



# Special issue on education for sustainable development

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In 2014 Springer Open Journals created “The Brazilian Journal of Science and Technology” (BJST). In September 2015, the BJST made a call for papers for a special issue on “Education for Sustainable Development”. The call was a success with excellent articles being received from various countries. The ten best articles were selected for publication in this special issue.

The selected articles are concerned with Education for Sustainability (EfS) at different academic levels and adopt different theoretical approaches. Some articles analyze EfS in course curricula, while others investigate projects involving EfS. The literature review in the final article provides the reader with a complete view of the current situation of EfS in the World.

Below, I present the ten articles in the special issue and invite you the reader to choose the articles that most satisfy your curiosity. For example, you can read the articles according to the academic levels involved: primary and secondary schools, undergraduate and graduate degrees. Alternatively, you can read articles that explore specific theories and then analyze the curricula, case studies and projects.

If you want to follow the sequence of the academic levels, first read the following article:

“The Green School—A sustainable approach towards environmental education,” by Lalieta Somwaru. This project deals with biodiversity, waste, water and energy, and is being introduced in all the primary schools in Suriname—South America. The project focuses on teaching children about the environment in a positive and practical way, thereby encouraging interaction. By August 2016 all the primary schools in Suriname will officially be “Green Schools”.

The next two articles are concerned with the relationship between secondary education and university. The article “From the Brazilian semiarid to university: The incorporation of a cooperative learning project as academic extension”, written by Bruno de Souza Lessa, Ana Clara Souza and José Carlos Silva-Filho, analyzes the role of the Program of Education in Cooperative Cells in preparing students from the semiarid region for the entrance exam of the Federal University of Ceará. The research provides insights into the factors necessary to integrate university and community through the assimilation of social initiatives. The second article, “Education for sustainability in business schools by practicing social learning”, by Paola Schmitt Figueiró, Bruno Bittencourt and Soraia Schutel, asks “How can Social Learning, focusing on collaboration between

different actors, contribute to effective EfS in business schools?” To answer this question, action research was conducted in a public high school attended by children from highly vulnerable social conditions and considers their interaction with undergraduate and MBA students from two business schools in southern Brazil.

Sustainability in the undergraduate curriculum is analyzed in two articles. The article “Sustainable Development in Business Administration Programs of Excellence in Brazil” by Mariane Lourenço, Adriana Takahashi, Sérgio Vogt and Marcos Vinícius Correa, investigates how the subject, sustainable development is being incorporated into the curriculum of Management programs in Brazil. The results demonstrate the need to expand the inclusion of the subject in Brazilian academic programs. The second article “Environmental education in distance learning in Environmental Engineering at the Federal University of São Carlos, Brazil: potentialities and limitations towards a critical techno-scientific education”, written by Vânia Gomes Zuin and Carolina Borgonove, presents a case study that analyzes an environmental education module in the undergraduate Environmental Engineering course at the Federal University of São Carlos, Brazil.

Two other articles analyze sustainability in graduate courses, one of them in Brazil and another in UK. The article “Treading Paths to Sustainability: an analysis of the postgraduate curriculum in business administration” by Carolina Sampaio Marques, Marcelo Trevisan and Anderson Cougo da Cruz, examined the pedagogical projects of eight master degree programs offered by Management Schools in the south of Brazil. The article about sustainability in Management Programs in UK: “Transformative Learning to Promote Sustainability: Inserting the Third Level of Learning in Management Programs”, by Lisiane Celia Palma and Eugênio Ávila Pedrozo, presents an expanded framework of the integrated model of organizational learning.

The next article is a case study on the subject of energy: “Sustainable energy generation and use in SIDS and beyond—introducing the L3EAP online learning approach”, by Franziska Wolf, Deisi Becker, Walter Leal, Jonathan Krink, Julia Haselberger and Maria Kowald. This article explores the importance of open-access online courses for improved lifelong learning. The “Lifelong Learning on Energy Efficiency, Access and Security in African and Pacific Small Island Developing States”, (short L3EAP) case study offers valuable insights into the practical development and implementation of a demand-driven approach.

The article “Education, sustainability and social learning” by Pedro Roberto Jacobi, Renata Toledo and Edson Grandisoli discusses social learning as a potential framework for strengthening the role of sustainable actions through educational initiatives. This paper establishes a dialogue with the current literature on education for sustainability with social learning and adaptive management.

Finally, the article “A Bibliometric Study on Education for Sustainability” by Pedro Luiz Cortes and Rosely Rodrigues is a bibliometric study of international journals. The results show that academic production in the area has been growing since the middle of the last decade, focusing on the fields of the applied social sciences, environmental sciences, energy, management, engineering, humanities and psychology. Australia, United Kingdom, United States, New Zealand, Spain, Israel and Canada are the countries that stand out.

However, if you are interested in reading the main theories addressed in these articles, read the following articles: For “Social Learning”, read the articles “Education for

sustainability in business schools by practicing social learning” and “Education, sustainability and social learning”; for “Cooperative Learning”, read the article “From the Brazilian semi-arid to university: The incorporation of a cooperative learning project as academic extension”; and for “Transformative Learning”, read the article “Transformative Learning to Promote Sustainability: Inserting the Third Level of Learning in Management Programs”.

I hope reading these articles broadens and deepens your knowledge regarding education for sustainable development. I would like to thank all the authors who submitted their articles for this special issue and the reviewers who contributed to improve the quality of those articles. My special thanks to Vinícius Amorim Sobreiro for his logistical support and to Prof. Charbel Jabbour for his friendly cooperation. Special thanks to Prof. Walter Leal for your encouragement and confidence. I am very grateful to everyone who helped in this special issue. To the readers, I wish you all a good read.

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