

Realigning Education Policies

Overcoming the learning crisis while improving equity 



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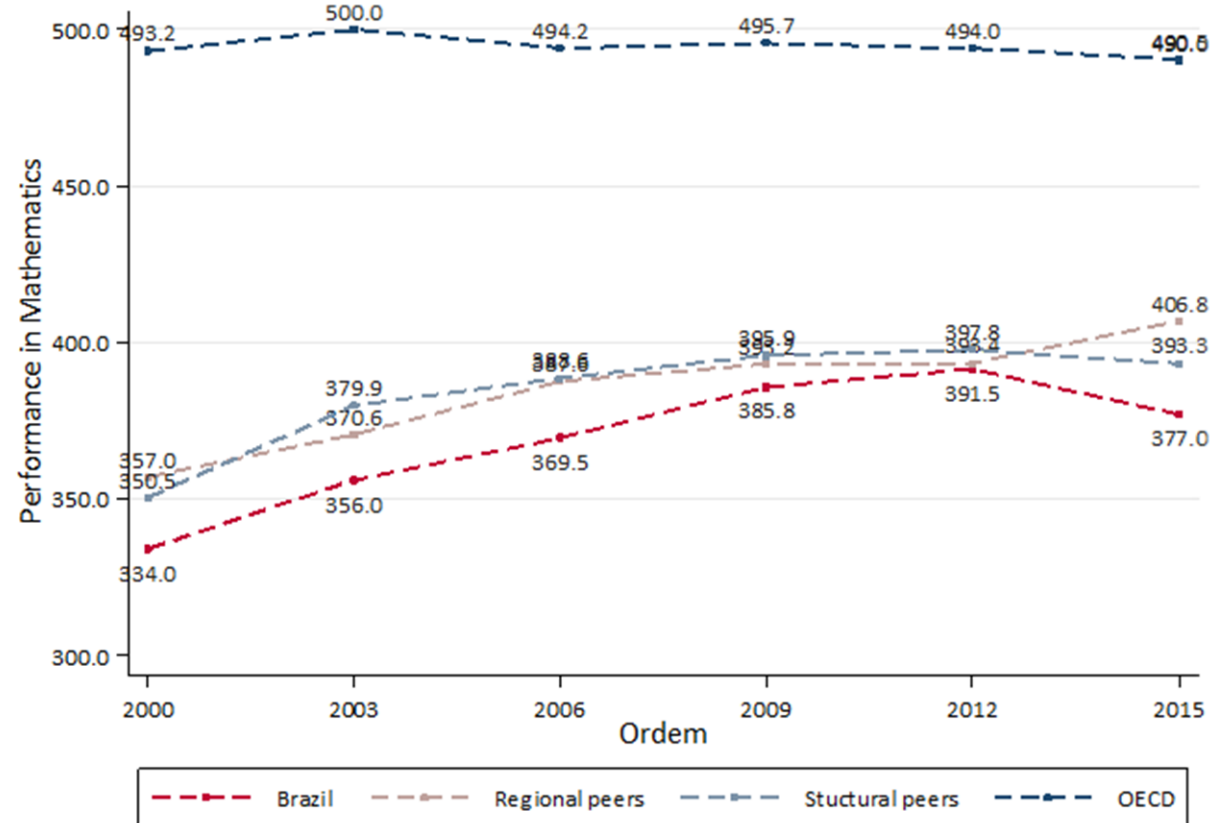
September 6, 2018

I. Key Sectoral Challenges

Brazil's learning outcomes are very weak in international comparison

- Although access to education has improved (as reflected in the increase in primary and secondary school enrollment), progress in learning outcomes has been limited.
- Brazil's performance in mathematics in the PISA (Program for International Student Assessment) is low compared to its regional and structural peers and OECD members.
- Brazil improved significantly in the PISA math exam from 68% of the OECD average to 79% between 2002 and 2012, but has since fallen back to 77% in 2015 (the 2009 level).

Figure 1: PISA Performance in Mathematics, Brazil and Peers

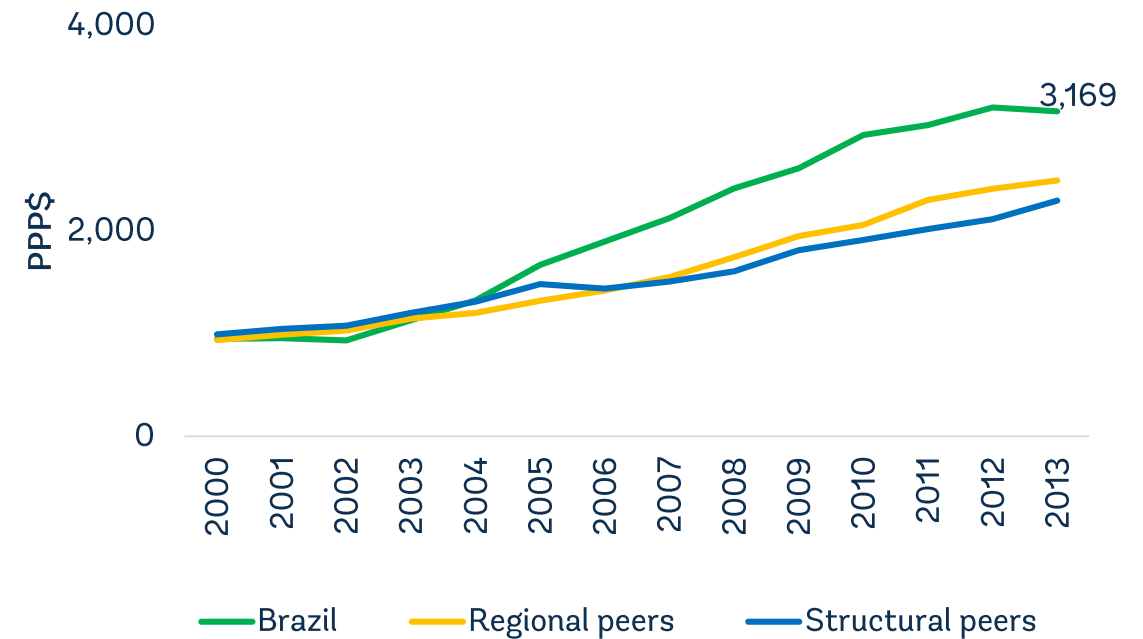


I. Key Sectoral Challenges

...despite a huge increase in education spending in recent years

- Public spending on education has grown rapidly in recent years, above the level observed in peer countries.
- Steadily increasing public spending combined with falling public enrollment has resulted in higher spending per student and lower student-teacher ratios: This has resulted in significant inefficiencies.
 - The constitutional obligation to spend 25% of tax revenues on education forces municipalities to increase spending in education, even though they are already facing a rapid reduction in student numbers due to demographic transition.
- Brazil is spending 62% more than it would need to achieve the same performance in public schools, which corresponds to nearly 1% of GDP.

Figure 2: Spending per student in primary education

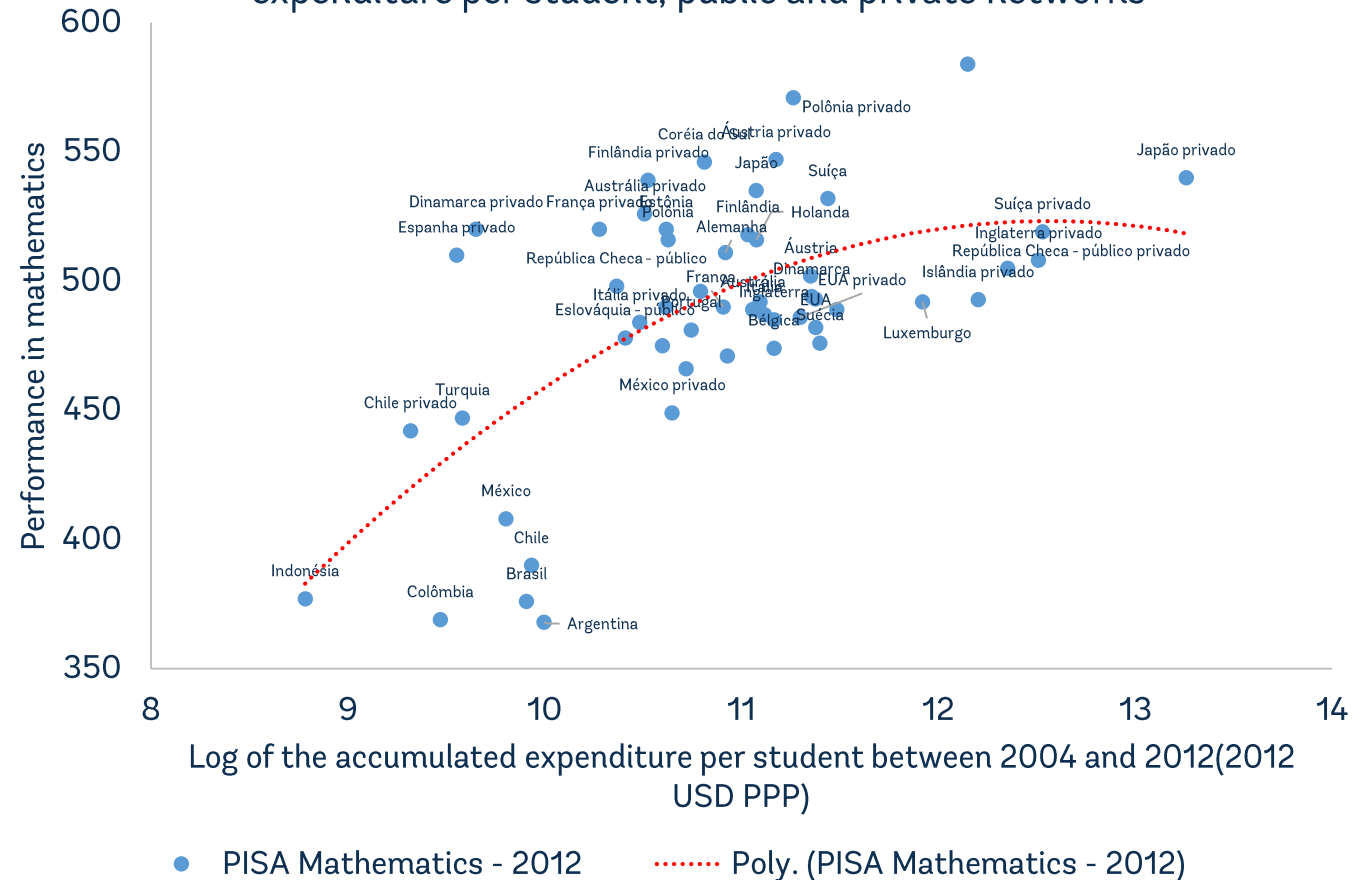


I. Key Sectoral Challenges

The "value for money" in education spending is below peers

- When controlling for the level of spending per student, the PISA results are still disappointing.
- Brazil's performance measured by the PISA math score in 2012 was only 83% of the level expected given its level of spending per student

Figure 3: PISA performance in mathematics versus accumulated expenditure per student, public and private networks

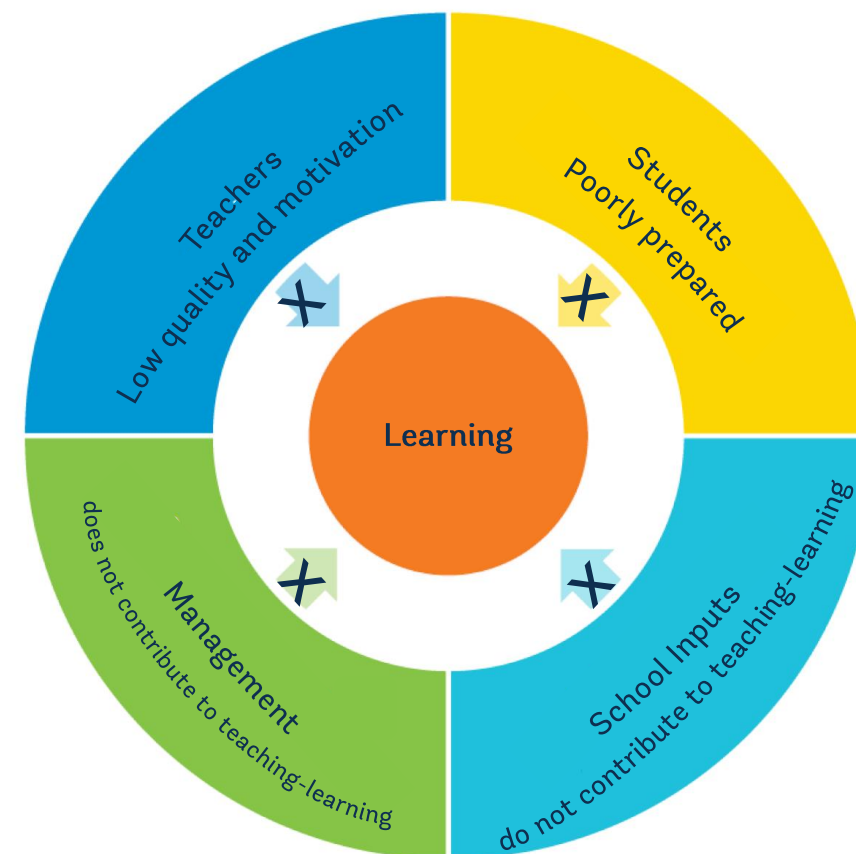


I. Key Sectoral Challenges

There are several dimensions to the “learning crisis”

- The learning crisis has four dimensions:
- Students are poorly prepared when they enter 1st grade of Primary Education. Preparation could be improved by increasing investments in Early-Childhood Education.
- Teachers are poorly trained and lack motivation. Improving the selection of teachers in public education, implementing continuous training programs for educators, and linking merit to teaching performance would help improve the quality of teaching and learning.
- Investing in school inputs will only be effective if impacting learning outcomes. In Uruguay and India, using technology to personalize education to students’ needs has helped improve learning outcomes.
- School management needs to focus on improving learning outcomes and teaching quality.

Figure 4: The dimensions of the learning crisis



Main barriers to achieving higher levels of learning outcomes

- **Insufficient enrollment and quality at ECD level (0 to 3 years old)**, which has an important negative impact in later levels of education in terms of retention and quality of learning.
- **Reduced relevance of the curricula in Secondary**, which is disconnected to labor market needs and does not encourage student motivation.
- **Low quality of teaching due to:** low quality of pre-service training, inadequate use of student assessments to inform pedagogical practices and in service teacher training; teacher's career and salary incentives are de-linked from performance; and weak teacher support and accountability.
- **Ineffective governance and accountability** that does not reward performance, and weak institutional capacity of states and municipalities in running their education systems.
- **Dysfunctional education transfer schemes** that are de-linked from education outcomes and fall short of achieving regional equity (nationally and within the states).
- **Budget rigidities** that generate negative incentives for cost control and thus encourage inefficiency.

I. Key Sectoral Challenges

Recently important education reforms took place

- **The establishment of a new national core curriculum in basic education (BNCC).**
 - BNCC is a key pillar for improving the quality of education with regional equity.
- **A comprehensive upper secondary education reform was enacted.**
 - The 2017 reform of Ensino Medio substantially changes the academic curricula, increases student choice, strengthens the focus on socioemotional skills, and extends the school day.
- **Brazil can learn from best practice innovations in school governance and management at the subnational level.**
 - Excellent results have been achieved by making schools more accountable and oriented towards learning results (in Ceara).
 - There have also been successful experiences with joint-management programs with non-governmental institutions in ECD and upper secondary education.
- **However, political incentives often militate against copying of best practices.**
 - Budget and civil service employment rules create few incentives for reform.
 - School managers are often politically appointed and political resistance against tighter performance management is high.
 - Wealthier parents avoid public system; poorer students drop out – little demand pressures for improvement

I. Key Sectoral Challenges

Early Child Education (ECD) coverage is insufficient and unequal

- Demographic change and effectiveness of low-cost traditional daycare-centers in low-density areas create the need for an improved legal framework allowing and overseeing the quality of alternative models.
 - Lower-cost community daycare centers and home-visiting for parenting training programs are increasingly being used, especially in more remote regions.
- **Cooperation between municipal governments and NGOs has been critical to support the recent expansion in access.**
 - More than one-third of the 0 to 3 children enrollments are in private institutions (of which 45% under the “Conveniadas” framework), complementing the public provision of ECD services.
- Even though there are national standards for this service delivery, the lack of M&E systems affects the quality of services, especially among the most vulnerable.

Figure 5: % of 0 to 3 children in daycare by area

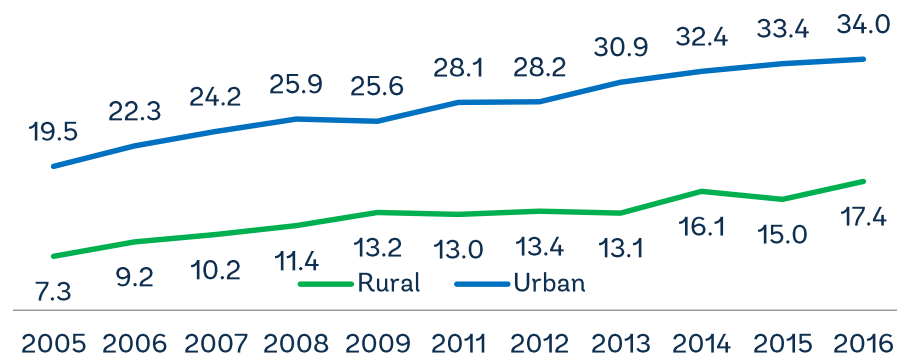
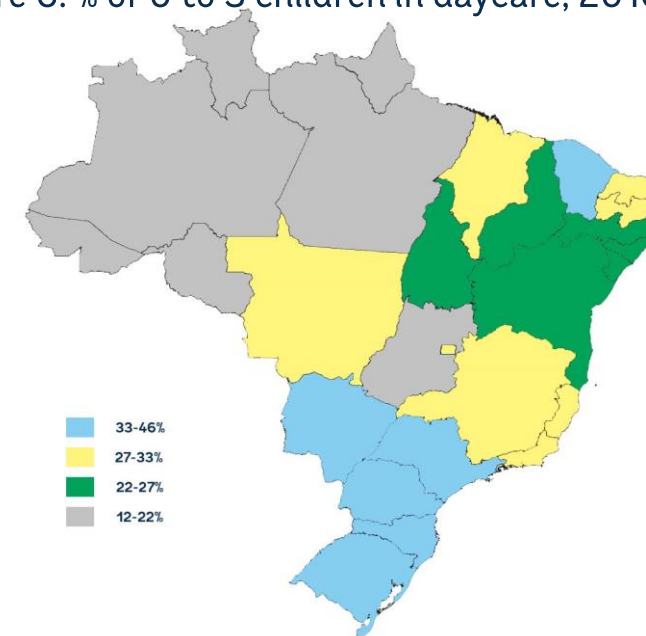


Figure 6: % of 0 to 3 children in daycare, 2016



I. Key Sectoral Challenges

Weak teacher quality and accountability

Pre-service - Initial training and recruitment:

- Teacher training provides highly theoretical training with little or no emphasis on pedagogical and in-classroom practice; and it is also disconnected from the curriculum.
 - Intake of students into pedagogical faculties generally have lower test scores – teaching profession does not recruit the most talented
 - Teaching career relatively unattractive compared to other public sector jobs
 - The teacher selection processes are poorly organized, and the examinations are solely based on theoretical aspects: as a result they fail to recruit the best educators.

Continuous training:

- Brazil does not have a standardized assessment of teaching skills.
- Teaching career (like the rest of the civil service) is based on automatic promotions and de-linked from performance and merit.

I. Key Sectoral Challenges

Inefficient education financing and expenditures

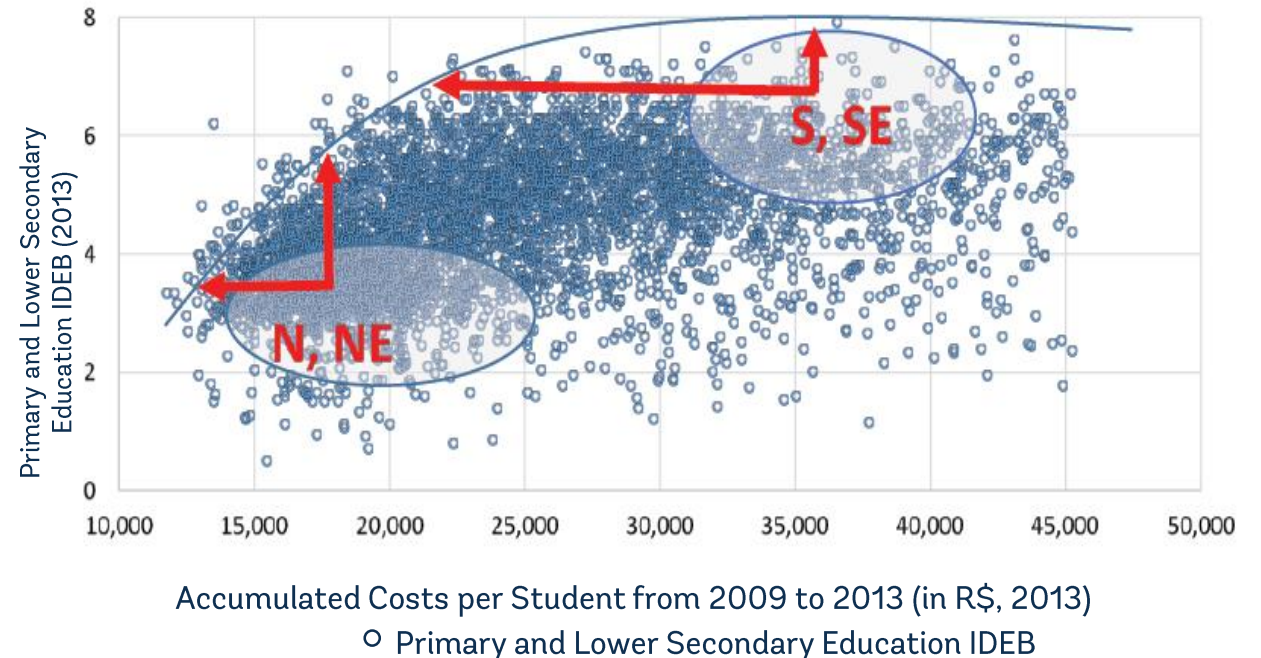
- Brazil spends 6% of GDP, which is more than OECD (5.5%), regional (4.7%) and structural (5%) peers.
- Public education spending has increased substantially in Brazil (5.3% p.a. since 2000).
 - The fastest growth was in early education (7.3% p.a.) and secondary education (8% p.a.)
 - With falling enrollment and increased teacher salaries, spending per student has increased substantially, and much faster than OECD and peers for primary and secondary education
- **Spending is very inefficient: Brazil could improve its learning performance (as measured by the Development of Basic Education Index, IDEB) by 40% at its current spending.**
 - Spending is only weakly correlated to IDEB performance. Some municipalities (e.g. Sobral) do very well with limited spending
- Large share of inefficiency (39%) comes from low pupil-teacher ratios. As enrollment continues to drop, inefficiencies are likely to get worse unless number of teachers also adjusts.
- Constitutional requirement that 25% of state and municipal tax revenues be allocated to education has become redundant with the creation of FUNDEB and contributes to inefficiency: Expenditure per student in rich states is well above the minimum expenditure per student stipulated by FUNDEB, often resulting in waste of resources.

I. Key Sectoral Challenges

Inefficient education financing and expenditures – Basic Education

- North and Northeast municipalities and states are more cost-efficient and could still benefit from more budget
- Central-West, South and Southeast municipalities could benefit from better management and achieve better results with same budget
- Although FUNDEB has reduced the gap in spending per student among rich and poor states, differences across municipalities are still large.
 - For example, federal transfers to rich municipalities in poor states (Union complementation) but not to poor municipalities in wealthier states

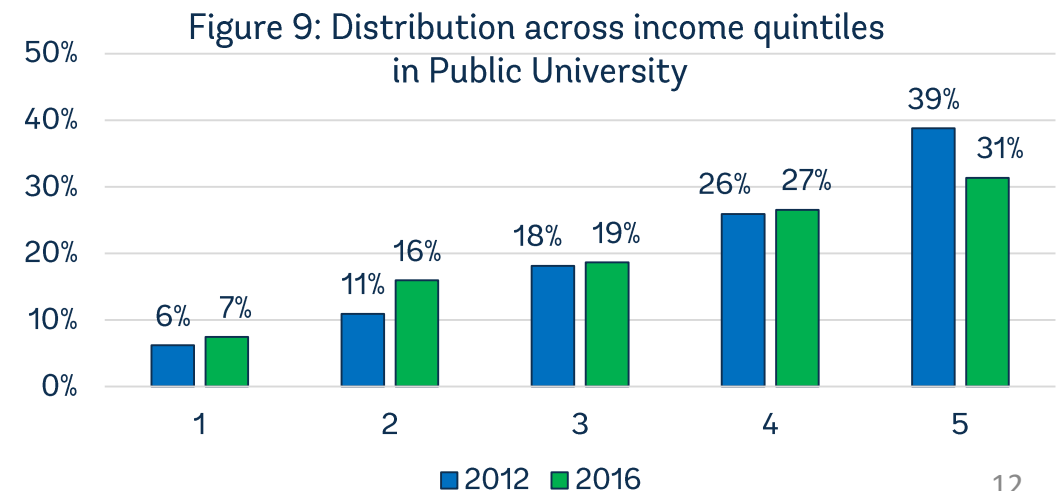
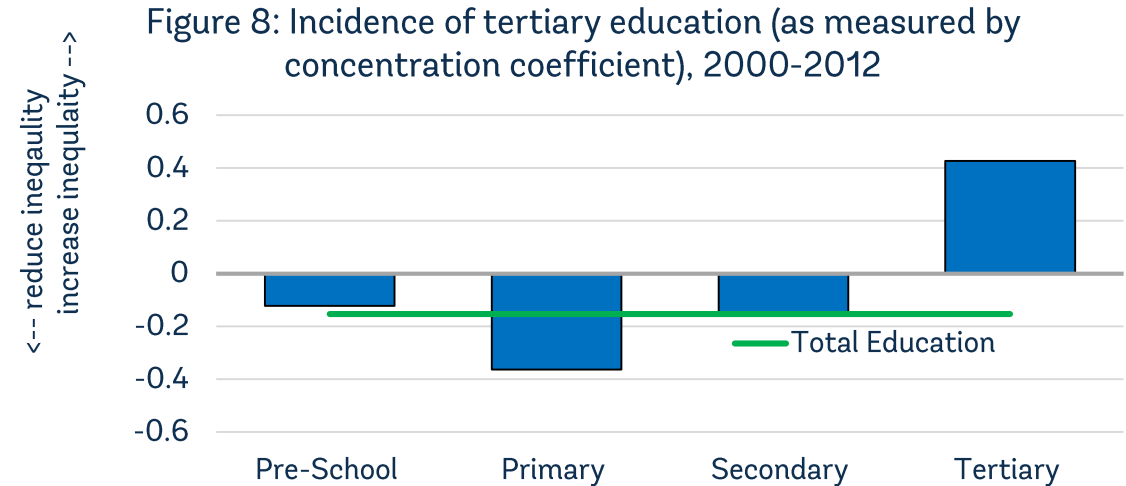
Figure 7: Accumulated Costs per Student from 2009 to 2013 in the IDEB of Primary and Lower Secondary Education (Municipalities and States)



I. Key Sectoral Challenges

Unequitable financing for higher education

- Public spending on primary and secondary education is progressive, but tertiary education spending is not pro-poor
- Public spending on federal universities largely benefits the rich by increasing their future earnings potential.
- Equitable expenditure has improved since 2013 following the entry into force of the “Lei de Cotas”. Nevertheless, still today 31.4% of enrollment in public universities is represented by students in the 5th quintile of per capita income. These richest students benefit from free superior education while youngsters from poorer households cannot afford to attend university.



II. Policy Recommendations

Reform efforts should focus on three axis

- **Expand coverage and increase the quality of ECD.**
 - Quality ECD has significant impact in improving retention and learning in further levels of education.
- **Improve teacher quality and accountability.**
 - Differences in teacher quality is the most important factor explaining differences in learning.
- **Increase efficiency & equity of public spending.**
 - Under severe budget constraints, a more efficient and equitable use of education expenditure is a necessary condition for achieving better outcomes.

II. Policy Recommendations

Expanding coverage, equity, and quality of ECD

- **Expanding ECD by supporting alternative delivery models beyond public day-care centers.**
 - Improve targeting of ECD expansion by mapping schools in vulnerable areas; and
 - Ensure quality standards by refining the regulatory framework for alternative delivery models at the subnational level and introducing performance agreements into the *Convênios*.
- **Reform national legal framework to allow the financing (through FUNDEB) of alternative ECD delivery models.**
 - Alternative models of ECD delivery can reach vulnerable low-density areas and provide quality services when daycare-centers are not cost-effective. These include community-based care for early stimulation, home visits for parenting training, and parents' community meetings.
 - Allowing FUNDEB financing for appropriately regulated alternative models would accelerate ECD expansion.
- **Improving the quality of ECD requires higher quality teachers and a better developed M&E system. The implementation of BNCC is a good opportunity to:**
 - Support higher quality teachers by defining ECD teacher standards and aligning trainings with BNCC competencies;
 - Define the profile and training standards of school leaders; create incentives through results-based management practices.

II. Policy Recommendations

Improving teacher quality and accountability: Pre-service

- **Attracting better students for pre-service teachers training.**
 - Reform the federal PIDIB program (tuition and living costs paid by MEC) by introducing: (i) students eligibility based on high ENEM scores; (ii) written tests of content mastery, aptitude tests, and interviews; (iii) requirement that beneficiaries can only attend programs accredited by SINAES
- **Reform pre-service training programs.**
 - (i) Align programs with the curriculum (the new BNCC); (ii) focus on specific subjects; make training practical and accountable; (iii) include in-classroom teacher practices.
 - MEC can develop models of teacher pre-service programs, and leverage their adoption by universities through: (i) accreditation of programs (through SINAES); (ii) tying federal and state financing to schools with accredited programs.
- **Selecting the better qualified candidates for teaching positions:**
 - (i) teacher standards to guide hiring decisions, (ii) tests of teaching-skills and competencies, and (iii) alternative certification for those not trained as teachers.

Improving teacher quality and accountability: In-service (continuous training)

- **Introduce a teacher standardized assessment (to use in guiding professional development).**
 - Teacher evaluation is critical to improve teaching and learning in-service
 - Use evaluation to reward high performers and target in-service training to the areas and the teachers needing the most help.
 - In-classroom standardized assessment can provide key inputs for improving class management, use of time and pedagogical practices.
- **Reform teacher career by introducing a new framework with clear paths to reward good performers and, with that, be able to provide intense and effective support to weak performers.**
 - Career path reforms may include making permanent promotions contingent on teaching assessments rather than on seniority (and formal training requirements) and expanding salary differentials across different grades.
 - Performance incentives which focus on student learning can be productive in systems where other accountability mechanisms (e.g. from school administrators or from parents) are weak. These are likely to be most effective at school rather than individual teacher level.

II. Policy Recommendations

Improving the efficiency and equity of education spending

- Slow the rate of new teacher hiring to allow attrition (through retirement) to increase student/teacher ratios, especially in S and SE networks.
- Rethink school networks and create incentive to increase student-teacher ratio, linking FUNDEB to minimum student teacher ratios.
- Relax the constitutional minimum education spending (as a proportion of net revenue) to contribute to reducing inefficiency. This rule has become redundant with the creation of FUNDEB that establishes a minimum expenditure per student.
- Reform FUNDEB to reduce regional inequalities and increase efficiency in spending, supporting poor municipalities in richer states and dropping the support to rich municipalities in poor states.
- Reform PAR and state-level discretionary transfer schemes so that they become results-based financing mechanisms.
 - PAR: institutional and performance agreements, with focus on equity by creating incentives for improvements in education outcomes (rather than levels) and additional support from MEC to build the capacity of states and municipalities lagging behind.
 - At State level: remodel transfer schemes to municipalities based on ICMS tax revenue (state consumption tax), linking municipalities revenues with improvements in educational outcomes
- **Introduce cost recovery from richest students in higher education** while expanding student income contingent loans and its recovery through the tax system (e.g. Australian model).

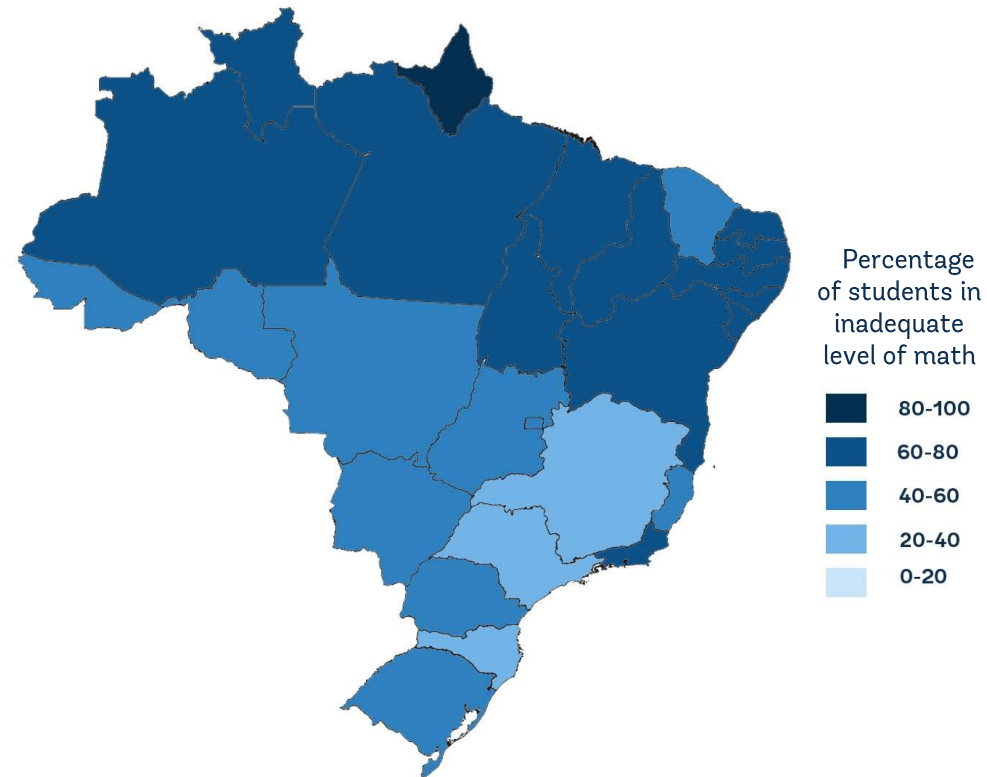
A core priority is to ensure that the BNCC and the 2017 reform of Ensino Medio are successfully implemented.

In addition, the following priority areas stand out for Brazil to advance educational outcomes for all in aspects such as learning, school flow, access, completion rate:

- **Expand coverage and increase the quality of ECD.**
 - Quality ECD has significant impact in improving retention and learning in further levels of education.
- **Improve teacher quality and accountability.**
 - Differences in teacher quality is the most important factor explaining differences in learning.
- **Increase efficiency and equity of public spending.**
 - A more efficient and equitable use of education expenditure is a necessary condition for achieving better outcomes.

The Brazil learning crisis starts at early grades (mainly as results of weak or non ECED)

Figure 10: Results of 3rd graders students national assessment, ANA 2016



- A Fair Adjustment: Efficiency and Equity of Public Spending in Brazil
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