

More Than Good Pedagogy: The Value of Incorporating Students into Geo-Technology Research

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Abstract

Never before have private citizens been so important in the production of geographic knowledge. Advanced forms of geographic representation, including online maps, remote sensing, and vast multidimensional databases, are increasingly being used and in many cases produced by non-experts. Young people make up a disproportionately large share of these citizen scientists – students come to universities with an increased awareness of and sensitivity to advanced geographic technologies (e.g., GPS, smartphone apps, Google Earth), and, more broadly, increased exposure to (if not critical literacy about) graphics and information through social media and web interactions. Indeed, young people can logically be considered the drivers of innovation - they take for granted technology and information that amazes those of us who teach them, they explore and communicate with graphics and data as part of their everyday routines, and they constantly demand new and better forms of interacting with those graphics, data, and each other. As such, research in geographic information technology naturally can - and indeed should – involve students. Combined with the evidence from pedagogical literature that integrating research and problem-solving into classroom teaching leads to superior synthetic learning and creates more literate and critical young scholars, there is ample reason for university educators to strive to inspire students through research, and, conversely, have our research be inspired by students. This address will document the productive synergy of teaching and research in my career as an educator in a variety of different settings, and (I hope) will prompt both discussion at the conference and efforts after the conference to integrate the innovations in our field with the imagination of our students.

Biography

Rob Edsall is an associate professor in the Department of Geography and Earth Sciences, with a joint appointment in the Department of Communication and Digital Media, at Carthage College, in Kenosha [Ken-OH-shuh] Wisconsin, USA. His teaching and research interests center on mapping: cartography, geographic visualization, GIS, spatial analysis, and geovisual analytics. He has authored or co-authored two dozen peer-reviewed publications in books, journals, and prestigious conference proceedings, and was recently the guest editor for the 2011 US National Report to the International Cartographic Association. He has also been on the faculty of the University of Minnesota and Arizona State University, where he was the recipient of two campus-wide teaching and service awards. He holds Bachelor's degree in Music from Kenyon College, and graduate degrees in Geography (PhD) and Meteorology (MS) from Penn State University.