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CITY: RIO DE JANEIRO

POLICY AREAS: EDUCATION

BEST PRACTICE

Escolas do Amanhã (Schools of Tomorrow), is an innovative program to improve 151 municipal schools in high crime, drug-affected neighborhoods so that they are islands of excellence and security not only for primary school children but for the community as a whole. It is strongly believed that the Schools of Tomorrow program can support impoverished communities to begin the process of rebuilding.

ISSUE

In the Rio de Janeiro education system there are 1,064 elementary schools and 300 nursery schools (the state government is responsible for high schools). Although Rio is not the largest city in Brazil, it is considered the biggest municipal school system in the country. The Rio education system has experienced many problems due to the effects and consequences that social promotion brings to its schools. For example, out of 700,000 children, 28,000 students in the 4th, 5th, and 6th grades are illiterate.

One of the most challenging situations for Rio schools is that drug lords and militia controlled areas of the city and *favelas* (low-income urban settlements). There were 151 schools where learning was almost impossible. Those schools were the only presence of the state in those areas. Despite the occupation and pacification of those *favelas*, it was still difficult for teachers to teach and students to learn.

GOALS AND OBJECTIVES

The Schools of Tomorrow program should contribute to the achievement of the system-wide goals, reducing the gap of knowledge between the Schools of Tomorrow and all Municipal Schools Network.

The City Department of Education has established ambitious goals for improving the quality of primary education:

- In 2011 obtain an Basic Education Development Index (IDEB Brazil's index for education quality) equal or superior to 5.1 in the early years of primary education (1st through 5th grade) and an IDEB of 4.3 in the late years of primary education (6th through 9th grades)
- Ensure that at least 95% of all children under the age of seven are fully literate by the end of 2012
- Reduce the functional illiteracy of students in the 4th through 6th years (ages 9-11) to less than 5% by 2012
- Reduce the number of students outside the appropriate school age bracket in the 6th grade to 10% by 2012

Each project within Schools of Tomorrow has specific objectives that contribute to the overall aim of bridging the gap between these schools and the system as a whole:

- Bairro Educador (The Educating Neighborhood) aims to tear down the walls that separate the school from the communities it serves, creating a more welcoming learning environment.
- 2) Saúde nas Escolas (Healthy Schools) is an innovative partnership with the City's Department of Health. The Schools of Tomorrow will offer a number of health services to its students in order to identify and address the needs of students and ensure they are prepared to learn.

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- 3) Professional Development to prepare teachers to address the specific needs of children who have endured trauma in their lives, as is common among children who grow up in violent and drug-ridden neighborhoods.
- 4) Extended school days through sports and cultural programs that keep students in a safe and stimulating environment for at least eight hours.
- 5) Experiment-based science education to develop children's reasoning and critical thinking skills, as well as instill in them a sense of curiosity and love for the world in which they live by making learning more hands-on and fun.
- 6) Remedial classes for smaller groups of children after school to help them gain a better grasp of the material and succeed in their regular classes.

IMPLEMENTATION

In January 2009, the city's Secretary of Education performed an assessment of learning in Rio schools. Brazil had recently universalized access to elementary school education, yet quality was still an issue in all cities. While reshaping the whole system in every school, the administration decided to take additional steps in the high-need areas. Additional support for the Schools of Tomorrow is led by the Municipal Education Secretary, but reflects coordinated efforts from the Municipal Secretaries of Culture, Health, Sports & Entertainment, Social Welfare, Quality of Life, Civil Works, and the Rio State Public Defender. Civil society institutions are also heavily involved in the design and delivery of the program. With this increased support the administration has launched 151 Schools of Tomorrow serving over 100,000 students. Three of these schools are in the Cidade de Deus (City of God) neighborhood, one of Rio's most notorious favelas.

To begin, a unified curriculum was established and organized on a bimonthly basis. Additional teacher training ensured teachers would know what was supposed to be taught for each subject area in each grade level. The 151 Schools of Tomorrow were established with six structural pillars: full time education, health orientation, community integration, science program, a dynamic learning methodology, and remedial classes, as shown in the picture bellow.

Remedial Classes **Full time education** Keep students inside schools and/or Reduce the gap between ST and network schools improving student cultural or sports centers from 7am performance significantly, with to 5pm, offering a safe and remedial classes when needed stimulating environment **Community Involvement Health Program** Open the school to the Program of participation of the comprehensive health communities, so that care (health promotion, Escolas learning becomes an prevention and care) for children and youth ongoing process do Amanhã Science program Dynamic way of learning

Establish innovative Science teaching, with the training of teachers and the installation of a

science laboratory inside each classroom

Enhance attendance levels by sparking the curiosity of students with creative and innovative teaching techniques



Key elements of Schools of Tomorrow program:

- I) Full time education The schools are open from 7 am to almost midnight each day for formal schooling, informal tutoring, and a wide variety of special cultural, arts, and sports programs delivered in partnership with the Departments of Culture and Sports and Recreation. This also includes Movie Clubs to draw community members into the safe, attractive school environment on weekends and at night.
- 2) Science program Designed to fight school evasion and enhance learning, the program places a science lab in each classroom and teachers are trained in a hands-on approach to science learning.



Students collaborating on a science experiment.

3) Enriched teaching and learning resources – Utilizing a teacher training specialist, each teacher in the 151 Schools of Tomorrow is trained on how to give classes that are dynamic and can break cognitive blockages that derive from over-exposure to violence. Learning resources include: state-of-the-art ICT (Information and Communication Technology) equipment, broadband internet, science labs, libraries and special budgets for books.



Student-created mosaics to help keep the school building clean and free of graffiti.



- 4) Community integration Strong outreach and partnership with the community is achieved through various paths, including: a full time community educator at each school who acts as the interface between the community and the school system; community mothers paid to monitor attendance and assist with school events; an innovative partnership with the Public Defender to make the schools a one-stop-shop for legal aid, such as obtaining birth and marriage certificates; and a collaboration with Social Assistance to investigate child labor and enroll families in Family Grant, a conditional cash transfer program.
- 5) Support for children's psychological, health and nutritional needs Many of the areas surrounding the 151 Schools of Tomorrow have no health services, so the goal of health services is not only treatment, but also prevention. Therefore health support in the Schools of Tomorrow is comprised of: three daily meals, health teams in all schools, school personnel trained to deal with abused and traumatized kids, and "1,2,3, Alô" a 24 hour phone hotline offering confidential advice.
- 6) Remedial classes To ensure all children achieve success, students are given extra help after school in small groups with the help of interns, volunteers and teachers, who use alternative methods and ITC support to ensure all children learn.



Cost

The Schools of Tomorrow represent a significant investment of municipal education resources targeting the most impoverished and conflict-ridden neighborhoods. The average per pupil cost for primary students in Schools of Tomorrow is at least double the average per pupil costs across the rest of the municipality's 1,000 primary schools.

In recognition of the difficult conditions in these areas, under the new teacher bonus program, staff of Schools of Tomorrow who meet their performance targets will get a 50% higher salary bonus (1.5 months extra salary per year, rather than 1.0). Additionally, the cost of the science program is approximately US \$13 million dollars a year, which includes students' books, science labs and teacher professional development. A high share of the program's costs is dedicated bringing new cultural and social services to communities where these are sorely lacking.

Below are the predicted investments in the Schools of Tomorrow program from 2010 to 2012, in Brazilian reais and in U.S. dollars. The final amounts for 2010 are not yet available.

Predicted Investment in R\$ Millions (US\$ Millions)									
2010	2011	2012	Total						
90,7 (54.4)	68,9 (41.2)	70,5 (42.2)	230,2 (138.0)						

RESULTS AND EVALUATION

One year after launching the program, results are already visible: the scores in the Brazilian standardized test, *Prova Brasil*, have shown a significant increase in 5th grade, going from 4.53 in 2007 to 5.30 in 2009. For Brazilian standards, this is an important achievement considering that the results in those schools had fallen from 4.62, attained in 2005, to 4.53 in 2007. Improvements have also been noted in 9th grade—in 2007, test scores were 4.27 and in 2009 were 4.38, reversing the downward trend.

Moreover, the bonus associated with performance targets based on the 2009 IDEB was awarded to a total of 290 schools, 53 of which were Schools of Tomorrow.

In addition to improved scores, the levels of attendance in the Schools of Tomorrow have increased relative to the rest of the city schools.

Municipal Schools	YEAR	Year I	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Average
Schools of Tomorrow	2009	91%	92%	92%	94%	93%	92%	92%	91%	92%	92.1%
Network Only		92%	93%	93%	94%	94%	92%	93%	92%	91%	92.1%
Difference		1%	1%	1%	0%	1%	0%	1%	1%	-1%	0.0%
Schools of Tomorrow	2008	90%	91%	92%	92%	92%	92%	92%	91%	92%	91.6%
Network Only		91%	92%	93%	93%	93%	92%	92%	91%	91%	92.0%
Difference		1%	1%	1%	1%	1%	0%	0%	0%	-1%	0.4%

^{*}The city is still calculating the evasion rates in order to evaluate whether there are significant improvements.



School evasion rates have dropped as well. In 2008, the Network of all city schools' evasion rate was 2.6 percent. This dropped to 2.35 percent in 2010. In the same period, Schools of Tomorrow demonstrated an even greater improvement, reducing their evasion rate from 5.1 percent (2008) to 3.26 percent (2010).

In order to systematize this program and evaluate its impact, the Department of Education has entered into a 36-month partnership agreement with UNESCO, whose international experience working with education in conflict-ridden areas will greatly contribute to the program.

TIMELINE

Calendar timeline for planning and implementation:

- Feb-April 2009 Selection of 151 schools located in areas controlled by narco-traffic, militias, or recently pacified ones, encompassing 73 favelas throughout 63 neighborhoods.
- May-June 2009 Intensive teacher training in a specific methodology for special student population.
- Starting August 2009 Launch of several initiatives, including a hands-on science program.
- Feb 2010 Based program on six pillars, developed activities in all schools, respecting the local social and cultural diversity in order to achieve the goals.
- 2009-2011 Rolled out of three Educating Neighborhoods in 2009; four in 2010; Plans to roll out 42 in 2011.
- December 2010 Partnership with UNESCO signed.
- Beginning in 2011 Integrating the various activities of the pillars in order to increase focus, speed up the delivery process and improve results.
- Beginning in 2011 Develop several partnerships around the program objectives, promoting social and personal development.

LEGISLATION

As of 2011, only mechanisms internal to the Department of Education have been used to regulate the program, such as a publication of the specific distribution of the curriculum in Schools of Tomorrow. There are no specific laws pertaining to this program.

LESSONS LEARNED

The Secretary of Education admits that most of the Schools of Tomorrow do not yet have all "model" elements in place. The philosophy is to not lose time chasing a perfect school but rather to get as many services in place in as many neighborhoods as possible from the beginning, and then to strengthen the program from there.

The geographical dispersion of schools and their respective location in violent areas often hinders the allocation of teachers, volunteers and interns, in addition to the logistical difficulty of distributing materials.

The social and cultural issues surrounding these schools cause a great number of interruptions in school activities. Insecurity, stress and life-threatening circumstances cause a large number of teachers to apply for sick leave.

The federal program Mais Educação (More Education), in spite of reaching all Schools of Tomorrow, has limited resources to service the totality of students in these schools. This program provides resources directly to schools in order to allow them to develop several different activities, such as sports, cultural, arts, math and reading. Due to limited funding, those activities cannot always be extended to all the students in each school.



Most of the schools have limited space or precarious infrastructure, reducing or preventing the implementation of educational activities.

The large number of teachers and their geographical dispersion hinder their participation in lectures, courses and seminars organized by the Department. In addition, the Department's limited personnel hamper its ability to monitor the program more intensely. E-learning has been an alternative to overcome these barriers.

A recently signed agreement with UNESCO will allow the City Department of Education to better comprehend the program's trajectory so far, set clearer goals moving forward and implement a rigorous impact evaluation of its key components.

TRANSFERABILITY

One of the most important aspects of Schools of Tomorrow program is that it recognizes and accepts the diversity within its 151 schools, respecting their history, culture, and the social aspects of each community, so as to build a partnership aiming towards common goals. The main pillars of the program could be replicated, adapting the activities and partnerships according to the city, neighborhood or school reality.

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For additional information on Schools of Tomorrow, watch the following news broadcast: http://www.youtube.com/escolasdoamanha#p/u/4/uCWj8lfuHmo

Facts and figures in this report were provided by the highlighted city agency to New York City Global Partners.