

# II INTERNATIONAL SYMPOSIUM ON SCIENCE AND BIOTECHNOLOGY ENTREPRENEURSHIP AND INNOVATION

## ALTERNATIVE APPROACHES TO UNDERSTANDING THE RELATIONSHIP BETWEEN BASIC SANITATION AND SCHOLAR PROFICIENCY

MATIAS, Fernando Dirceu; SOARES, Petrick Anderson; SCARATTI, Dirceu

1. Mestrando do programa de Pós Graduação em Ciência e Biotecnologia da Universidade do Oeste de Santa Catarina - Unoesc, Videira.
2. Doutor Professor do Programa de Pós Graduação em Ciência e Biotecnologia-Unoesc, Videira
3. Doutor Professor do Programa de Pós Graduação em Ciência e Biotecnologia-Unoesc, Videira

### Abstract

The basic sanitation has made little progress on the public policy agenda in Brazil. Currently, the lack of a general sewage network reaches 53% of the Brazilian population. The relationship between sanitation access and health is well known, but, the connection between the basic sanitation and other components of the human development index (HDI), such as education, is neglected. The access to school sanitation infrastructure and impacts on scholar development has not been explicitly studied in Brazilian literature. The question that arises is how access to basic sanitation improves scholar proficiency. Researches that are being developed about this subject have been revealed that the precariousness of access to sanitation is directly linked to variations in indicators that evaluate the quality of basic education, such as school attendance rate, primary school dropout rate and age-series distortion. Correlation analysis is the main method used for such analyses, using data from the demographic and school census. To the best of our knowledge, no research using the Data Envelopment Analysis (DEA) tool has been developed

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to better understand the relationship between access to basic sanitation and basic education in Brazil.

Keywords :Scholar proficiency. Data envelopment analysis. Correlation analysis.

E-mail: fernando.matias@unoesc.edu.br

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