

# Vocational Education in the Legal Amazon

## Introduction

Vocational Education in the Legal Amazon is suboptimal. Faced with a particularly challenging job market for young people,<sup>1</sup> the low representativity of technical training in the region's workforce has made it even more difficult for workers to enter the workforce. This study, produced by researchers from the Amazon 2030 project (AMZ 2030), reveals how the low rate of schooling in this modality contributes to a lower qualification of the workforce, which can mean a wasted opportunity of using the demographic bonus that the region has been experiencing.

The report “Education in the Legal Amazon – Assessment and Critical Factors”, developed by education economists Tássia Cruz and Juliana Portella, analyzes the main characteristics and challenges of elementary and higher education in the region. In its section on Vocational Education, the document dialogues with other AMZ 2030 publications which examine the way the region's labor market operates and point out lessons for development and for the generation of local jobs based on the experiences of free trade zones and international business.<sup>2,3</sup>

To assess the situation in Vocational Education in the Legal Amazon and compare it with other Brazilian states, the researchers analyzed data from the Basic Education Census of the Anísio Teixeira National Institute of Educational Studies and Research (INEP), Ministry of Education and National Research by Continuous Household Sampling (PNAD Contínua), and the Brazilian Institute of Geography and Statistics (IBGE). The numbers refer to an economic scenario that includes the year 2020 and, therefore, the beginning of the crisis triggered by the new coronavirus, although this has not significantly changed the indicators considered.

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<sup>1</sup> Gonzaga, Gustavo, Flávia Alfenas e Francisco Cavalcanti. *Mercado de Trabalho na Amazônia Legal - Uma análise comparativa com o resto do Brasil*. Amazônia 2030, 2020. [bit.ly/3qIMt3W](https://bit.ly/3qIMt3W)

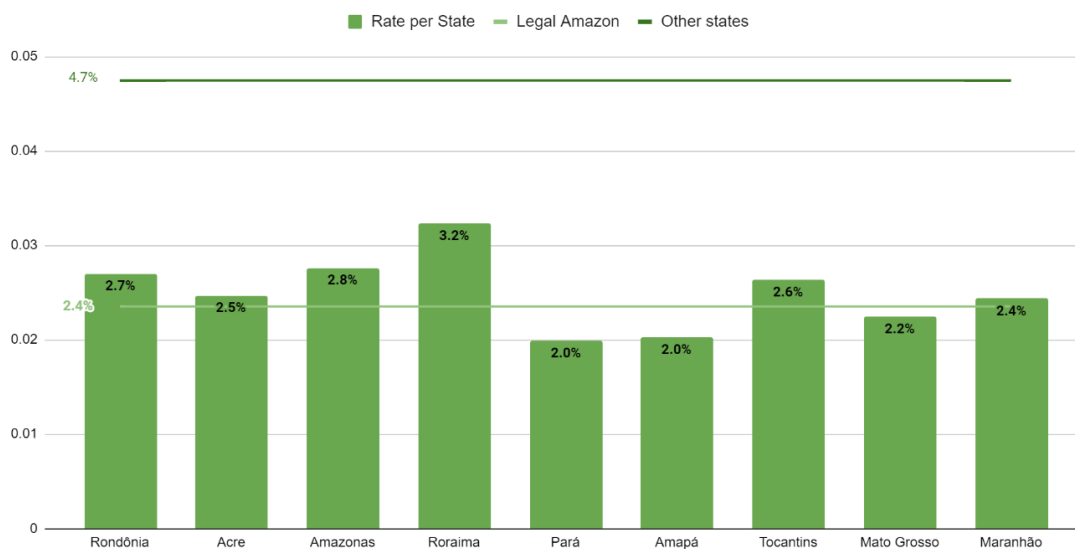
<sup>2</sup> Ibid.

<sup>3</sup> Schutze, Amanda, Rhayana Holz, e Juliano Assunção. *Aprimorando a Zona Franca de Manaus: Lições da Experiência Internacional*. Amazônia 2030, 2021. [bit.ly/3FsNuky](https://bit.ly/3FsNuky)

## Vocational Education in the Legal Amazon

The data reveal that there is a low rate of schooling in Vocational Education in all the states that make up the Legal Amazon, especially when compared to the average for the rest of the country. Figure 1 shows the gross enrollment rate at this stage, equivalent to the ratio between the number of enrollments (regardless of age group) in Vocational Education and the total population in the age group expected for this stage (in this case, between 15 and 29 years of age).<sup>4</sup> This rate for the Legal Amazon as a whole is almost half that of the rest of Brazil, indicating that the chance of a young person from the Legal Amazon to be enrolled in Vocational Education is much lower than that of a young person from outside the region.

Figure 1. Gross enrollment ratio in Vocational Education, 2020



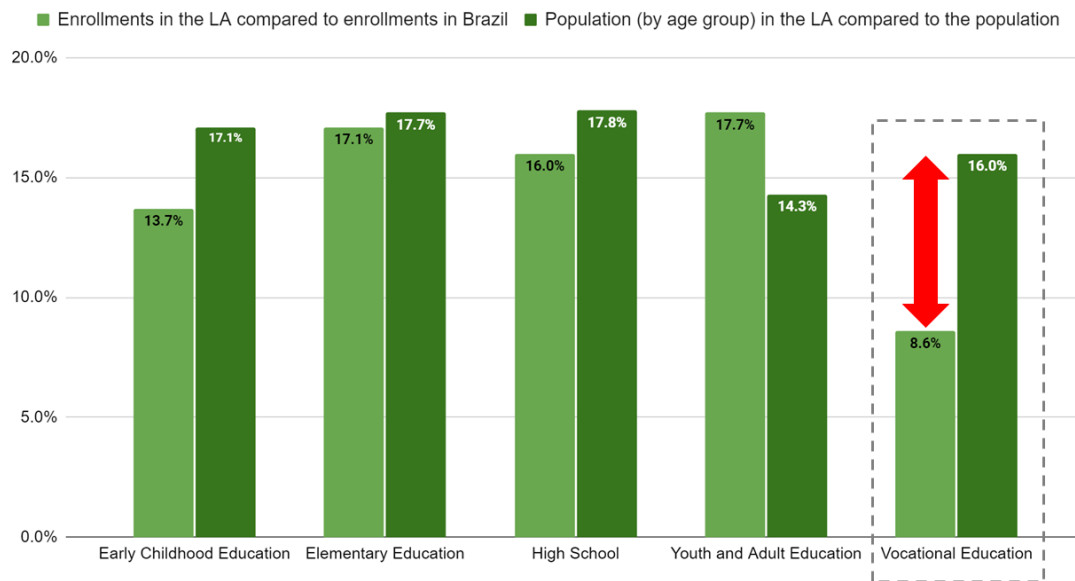
Source: AMZ 2030 with data from the Basic Education Census/INEP and IBGE

Note: To calculate the gross enrollment ratio, we considered the population between 15 and 29 years of age

<sup>4</sup> As there is no age group defined by legislation or literature as being 'ideal' to attend Vocational Education (there are only minimum age requirements), an age group corresponding to 80% or more of total enrollments in 2020 was selected: 15 to 29 years old.

This scenario is corroborated by Figure 2, which shows that only 8.6% of enrollments in Vocational Education in Brazil are from students in the Legal Amazon, while the region concentrates 16% of young people of typical age to attend this stage. In the same figure, we can see that this is not repeated in the case of Elementary School or High School, although it is possible to identify a similar situation, while less accentuated, in Early Childhood Education.<sup>5</sup>

Figure 2. Enrollment ratios in Elementary Education, 2020



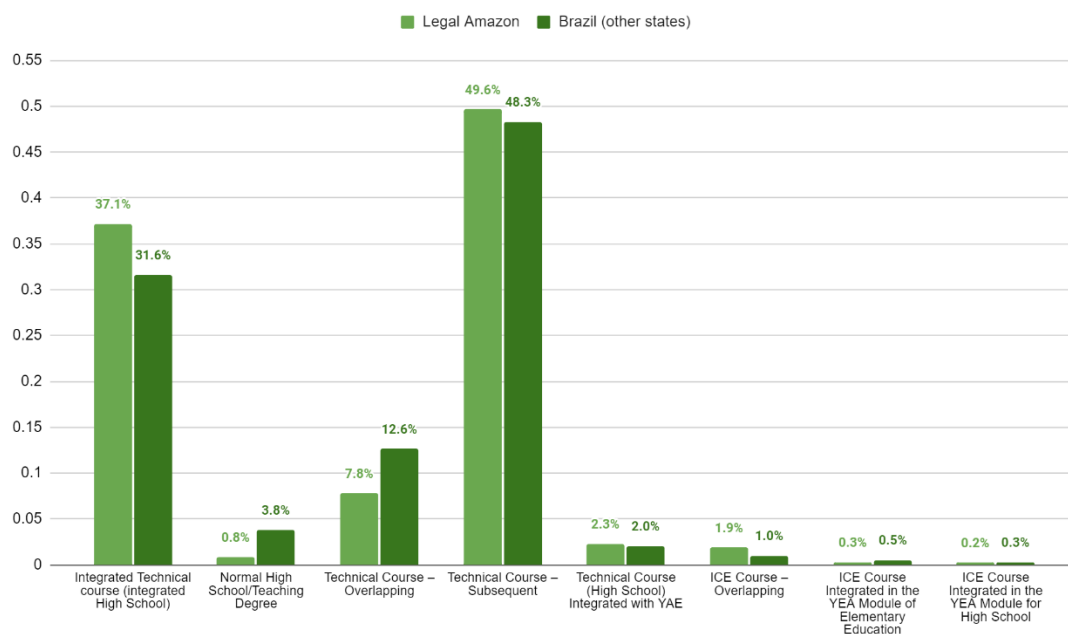
Source: AMZ 2030 with data from the Statistical Synopsis of Basic Education/INEP and IBGE

Note: We consider the following age groups for each educational stage: ECE - 0 to 5 years old; EE - 6 to 14 years old; HS - 15 to 17 years old; YAE - 15 to 39 years old (corresponds to ~80% of students); VE - 15 to 29 years old (corresponds to ~80% of students)

<sup>5</sup> The Early Childhood stage is analyzed in a specific section of the aforementioned full report.

According to Decree No. 5,154/2004, later endorsed by Law No. 11,741/2008, Vocational Education is organized into three segments: i) professional qualification courses or initial and continuing education (ICE), characterized by the basic level and its opening to any person, with no requirement of previous schooling; ii) technical level courses offered simultaneously with secondary education or after its completion, which have their own legislation and specific curriculum guidelines; and iii) higher level technological courses, which are also governed by their own legislation, have specific curricular guidelines and can only be taught by schools accredited by the Ministry of Education (MEC). In order to access these higher-level technological courses, it is necessary, in addition to completing high school, to pass a selection process. Figure 3 shows the participation of each stage in the total enrollment in Vocational Education.

Figure 3. Enrollments in Vocational Education by teaching stage, 2020



Source: AMZ 2030 with data from the Statistical Synopsis of Basic Education/INEP

All these modalities play an important role in the training of workers to meet the demands of the market and the productive sector, and can contribute to increased productivity, competitiveness and regional development, as well as the strengthening of the national economy.<sup>6</sup>

<sup>6</sup> Schwartzman, Simon and Claudio de Moura Castro. "Ensino, formação profissional e a questão da mão de obra". *Ensaio: Avaliação e Políticas Públicas em Educação* 21, nº 80 (2013): 563–623.

However, these modalities are offered by quite heterogeneous entities, such as state and municipal government agencies, technical schools, national service systems ('S' Systems), and civil society organizations.<sup>7,8</sup>

These particularities generate a complex scenario, which requires that public policies related to Vocational Education be carefully and coherently designed. It is also argued that while the sphere of action of the Ministry of Education is restricted to financing and maintaining the federal network, a variety of programs, projects and activities for training and professional qualification proliferate in parallel, generally fragmented and lacking coherence.<sup>9</sup>

One of the main challenging factors for the sector is the lack of available job opportunities, particularly for the younger population. As pointed out by the study by Gonzaga, Alfenas and Cavalcanti (2020),<sup>10</sup> there is a lack of dynamism in the labor market in the Legal Amazon, especially in relation to the rest of the country, which has generated a particularly unfavorable scenario for the insertion of young workers. According to the authors, the Legal Amazon had 57% of people between 18 and 24 years old and 40% of those between 25 and 29 years old without any occupation in 2019 – in this last age group, the occupancy rate was ten percentage points below that of the rest of the country.

However, the probability of getting a job does not increase significantly with the completion of vocational education; the unemployment rates found among workers who completed professional qualification courses or technical courses are very similar to those verified in the total Brazilian population, around 30%.<sup>11</sup>

At the same time, according to data from the 2019 PNAD Contínua, in the North region, where 7 of the 9 states of the Legal Amazon are located, 18% of people with complete high school and incomplete higher education who did not attend Vocational Education courses indicated lack of interest,<sup>12</sup> compared to 12% in other Brazilian regions.

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<sup>7</sup> The 'S' System is formed by SENAI, SESI, SENAC, SESC, SENAR, SEBRAE, SEST, SENAT, SESCOOP, the oldest of which is SENAI, which was created by Decree-Law No. 4048, of January 22, 1942. It has its own legislation that protects its revenue. The main revenue of the entities that make up this system comes from "transfers to third parties" from the Ministry of Welfare and Social Action, which total, on average, 4 to 5 billion per year, in addition to their own revenues generated through the provision of services, in the structure implemented throughout the national territory.

<sup>8</sup> Carusi Machado, Danielle, Mauricio Cortez Reis e Graciele Pereira Guedes. "Políticas Educacionais em Ação". *Educação Profissional e Técnica no Brasil: considerações sobre o nível médio*, nº 13 (2021). [bit.ly/3FmvaJ2](https://bit.ly/3FmvaJ2)

<sup>9</sup> Pedrosa, Fernanda Gomes. *Política de Educação Profissional e Tecnológica: Análise da Modalidade Pronatec Brasil Maior na Perspectiva de seus Implementadores*. Brasília, DF: IPEA, 2016.

<sup>10</sup> Gonzaga, Gustavo, Flávia Alfenas e Francisco Cavalcanti. *Mercado de Trabalho na Amazônia Legal - Uma análise comparativa com o resto do Brasil*. Amazônia 2030, 2020. [bit.ly/3qIMt3W](https://bit.ly/3qIMt3W)

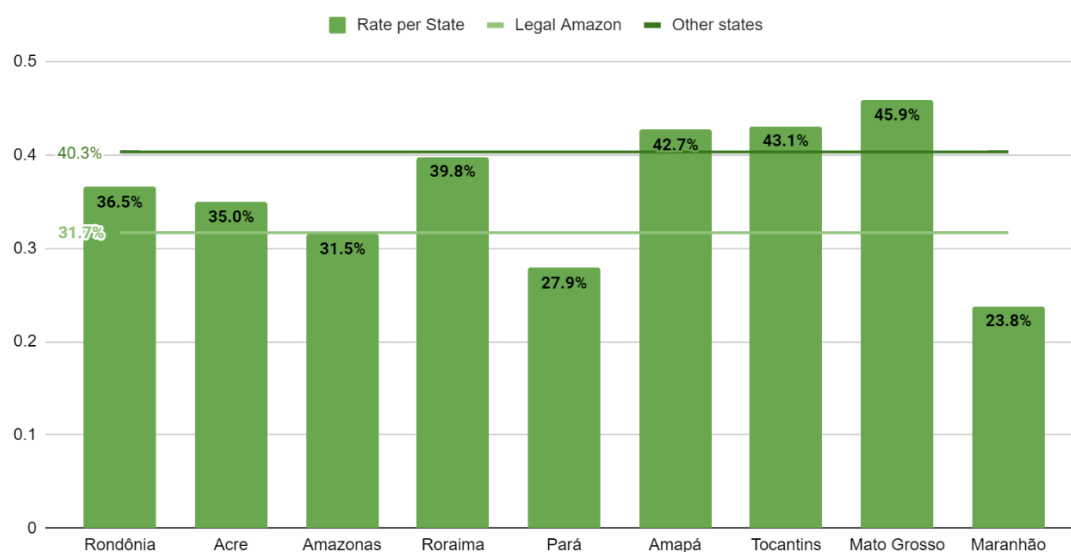
<sup>11</sup> Inter-union Department of Statistics and Socioeconomic Studies (DIEESE). *Educação Profissional e mercado de trabalho: ainda há muito a avançar*. Nota Técnica nº. 199, 2018.

<sup>12</sup> We grouped "Because I concluded the level of education I desired" and "Not interested" together here.

This situation suggests that qualification for the job market, which could contribute to the inclusion of these young people who are not employed, is unable to improve the conditions of young people in the market.

Young people in the Legal Amazon also have low enrollment rates in Higher Education, indicating that their educational trajectory is shortened in most cases, including in relation to the rest of the country. According to INEP data, the gross enrollment rate in higher education in the region is 19.1%, 8 percentage points lower than the average for other Brazilian states (as we can see in Figure 4).

Figure 4. Gross enrollment rate in Higher Education, 2020



Source: *Statistical Synopsis of Basic Education/INEP and IBGE*

Note: To calculate the gross ratio we considered people between 18 and 24 years of age.

As a result, people who don't work and don't study, the so-called "neither-nor", corresponded, at the end of the second quarter of 2020, to 40% of young people ages 25 to 29, a percentage much higher than the proportion in the rest of the country, which was 31%.<sup>13</sup> This could have long-lasting consequences on the productivity and economic development of the Legal Amazon, in addition to wasting the region's demographic bonus.

We conclude, therefore, that investments in Vocational Education, considered one of the main tools for improving the competitiveness of Brazilian industry and generating better employment and income opportunities for the population, must be accompanied by policies that generate greater dynamism in the labor market in the region, especially with regard to the inclusion of young people.

<sup>13</sup> Gonzaga, Gustavo, Flávia Alfenas e Francisco Cavalcanti. *Mercado de Trabalho na Amazônia Legal - Uma análise comparativa com o resto do Brasil. Amazônia 2030*, 2020. [bit.ly/3qIMt3W](https://bit.ly/3qIMt3W)

In this sense, we highlight the remarks made by Schutze, Holz and Assunção (2021) in research on the Manaus Free Trade Zone, also known as the Manaus Industrial Hub.<sup>14, 15</sup> The authors suggest, among other actions, conditioning or increasing tax incentives granted for companies in the region based on investments in education, such as school and university funding and training of employed personnel. Actions in this sense, combined with public policies for investment in professional education and the local job market, can help to develop the economy and increase the region's social well-being.

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<sup>14</sup>Schutze, Amanda, Rhayana Holz, e Juliano Assunção. *Aprimorando a Zona Franca de Manaus: Lições da Experiência Internacional*. Amazônia 2030, 2021. [bit.ly/3FsNuky](https://bit.ly/3FsNuky)

<sup>15</sup> Consistent with what is observed in the rest of the Legal Amazon, the Free Trade Zone is characterized by a low average wage level and jobs concentrated in the lowest pay ranges, despite the fact that the local industrial policy has regional development and job creation as its objective.

## Authors

### Tássia Cruz

Executive Manager, FGV

CEIPE [tassia.cruz@fgv.br](mailto:tassia.cruz@fgv.br)

### Juliana Portella

Researcher, FGV EBAPE

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### About Amazônia 2030

The Amazônia 2030 project is an initiative by Brazilian researchers to develop a sustainable development plan for the Brazilian Amazon. Our objective is for the region to be able to reach a higher level of economic and human development and achieve the sustainable use of natural resources in 2030.

### Press Assistance

O Mundo que Queremos

[amazonia2030@omundoquequeremos.com.br](mailto:amazonia2030@omundoquequeremos.com.br)

### Contact

[contato@amazonia2030.org.br](mailto:contato@amazonia2030.org.br)

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