

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
 Space Network: Social Media and Digital Resources (9)

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EXPLORING A SPACE EDUCATION THEMATIC WEBSITE TO BOOST PRECOLLEGE DIGITAL  
 INCLUSION - A BRAZILIAN EDUCATION MINISTRY'S EXPERIENCE

**Abstract**

The Brazilian federal government implements many policies to assist low-income citizens who have little access to online information. Several digital inclusion programs have been carried out, and the Brazilian Education Ministry plays an important role in this framework. The ministry's leading initiative to foster teaching better through access to information and high-quality materials is the Teacher's Portal (<http://portaldoprofessor.mec.gov.br/index.html>), the main Brazilian database for precollege education, accessed in more than 147 countries. It comprises qualified lesson plans, multimedia resources, newsletters, and thematic websites on topics of interest to educators. In 2010, a thematic website dedicated to Astronomy, Astronautics and Space Sciences in School (<http://educacaoespacial.wordpress.com/>) was launched. It comprises lesson plans; contents; innovative projects; the award-winning NASA's educational project, Space Weather Action Center, translated into Portuguese (<http://webeduc.mec.gov.br/nasa/>) in a partnership with NASA Goddard, serving Brazil and the Portuguese-speaking community; a forum (<http://portaldoprofessor.mec.gov.br/ListarMensagensForum.html?idTopico=114>), and so forth. In only a few months, this website became one of the most accessed among all education ministry's thematic websites, and the most accessed internationally – connections from 95 countries (data of 01.30.2013). Qualitative research regarding the effectiveness of this ministry's space education thematic website has been conducted. A sample of users has been selected for different Brazilian states, and a questionnaire submitted via e-mail. Preliminary results point out that virtual projects generate real results. The website inspired efforts by educators on hot topics i.e., Mars human exploration, and new methodological ideas for the classroom, such as using the aforementioned NASA's Space Weather Action Center. Another interesting result was the identification, by the ministry, of an opportunity to have Brazilian students interacting with NASA scientists through NASA's Digital Learning Network ([http://portal.mec.gov.br/index.php?option=com\\_contentview=articleid=16372](http://portal.mec.gov.br/index.php?option=com_contentview=articleid=16372)). Limitations have also been identified, such as the need for direct interaction. In response, we are planning to accessible digital resources for space education has been increasingly explored worldwide. In both developed and developing countries, web-based projects help substantially fill this gap. In summary, we conclude that Web-based projects, i.e., websites and forums, constitute a world opportunity that contribute to raising educational standards for low-income communities and remote areas.