## Introduction

n 2011, a delivery came to my classroom that would transform the way I thought about teaching and learning. With a class set of iPads, my fifth graders could interact with content in a way that would have been hard to imagine just a few years before. This tablet technology made it easier to differentiate learning activities, made content consumption more meaningful and effective, and increased the ease and number of possibilities for student content creation.

Mobile technology is transformative. The way we locate directions, check movie times, send birthday wishes, and communicate with friends has become more efficient, creative, and interesting thanks to mobile technology. Preparing students for a world where they can leverage these tools for learning is a task educators must embrace. Mobile technology can support student learning when thoughtfully integrated into curriculum. Students should be able to interact with their learning environments to locate information, explore content, and ultimately improve their understanding of key concepts.

The influx of mobile tools into classrooms around the world is happening at an exciting pace. Some reports place school purchases of these devices in the millions.<sup>1</sup> Just like a textbook or a new set of pencils, placing new tools in the hands of teachers and students does not automatically translate into high-quality instruction. Students must learn to see mobile technology as a learning tool. Teachers need to become proficient users of education technology who can elevate their practice and engage children of all ages by leveraging the power of these devices.

<sup>1.</sup> https://www.apple.com/education/docs/iPad\_in\_Education\_Results.pdf

Technology use in the classroom is so much more than turning on a SMART Board or flipping through PowerPoint slides. Our goal as educators is to prepare students for careers of the future and produce well-informed, productive citizens who think critically, problem solve, and know how to find answers to their questions. We want to make sure students have a skill set that can be applied to all of the unknowns in the future.

Using scannable technology in the classroom is one step in this direction. It is an opportunity to empower children and students of all ages by providing instant access to information that is connected to a place or space. It can be used to keep students interested and curious while interacting with content across subject areas. It is a simple way to share the digital products of your students to provide an audience for their authentic work.

So what is scannable technology? Scannable technology is the interaction of mobile devices and a trigger image to connect users to content. In the education setting this most often describes QR codes. When QR codes are scanned they bring students to a website. Scannable technology can also refer to augmented reality triggers that are scanned with a specific app to make content pop off of the page into a three-dimensional model. Outside of education you might see someone scanning their boarding pass at the airport using a QR code on their smartphone or paying their Starbucks' bill with a OR code displayed on their Apple Watch. Although this book focuses on scannable technology, you will likely make connections to related topics such as pingable technology, a term that can describe iBeacons or the location-based alerts that happen over Bluetooth technology, and wearable technology like a Fitbit or Google Cardboard. The ACES Framework outlined in this book can be applied to a variety of technology and we'll see the power of this as we begin our discussion looking at scannables in the classroom.

Scannable technology makes it simple for students to *access* materials you have *curated* for them, *engage* students in traditional and innovative tasks, and help teachers easily *share* the great work their students have produced on digital devices.

The goal of this book is to ask you to think beyond the page. Not just the pages you hold in your hand at this moment but the pages in all of the spaces in your learning environment. How can you move beyond the static pages of your students' textbooks and flat posters on the walls of your classroom to create dynamic learning environments for your students? Let *Deeper Learning With QR Codes and Augmented Reality: A Scannable Solution for Your Classroom* push you to think big about transforming spaces in your school by starting small with the actionable tips spread throughout this book.

We are on a journey to provide engaging and meaningful experiences for our children that empower them to become lifelong learners. Let's dive in and get started together!

Note From the Publisher: The author has provided video and web content throughout the book that is available to you through QR codes. To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.