"Let the young ones do it"
How digital divides influence the use of the Geoweb by farmers and food advocates in rural Canada.

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Abstract

This study draws on a community-based research project in the North Okanagan Valley of British Columbia to examine the use of the Geoweb in rural Canada and to understand how the Geoweb "maps" onto the digital divide.

Background and Relevance

Digital divides within and between communities is a long-standing dilemma in Canada's digitally engaged society. Digital divides are often portrayed in the literature as a split between those citizens who have access to information technology compared to those who do not (Servon, 2002). The recent move from Web 1.0 to Web 2.0 and with that the emergence of the Geospatial Web 2.0 (Geoweb) has opened a wider door to the interaction of non-experts to both create and disseminate spatial knowledge (Garrett, 2006; Haklay et al., 2008). With the Internet reaching deeper into rural Canada coupled with an ever-increasing reliance on the Web for communicating diverse forms of knowledge, the divides seem to be shifting (Compaine, 2001; van dijk & Hacker, 2003). Both Crampton (2009) and Elwood (2008) point to the digital divide as a critical factor of the effectiveness of the Geoweb to engage citizens in the mapping process. Thus, it is important to extend an understanding of use of the Geoweb to include skills and usage constraints, as these will challenge the uptake of Geoweb.

Methods and Data

This study draws on a community-based research project in the North Okanagan Valley of British Columbia to examine the use of the Geoweb in rural Canada and to further understand how non-expert citizens can access and use the Geoweb. The project developed Geoweb applications to map out the local food system with local food advocates and farmers. Semi-structured interviews with participants from local food action groups and regional farmers informed this study. In addition, the researcher throughout the course of the project utilized participant observation techniques. Data includes interview transcripts from 10 participants along with field notes.

Results

The results of the study suggest that there are ongoing divisions within communities to utilize digital technologies, which include access but also expand to skills and are influenced by age. In particular, members of volunteer organizations who describe themselves as an older generation, feel challenged by the ever-changing and expansive

nature of the Web. At the same time, participants recognized the relevance of using the Geoweb to expand networks and increase support for food security concerns within the region. From these results, several recommendations are offered to overcome the divides found in this study and are discussed as an example of rural and small Canadian communities.

Conclusions

The study demonstrates that there are both challenges to the use of the Geoweb in rural Canada, but also opportunities for volunteer based organizations to utilize these sources of spatial knowledge. It is suggested that the Geoweb is not yet a tool on which citizens can universally draw. Instead, it is dependent on a number of factors that influence participation in the mapping process. Several key issues need to be addressed to surpass the digital divides. These issues begin with access to the Internet in rural Canada but extend to training for volunteer organizations and combating preserved barriers because of age.

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