

O287

Paper

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## Singularities of Engineering Education in Brazil

This work discusses the engineering education in Brazil and emphasizes the singular characteristics that distinguish this career from others in Brazilian superior education system. Usually, comparative studies on education of Latin America have not highlighted appropriately Brazilian singularities. For instance, Brazil has a historical gap in basic education in comparison with other countries in South America. In superior education, a relevant Brazilian characteristic is the dominance of private system over public system. About 67 % of enrollments of superior education system are concentrated in private institutions while only 33 % are in public institutions: federal, state and municipal institutions. Therefore, the access to superior graduation is not done by massive public education, as in Mexico and Argentina, but by a paid education that is, typically, inferior. The public superior education system is responsible for about 90 % of all scientific and technological research in Brazil and, on an average, its quality is superior to the private system. There are exceptions, of course, in this scenario: quality education can be found in traditional private institutions; among these are religious and philanthropical institutions. Engineering education presents some characteristics that distinguish this career from the others. Like medicine courses, engineering courses demand large investments in laboratories, computational resources, consuming material, etc. The lower private-public education system proportion and the high dropping out are examples of engineering education characteristics, which differ from the average of superior education system in Brazil. Recently implemented, the national evaluation of superior education offers a source The distributions of the higher and lower grades obtained in the National Exam of Courses, a national evaluation realized by students in the last year of their graduation, which is common to all students, is also analyzed. To illustrate particularities of engineering education, we compare, through presentation and interpretation of official data, the education of three traditional engineer careers with three other distinct careers: Administration, Law and Medicine.