

ICT Lesson

Introduction to QR Codes

Objectives

To introduce students to the use of QR Codes. What are QR Codes and what are their uses?

To gain practical experience using QR codes, which will include:

Access to blogging

Download and installation of QR software to mobile device (laptop and mobile phone)

Scanning and recognition of example QR Codes to access web pages

Creation of QR Codes

Introduction to BitLy and Google URL shortening and QR Code generation

Collaboration by recording results/answers using a shared Google document

Resources

This lesson outline

Powerpoint presentation lesson slides

Mobile device with integral camera (laptop and/or smartphone)

QuickMark QR Code software installation file - Quickmark.msi



Links to mobile phone QR Code readers (Quickmark, Neoreader, i-nigma, BeeTagg)



Example QR Code list


QR Codes (4 per page) for student use (taken from QR Code list)

Example Google Document (students to be given shared edit access on Google Docs)

Lesson Sequence

Slide 1	 <p>www.digitallearningworld.com</p>	Introduce students to the blog: digitallearningworld.com Get them to type in the URL Note how long this takes and how many errors are made
Slide 2		Display the Barcode – and briefly discuss What is it? What is it used for? How does it work? Examples?

Slide 3		<p>Show the QR Code - Discuss</p> <p>Anyone seen/used this?</p> <p>What do you think it is?</p> <p>How can it be used?</p> <p>What applications can it be used for?</p>
Slide 4	<p><u>Google Document:</u> Quick Response Codes – Lesson Progress http://bit.ly/2EmBw</p> <p><u>QuickMark Software (PC/Laptop) Download:</u> www.digitalelearningworld.com</p> <p><u>Mobile Phone App Download:</u> Quickmark: http://bit.ly/dEaq7D Quickmark (WAP): http://bit.ly/fJOPg NeoReader (WAP): http://get.neoreader.com/</p>	<p>Setup Resources time:</p> <p><u>Google Docs</u> Link to Google Document -This is where each student will record their findings – In real time</p> <p><u>Windows PC/Laptop</u> Link to Quickmark Download – Download and install onto laptop/PC</p> <p><u>Mobile Phone</u> Link to Quickmark Download - Install to mobile phone * Also available at iPhone Apps store Link to Neoreader WAP Download – Install to mobile phone</p>
No Slide	<p>No Slide</p> <p>Project the shared Google Doc.</p>	<p><u>Scanning and QR Code recognition/use</u> Once software/apps has been installed students should:</p> <p><u>Scanning and Recognition</u> Hand out sheet with unknown QR Codes (or post all the example QR Codes up around the room so that students to scan four at random) Open the Google Doc and get students to open Students to scan in the four unknown QR Codes (first try on laptop, then on mobile phone) Record their results in real time in the shared Google Doc (have this projecting on the whiteboard – and monitor/encourage progress)</p> <p><u>Creating QR Codes</u> Using the Quickmark software on the laptop students should create a QR Code for their own favourite website and record their results in the shared Google Doc</p>
Slide 5		<p><u>URL Shortening/QR Code Generation</u> Get students to sign up at Bit.Ly Students should type in their previous URL's and generate a shortened URL. These should be added to the last column in the shared Google document. Get students to view QR Codes generated in Bit.Ly</p>

Slide 6	 <p>The screenshot shows the Google URL Shortener web page. It features a search bar for the original URL, a 'Shorten' button, and a 'Generate QR Code' button. Below the buttons, a QR code is displayed. A red arrow points from the text 'Simply add it to the shortened URL to generate the QR Code' to the QR code.</p>	Students may also be introduced to Goo.gl Google's URL shortener that also generates QR Codes
Slide 7	<p>QR Code - Real World Applications</p> <ul style="list-style-type: none"> • E-Wallet/E-Money • Vending Services/Buying items • Paying Utility Bills • Delivery/Courier Service Tracking • Maintenance Services • Mobile Ticketing • Mobile Advertising/Marketing • Product Identification <p>.....and many more</p>	Complete the lesson with some examples and a discussion on Real World Applications for QR Codes

Extension Work

Create and try QR Codes for:

- A Telephone Number
- An SMS
- An Email message
- A Vcard

Remind students not to forget to share their findings by recording their results in the shared Quick Response Codes – Lesson progress Google document.

Assessment

Would anyone like to contribute an assessment rubric?