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Evaluating geography learning in 11 – 12 year olds in Irish primary schools analysing messaging loops.

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Abstract

The purpose of this qualitative study is to evaluate geography education in 11 – 12 year olds in Irish primary schools analysing messaging loops. Messaging loops are interactions that originate from the student and return to the student irrespective of the technology or medium of communication. During a messaging loop the student ‘owns’ the interactions, by initiating them and completing them. This study seeks to investigate the cognitive changes that can occur in 11-12 year olds as they practice analytical skills as part of the primary school geography curriculum. Research shows that geography education provides opportunities for practice of skills considered necessary for developing higher order thinking skills. However there has been little focus on the cognitive changes that can occur in primary school students during geography lessons. Geography as a component of the primary school curriculum can provide practice of analytical skills considered necessary for the development of higher order thinking skills in primary school students.

This study implemented a constructivist learning model focusing on geography analytical skills development. The study was hosted online using a teamsite on Microsoft Sharepoint 2013. Over a period of two weeks, participants had to complete four tasks. These four tasks were expected to take approximately thirty minutes each to complete. The participants engaged in tasks that required them to practice analytical skills in geography. The resulting data was documented using the survey app on Microsoft Sharepoint 2013. The participants also posted comments onto a discussion board following the completion of each task. During the final reflection the participants engaged in a conference call using the Instant messaging

app Microsoft Lync 2010. This data enabled the researcher to further explore themes that emerged during the study.

A range of data collection methods were used for this study. Documentation of the participants answers to assignments focusing on analytical skills were analysed through domain and taxonomic codes. The domain and taxonomic codes were selected from the suggested areas of study listed in the Irish primary geography curriculum. The analysis focused on the correct contextual use of vocabulary target words, for example 'sort, group and classify' and emotion target words, such as 'feel' 'sad' and 'happy'. Documentation of a questionnaire that the participants could take after each assignment provided verification of the participants' ability to understand the task and negotiate the activities correctly. The questionnaire was analysed for accuracy and the participants understanding of the required tasks. Documentation of the participants' posts to the discussion boards were analysed for domain and taxonomic codes, and vocabulary acquisition to include target and emotion target words. The Instant Messaging conference was recorded using windows media player and then transcribed by the researcher.

The findings describe and explain how participants contextualise geography analytical skills in a more meaningful way while acquiring new vocabulary to support this change following participation in the study. The participants displayed affective and cognitive empathy during online discussions while learning about another international community where poverty and child labour is prevalent. These participants also developed existing cognitive skills and improved their analytical skills as they progressed through their tasks. Through self-directed learning, the participants also developed their ability to research and retrieve information online by completing assignments that necessitated the exploration and decoding of content hosted on the teamsite. These findings also demonstrated that tension experienced in traditional classroom discussion can be relieved by scaffolding the learning environment with discussion boards and instant messaging. The presence of discussion boards and instant messaging during geography activities can assist Irish primary school children structure answers and increase their interactions.