QR Codes in K12 and Teacher Education

Kellie Shumack, Timothy Lewis, Kate Simmons and Laura Carpenter

Auburn University Montgomery
United States
kshumack@aum.edu
tlewis19@aum.edu
ksimmon2@aum.edu
lcarpent@aum.edu

Description of Poster Session

This poster session will show participants how QR codes can be used in teacher education and in the K12 classroom. Examples will include QR codes in special education and general education classrooms at several levels. Creating QR codes is so easy that teachers can create projects for a wide variety of uses. For example, teachers could use QR Codes as a remediation tool in the classroom by building a math "QR Code Wall." QR codes could also be used for conveying directions to English Language Learners or to convey recorded directions for students who have difficulty reading. A QR Code scavenger hunt reviewing weekly materials gets students up and moving while letting teachers informally assess student learning.

Background

QR codes are similar to bar codes, and are capable of handling more characters, require 1/10th the space, have error correction capacity, and can be read from any direction ("QR Code Features", n.d.). Used in manufacturing, shipping, and marketing, these codes are also used in education settings. QR stands for “quick response” because the code quickly generates an intended product, such as a website, text, or an audio message. Free online QR code generators produce the actual code and mobile devices (like an iPhone, Android phone, or iPod touch) read the codes and generate the product.

The Problem

Over the last ten years the technological advancements in all walks of life have been astronomical and continue to grow. Technology has also made its way into the classrooms with the development of interactive whiteboards and GPS geocaching, just to name a few. Cell phones and other mobile devices are part of the ever-advancing technology, which is part of students’ lives. Between 2005 and 2009 the number of U.S. 10 to 11 year olds with cell phones grew almost 81% (Frommer & Angelova, 2010). Children who have phones inevitably bring them to school. In the past, this has been seen as a disruption, but QR codes demonstrate a way that this technology can be used in the learning process.
Justification

According to Carter (2011), Quick Response (QR) is the next technological advancement that promises to transform the way that students access data. Two dimensional vague looking pixilated black and white squares are embedded with information enticing students to access and act upon the enclosed coded messages with smart phone or tablet technology. QR codes can be created to produce several things. According study found that 14 million mobile users scanned a QR Code or a barcode during one month of 2011 (Skeldon, 2011).

References


