Creating Immersive Learning Experiences Using ThingLink to Teach Middle School Geography Skills

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EXECUTIVE SUMMARY

This study investigated the effectiveness of ThingLink, a digital storytelling tool, in enhancing the geography skills of eighth-grade students. Existing research has shown that students of various grade levels and abilities often encounter challenges in comprehending geography concepts. The primary goal of this research was to determine whether ThingLink can serve as a valuable resource for improving geography education in the classroom. Employing a mixed-methods action research approach, this study utilized pre- and post-tests, questionnaires, and students' written reflections to assess the impact of ThingLink on eighth-grade geography skills. The findings suggest a significant enhancement in geography content knowledge and a positive impact on students' perceptions of ThingLink's effectiveness in improving their geography skills. The results of this study can contribute to the understanding of the potential benefits of ThingLink in geography education.

INTRODUCTION

Geography skills are not only skills students need to pass the New York State Regents (equivalent to state competency tests) and graduate high school, but they are necessary for students to be successful members of society. Based on the New York State Regents scores, competency in geography is something with which most students struggle. According to the National Assessment of Educational Progress (NAEP), only 25% of American students in grades 4, 8, and 12 demonstrated proficiency in geography (National Assessment of Educational Progress, 2018). In addition, the American Geographical Society (2021) found that many college students in the United States lack basic knowledge of geography and struggle with key concepts.

There are many reasons students struggle with these skills. Williams and Solecki (2015) argue that students often lack the necessary background knowledge and spatial thinking skills to understand geography concepts and that traditional teaching methods may not effectively address these challenges. To help students overcome these difficulties, the authors suggested that educators should focus on developing spatial thinking skills, providing more opportunities for hands-on learning, and making connections between geography concepts and real-world situations. Egiebor and Foster (2018) suggest that students struggle with geography competencies due to a lack of geography education opportunities. This study indicates that software like ArcGIS improves students' engagement with geography (Egiebor & Foster, 2018). Instructors who teach geography are also struggling to convert what they understand about geography on an academic level into an effective teaching strategy for the students (Brooks, 2006; Solem & Vaughan, 2023). This study focused on finding a way to improve how educators teach geography, and the competencies needed to help middle school students be more successful in geography.

Background of the Problem

This action research project evaluated ThingLink software. ThingLink was used because research suggests it would give students the tools they needed to be successful with geographic context skills. ThingLink is a way to visualize content using interactive materials (ThingLink, n.d.). Geographic context involves locating a spot on a map and explaining why a certain event was happening there. ThingLink can be used to map the story of an event.

Roberson's (2015) study explored the teaching methods of geography in schools, focusing on the geographic literacy skills required by both teachers and students. This study was conducted in K-12 classrooms focusing on high school geography skills. Robertson's study argued that we need to change the way we are teaching geography to make it more engaging and tangible for each student. The goal of this