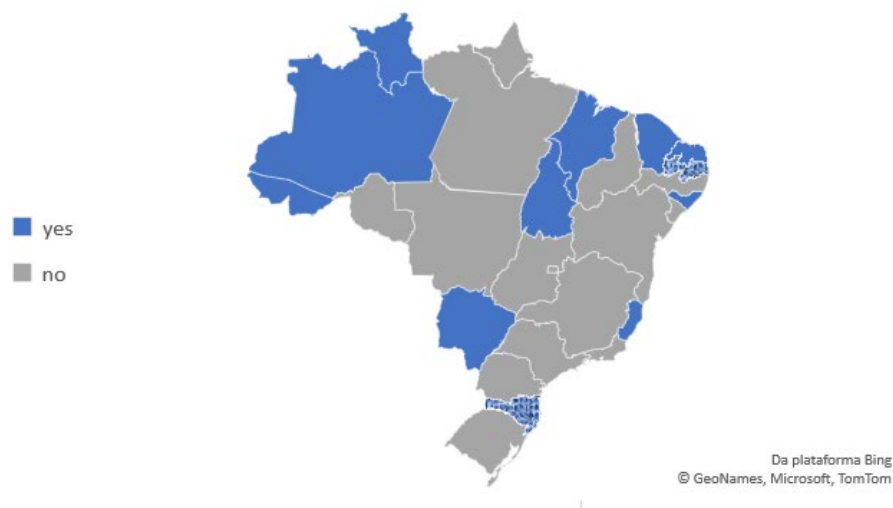
Figure 6. Classification of Math standards (3rd and 5th grades), by State



Supplemental Information

In this section we explore the extent to which state curricula included supplemental information. In total, 12 of 27 states included some kind of supplemental information within their curricular framework, generally by adding an extra column to their table of standards. We find slight variation across states in the type of additional information provided. Some states, such as Mato Grosso do Sul, added a detailed comment for each standard; others included broader information for a group of standards, as Acre did; and some states added supplemental information for one subject but not for the other, such as Paraíba, which included supplemental information only for Math, and Santa Catarina, which provided additional content only for History.

Figure 7. States Including Supplemental Information



For most states, this supplemental information included suggestions for pedagogical activities or didactic materials. For example, Acre proposed creating “situations in which children can use numbers to express measures such as height and weight (the number as a measurement indicator)” to supplement the BNCC standard EF05MA02, “usage of natural numbers in its various functions: as cardinals, ordinals, code or measure.” Some states, such as Maranhão, provided individual suggestions for each standard. For instance, its curriculum suggests the “construction of geo-spatial metrics with students, using low-cost materials, such as straws, jelly beans, etc.” to supplement the BNCC standards EF03MA13 and EF03MA14,

“Describe characteristics of some spatial geometric figures (straight prisms, pyramids, cylinders, cones).” Other states, such as Mato Grosso do Sul, Paraíba, and Rio Grande Do Norte, suggested activities or materials that could be used when teaching a specific standard or when teaching more than one standard, such as “use the abacus to identify equal numbers,” or “reflect about a shopping situation that has the same final price but with different amounts of products.”

States also used these suggested pedagogical activities to contextualize their standards. For example, Alagoas suggested that students “list the main archaeological findings in the state of Alagoas,” while Santa Catarina asked that students create a “timeline about the History of the municipality (permanence and changes; different perspectives and views of History and municipality events, focusing on the views from the students, the family, the descendant of a European immigrant, the fisherman, the farmer, “quilomvolas,” indigenous people, gypsies, refugees, migrants from other countries, among others).”

A small number of states also included supplemental guidance on how to implement an interdisciplinary approach by connecting standards across subjects. For example, Espírito Santo included “Integrative Themes” (Temas Integradores), which introduced subjects such as financial education and science and technology, that can be matched to specific standards. Mato Grosso do Sul⁵, Paraíba and Ceará also suggested an interdisciplinary approach by highlighting where one subject’s standards might overlap with another subject’s standards. For example, for the Math standard, “before using a conventional technique to calculate the sum $238 + 497$, students can imagine ways of performing the calculation, producing personal records/notes to then discuss collectively. Calculators, games and varied teaching materials are also useful in developing this skill,” the Mato Grosso do Sul curriculum notes, “There is opportunity for interdisciplinary work with Portuguese standards (EF03LP11) and (EF03LP16), which refers to reading, understanding and using numbers in recipes.”

We also saw a small number of examples of states providing guidance on assessment or how to connect specific standards to the competencies. Acre and Rio Grande do Norte provided guidance on assessment. Acre does so by including a section called “assessment” in their curricular framework to highlight ways to evaluate students, while Rio Grande do Norte does so by presenting a list of activities to evaluate students called, “Evaluation Instruments and

⁵ Mato Grosso do Sul has a different code number for the Portuguese standards, because the state renumbered some of its standards.

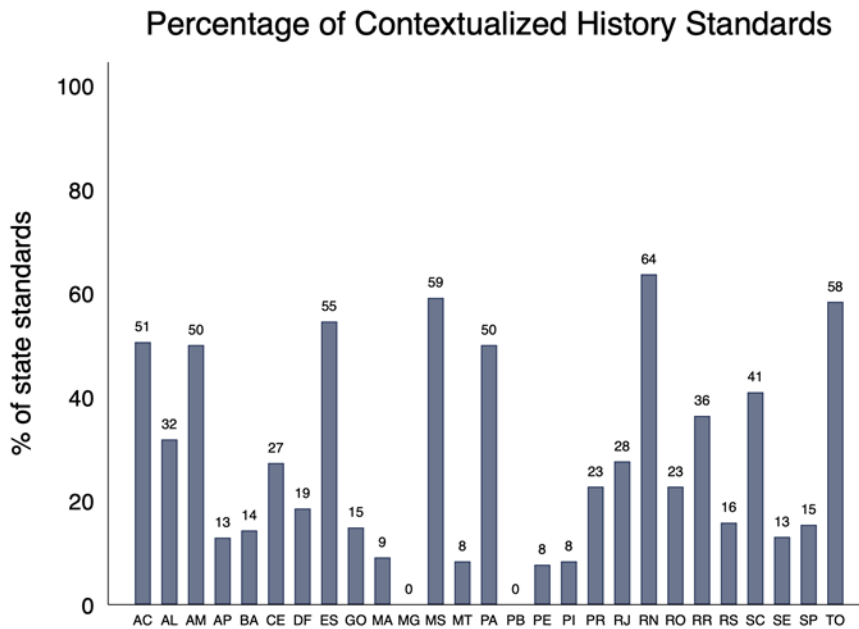
Procedures” at the end of their standards. Espirito Santo and Ceara provided guidance on how to connect the standards to competencies. For example, Espirito Santo added the “Specific Competencies” column, indicating the competency to which the standard is related.

Contextualization of BNCC Standards by the States

In this section we describe the degree to which the states contextualized the BNCC standards to better match the local socio-political, economic, and historical contexts of their state. Overall, we saw some contextualization in History and virtually none in Math. More specifically, only 14 out of the 1,688 Math standards we analyzed were contextualized. In contrast, roughly 27.5% of History standards were contextualized. Almost all states contextualized at least some of their History standards (see Figure 8), where Minas Gerais and Paraíba were the only states that did not.

One type of contextualization involved the incorporation of specific state historical events into a given standard. For example, for BNCC standard EF05HI01, “Identify the cultures and people’s formation processes, relating them to the geographical space occupied,” Rio Grande do Sul included, “to know territorial disputes that occurred in the Rio Grande do Sul territory between Spanish and Portuguese, and indigenous people’s defense of the land.” Another type of contextualization involved states suggesting activities such as conducting research about elements of students’ city and/or state. For example, for BNCC standard EF03FI09, “To map public spaces where you live (streets, parks, schools, hospitals, City Hall, City Council, etc.),” Alagoas added in the supplemental information “To know environment preservation areas within Alagoas State.”

Figure 8. Percent of History Standards (3rd and 5th) contextualized by State



Inclusion of the BNCC Subject-Specific Competencies in State Curricula

In this section we describe the degree to which the state included the BNCC subject-specific competencies in their curricula. The format and structure of the state curricula were relatively similar, with each document beginning with lengthy documentation of the legislative and legal underpinnings of the BNCC as well as descriptions of the local stakeholders who participated in creating the document, followed by the state’s values and beliefs regarding child development and the ideal role of education in society. Within these statements, all states incorporated the 10 general competencies, and 23 of 27 states also included the subject-specific competencies in the sections introducing that subject’s standards.

How the states will develop these competencies and relate them to the standards to guide classroom instruction is an important question worthy of further exploration. Only the states of Ceará and Espírito Santo explicitly connected the standards with the specific competencies within their curriculum framework. Importantly, the other states included the competencies without any explanation or guidance on how they should be used in conjunction with the standards. Only three states, Pará, Paraíba and Distrito Federal, did not incorporate the BNCC’s subject specific competencies in either History or Math. However, Paraíba presented nine competencies for Math and ten statements for History that differ from the BNCC’s subject-

specific competencies. It is unclear how those differences will meaningfully impact teaching and learning in Paraíba as compared to states that used the BNCC subject-specific competencies. Rio Grande do Sul presented subject-specific competencies for Math, but not for History. We are uncertain why those states did not add the BNCC subject-specific competencies or included them for only one subject.

Conclusions and Discussion

In this section we discuss initial hypotheses on why states made key decisions regarding the content and design of their state curriculum, and why we think those processes and outcomes matter. In particular, based on our initial interviews, we provide possible explanations for why most states replicated the BNCC standards in their curriculum while simultaneously supplementing and contextualizing those copied standards to make the curriculum their own. We conclude by discussing the future direction of our research.

Reproducing the BNCC Standards in State Curricula

Numerous factors might explain why states largely duplicated the BNCC standards, particularly in Math, in their curriculum. One possible explanation is that state leaders and curriculum developers did not believe that they were entitled to create their own standards given guidance and messaging from MEC. For example, states may have interpreted the Criteria for Reading State Curricula, which was intended to act as a rubric for states to follow as they developed their own curriculum, as requiring them to include all BNCC standards in their curriculum. The “aligned to BNCC” rating for the Progressions element requires that “all the BNCC learnings are present on the curricular framework.” If states interpreted “BNCC learnings” as the BNCC standards themselves, this criterion would explain why states believed they needed to maintain the BNCC standards verbatim in their curriculum. States may have felt this most strongly in Math, where more than 80% of the standards remained the same as those in the BNCC, given that Math is tested on SAEB and states might have wanted to ensure students had exposure to the content that would be on the test.

Additionally, in initial interviews, we came to understand that states felt that they were expected to reproduce the BNCC standards even though they were permitted to expand individual standards and add localized content. Some states may have received the message that

they were to interpret each BNCC standard as a “learning right,” meaning that all standards must be included in their own state curricula. This resonates with what we heard from stakeholders in the first year of our study. Nearly all stakeholders understood that the main rationale for implementing the BNCC was related to educational equity and that its central purpose was to “guarantee a minimum level for all Brazilian students.” We also heard from several MEC officials that they had discouraged some states from excluding individual BNCC standards, potentially explaining why we saw almost no standards excluded. Further, the curriculum writers may have been hesitant to change too much of the BNCC content to avoid later criticism from their peers, the universities, and MEC. One curricula writer shared that “Despite the fact that MEC kept saying that each state should look to their individual realities, and despite MEC continually saying that the BNCC was not curriculum, the truth is that in all WhatsApp groups of teachers, everybody said to copy the BNCC standards, alleging that they couldn't be too far from what was in the BNCC.”

Another possible explanation for this replication is that states may not have had the human and fiscal resources necessary for the complicated task of creating new standards for all subjects, across all grades, within a relatively short time frame, despite the assistance from MEC and other partners during the curriculum writing process. As one curriculum writer shared, “I firmly believed the curriculum wouldn't be ready in time. I think we didn't have enough time. There was not enough time for us, and I almost went crazy.”

Regardless of why states largely reproduced the BNCC standards in their curricula, similarities between the BNCC and the state standards might be considered a positive outcome if the BNCC standards are viewed as rigorous and high quality. It might also strengthen BNCC implementation. Some curriculum developers felt that preserving the standards was critical to meeting the BNCC's primary purpose of promoting equity by ensuring all students have access to the same content. As one curriculum developer said, “If a kid studied in Maranhão and then moved to São Paulo, he will continue learning. Copying standards is positive because it brings continuity. This is alignment.” On the other hand, although most states did in fact contextualize the BNCC standards in their curricula, there may be political objections among some stakeholders to the stark similarities between the federal and state standards. This may prove to be important during implementation, given that early popular support for the BNCC was in part

dependent on the appearance of democratic participation in the creation of the standards, as well as the expectation that state curricula would reflect local conditions and respect local autonomy.

Supplementing and Contextualizing Copied Standards

Although they largely reproduced the BNCC standards, many states appeared to have looked outside of the standards in efforts to make the curriculum their own. This desire to put a local stamp on state curriculum is in line with the broader concept of standards-based reform, where national standards define the *what* of student learning, while local stakeholders define the *how*. Indeed, states may have understood it as their responsibility to support teachers in the *how* of teaching the national standards and in adapting the context-neutral BNCC standards to reflect their local communities. This resonates with what we heard in interviews from the first year of our study. Stakeholders shared that the BNCC was intended to influence *what* to teach rather than *how* to teach as a way to avoid imposing on teacher autonomy, thereby circumventing this issue politically. Yet, states also recognized that teacher practice would require improvement for the standards to be implemented successfully, and including supplemental information could represent one approach to addressing that requirement. As one curriculum writer recently shared, “the BNCC standards were already very complete and reflected the way teachers teach, but there was still the need to help teachers in their practice, so that’s why the additional instruction column was added.” We also heard in our early interviews some respondents argue that the standards were *too* context neutral and could therefore not reflect Brazil’s vast historical, cultural, and political diversity. States may have seen it as their responsibility to contextualize the national standards to meet their local needs and emphasize their local context.

Another explanation for these efforts to contextualize is that states simply followed MEC’s guidance, particularly the Criteria for Reading State Curricula. If states sought to meet the rubric’s highest rating, “go beyond,” they might have interpreted the criteria for the Active Learning and Learning Contextualization elements as requiring them to provide supplemental information and contextualize their standards, respectively. For example, to meet the “go beyond” rating for the Active Learning element, states need to “propose ways to further develop the concept by bringing elements to induce learning and teaching beyond traditional expository classes.” Similarly, to meet the “go beyond” rating for the Learning Contextualization element, state curricular frameworks must include local and cultural aspects. States using these criteria

likely made different decisions on when and where in their curriculum they aimed to meet the “aligned to” rating and where they aimed to “go beyond,” potentially accounting for the variation we found in providing supplemental information or in contextualization across states. Another resource from MEC that may have influenced or inspired the state’s supplemental information is the “Comments on BNCC” (*BNCC Comentada*). There are similarities between states’ supplemental information and those included in the Comments. Despite variation across states, the nature of the language is similar, suggesting it might have been an important resource.

The collaborative processes in which states engaged to develop their state curricula might also explain why states built off of the standards in these ways. State curricula were meant to be created collectively through collaboration regimes that included state and municipal leaders as well as third party organizations, universities, teacher unions, and school-level actors. We might expect those stakeholders to make the curriculum their own through the supplemental information, contextualization, and the preambles, rather than the standards themselves. In fact, in the first year of our study, we found that a high-point of implementation up to that point was the revival of collaboration regimes, which forced municipal and state leaders into relationships that required joint decision-making and frequent negotiation. We heard overwhelmingly positive feedback on how this structured relationship cultivated the cross-pollination of ideas between state and municipal governments. For example, one of our case study states, Maranhão, with support from Fundação Getúlio Vargas (FGV), organized events across the state in 2018 to collect and organize pedagogical suggestions.

The inclusion of supplementation information and the contextualization of the History standards may strengthen BNCC implementation by helping teachers to translate the standards into classroom activities. Similarly, contextualizing the History standards might make those standards feel more relevant, thereby potentially increasing teacher buy-in and ultimately increasing the likelihood that teachers will incorporate the standards into their instruction. Indeed, the standards will only have their intended impact of equitably improving student learning if they transform the classroom process of teaching and learning.

Future Direction of Research

These results will clearly influence the direction of our research moving forward. In particular, it will allow us to go deeper into the Lemann Foundation’s first pillar of

implementation, curriculum development, to further understand why states developed their curriculum as they did. More specifically, we will seek to understand whether state leaders believed that they were entitled to deviate from the BNCC standards to adapt their local curriculum to their own context and the extent to which they were familiar with and used the MEC guide when creating their curriculum. We will also explore the role human and fiscal resources played in their curriculum development process.

Much of this upcoming work will be addressed through our case study states São Paulo, Maranhão, and Mato Grosso do Sul. Like most states, our case study states largely reproduced the BNCC standards in their state curricula and incorporated the subject-specific competencies in their preambles. This commonality will allow us to explore the extent to which they felt entitled to make changes to the standards and/or if they had the human and fiscal resources to do so. However, variation across our case study state curricula in the extent to which they incorporated supplemental information or contextualized their History standards will allow us to better explore if they felt it was their responsibility to go outside of the standard to make the curriculum their own and/or if they were familiar with and followed MEC's guidance. For example, São Paulo more often than the other states revised the BNCC standards with additional content. However, Maranhão and Mato Grosso do Sul added supplemental information for all standards in their curricula, while São Paulo added none. Further, Mato Grosso do Sul contextualized almost 20% of their standards, while Maranhão and São Paulo contextualized 5 or fewer percent.

Moving forward, we will also explore the other three pillars of BNCC implementation—teacher training, textbook alignment, and assessments—to understand other issues relevant to the wider implementation, such as whether states and municipalities have the local capacity to engage in the implementation process as it is conceived of in the BNCC Implementation Guide. These questions remain relevant, as they will likely become key considerations with the school-level implementations. In particular, will teachers and administrators have the training and capacity to implement the local curriculum? Will teachers feel they have autonomy to implement the local curriculum in creative and innovative ways? We will also consider how the COVID-19 pandemic is influencing state, municipal, and school-level decisions related to BNCC implementation. In the first year of our study prior to the pandemic, many BNCC detractors pointed to inadequate school infrastructure, teaching conditions, and school finance systems as more pressing issues that would require reform in order for the BNCC to reduce educational

inequities. These challenges will likely be exacerbated by the pandemic and, therefore, might further hamper BNCC implementation in the near term. However, it is also possible that COVID-19 pandemic will slow down implementation process such that it allows states, municipalities, and schools to adequately build their capacity and train their teachers to implement the curriculum in innovative ways.

References

Achieve. (2017). *Strong Standards: A Review of Changes to State Standards Since the Common Core*. Washington DC: Author. Retrieved from <https://www.achieve.org/strong-standards>

MEC - Ministério da Educação. (2018). *Critérios de Leitura de Currículos dos Estados*. Retrieved from <http://basenacionalcomum.mec.gov.br/images/implementacao/5. Critérios de Leitura Rubrica VALIDADO.pdf>

Norton, J., Ballinger, S., & Ash, J. (2016). Massachusetts English Language Arts/Literacy and Mathematics Curriculum Frameworks Review, Abt Associates.

Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Assessing the Common Core Standards: Opportunities for Improving Measures of Instruction. *Educational Researcher*, 40(3), 103-116.

Porter, A.C., Polikoff, M.S., & Smithson, J. (2009). Is There a de Facto National Intended Curriculum? Evidence from State Content Standards. *Educational Evaluation and Policy Analysis*, 31(3), 238-268.