

KRIKHOF CENTER 2201

*Strategies to Improve Geographic Literacy in K12 Education Using GIS, GPS, and Multimedia*

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This paper describes how GIS, GPS, and multimedia technology can be incorporated into current school curricula to help students develop skills that will enable them to better observe patterns, associations, and spatial order. Thus, integrating this technology into K12 education answers the call for including critical thinking, integrated learning, and multiple intelligences in curriculum design. We selected two public schools in Michigan; Riverside Sixth Grade Academy in Grand Rapids, and Ithaca Junior-Senior High, to observe how GIS, GPS and multimedia would accommodate better learning of geographic concepts. Our feedback showed that geocaching is an excellent way to introduce and reinforce the five themes of geography. In addition, students were able to understand concepts such as directions, connections, proximity, adjacency, containment, and intersection as fun exercises embedded in geocaching.