

# **BRAZIL'S FIRMS FORCED TO TEACH BASIC SKILLS**

**Low education standards have led to a vast shortage in qualified workers. Companies are taking up the slack.**

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**RIO DE JANEIRO** – When the work-day ended at the Reduc oil refinery on the outskirts of Rio one day last month, most of the complex's 8,000 workers made their way home through the heavy spring rain.

But the day wasn't over for more than 100 laborers and service workers, who headed to the company cafeteria for career-development courses. There, in the cavernous hall, they got down to work. Some were learning to read and write for the first time. Others were doing primary school-level science. A few were even trying to master basic English commands.

Such scenes of adult education inside factories and businesses are increasingly common across Brazil these days. With the education at state schools little short of risible, the pool of professional companies such as Petrobras - the state-owned oil company that runs Reduc - are taking on the role of educators. Heeding the warnings of economists and development specialists who fear that low standards of literacy, math, and science are compromising Brazil's productivity, competitiveness, and even economic growth, employers are doing something about it.

"Companies are taking up the role of the state and offering education," says Fernando Guimaraes, the director of SESI, an industrial organization that coordinates programs like the one at Reduc. "There's no doubt that the number of students we've got has risen fantastically."

## Shortage of competent employees

Brazil's low education standards have a doubly ruinous effect on Brazilian companies, according to experts and CEOs. Many struggle to find competent people to fill even entry-level positions, as many applicants cannot read or write or add or subtract to acceptable levels.

But even those who are employed often lack the creative spark and mental agility that can make the difference between profit and loss.

"There are two conceptual frameworks to understand innovation," says Alberto Rodriguez, the author of a soon-to-be-released World Bank study on how better education spurs faster growth. "You have the high-tech, frontier innovation and you have the adaptation and improvement of technology that happens day-to-day in firms. By improvement of a process, you reduce costs and become more competitive."

"In 1960, Korea and Brazil had the same per capita income. Today, Korea has about 5 times more per capita income than Brazil. Most of the growth in Korea in this period can be attributed to improvements in total factor productivity: the same people with the same resources operating more efficiently. And that is what Brazil needs."

Last year, Korea's GDP grew 4 percent and Brazil's grew 2.3 percent. It was a similar story with other developing nations. Russia, India, and China - all emerging powers frequently compared with Brazil - grew faster and all reported higher education standards.

Brazilian employers understand that relationship and recognize Mr. Rodriguez's explanation. They say it is why they are providing more schooling for their employees. Most firms, like Petrobras or Tecnisa, a major construction firm, provide on-site classrooms and teachers before or after work. Others, like Zanzini, a furniturermaker, opt for more immediate solutions.

The \$32 million-a-year company is based in a small town in rural São Paulo and therefore has the pick of the local workforce, says Leonardo Magnili, Zanzini's human-resources director. But even then, so many employees were having trouble with everyday tasks that managers set up a classroom in the middle of the factory floor to provide impromptu lessons.

"When we see that someone can't do something, we take them straight to the classroom and try to explain it," says Mr. Magnili, adding that the overall standard of handwriting is so poor that they offer calligraphy courses. "It is common to see people who can't read or write or fill in forms. They have finished secondary school but they can't add without a calculator or fill in a form. They should know this stuff."

But they don't, and empirical evidence shows why. The performance of Brazilian math students was the worst of 40 countries in the most recent study by the Paris-based Organization for Economic Cooperation and Development (OECD).

## Brazil's children left behind

Exactly half of Brazilian 15-year-olds fall short of even the most basic level of math proficiency, according to the study. The number was four times that of Russia and about 25 times that of Korea.

In reading, Brazil's performance was also poor: 74 percent of Brazilian 15-year-olds could not demonstrate detailed understanding of texts, a number three times that of Korea. Between a quarter and a third cannot read basic sentences properly, the study showed.

Teachers here in the Reduc canteen are anxious to resolve the situation. But in spite of their efforts, and those of the students - many of whom come from the impoverished northeast and are taking their first lessons at the age that some Brazilians retire - they are hamstrung by the sheer enormity of the task.

One woman in her 50s, given the task of rating the prices of five items, could not tell whether 99 cents was more or less than 69 cents. A man struggled to rank three different goods, starting with the most expensive. Others could only haltingly read short texts.

Yet the students still plug away, eager to better themselves. They know they are starting late, but they can see there are both personal and professional advantages to studying hard.

"I had the chance to study when I was a kid, but I couldn't be bothered," said Raimundo da Silva, a 36-year-old laborer poring over a composition exercise. "Now I can see that if I learn more, I can earn more. My company gives me an incentive to learn. We can see people who go to school move up. Now I come here straight from work, even though there's a bus waiting to take me home. I want to go forward, not back."