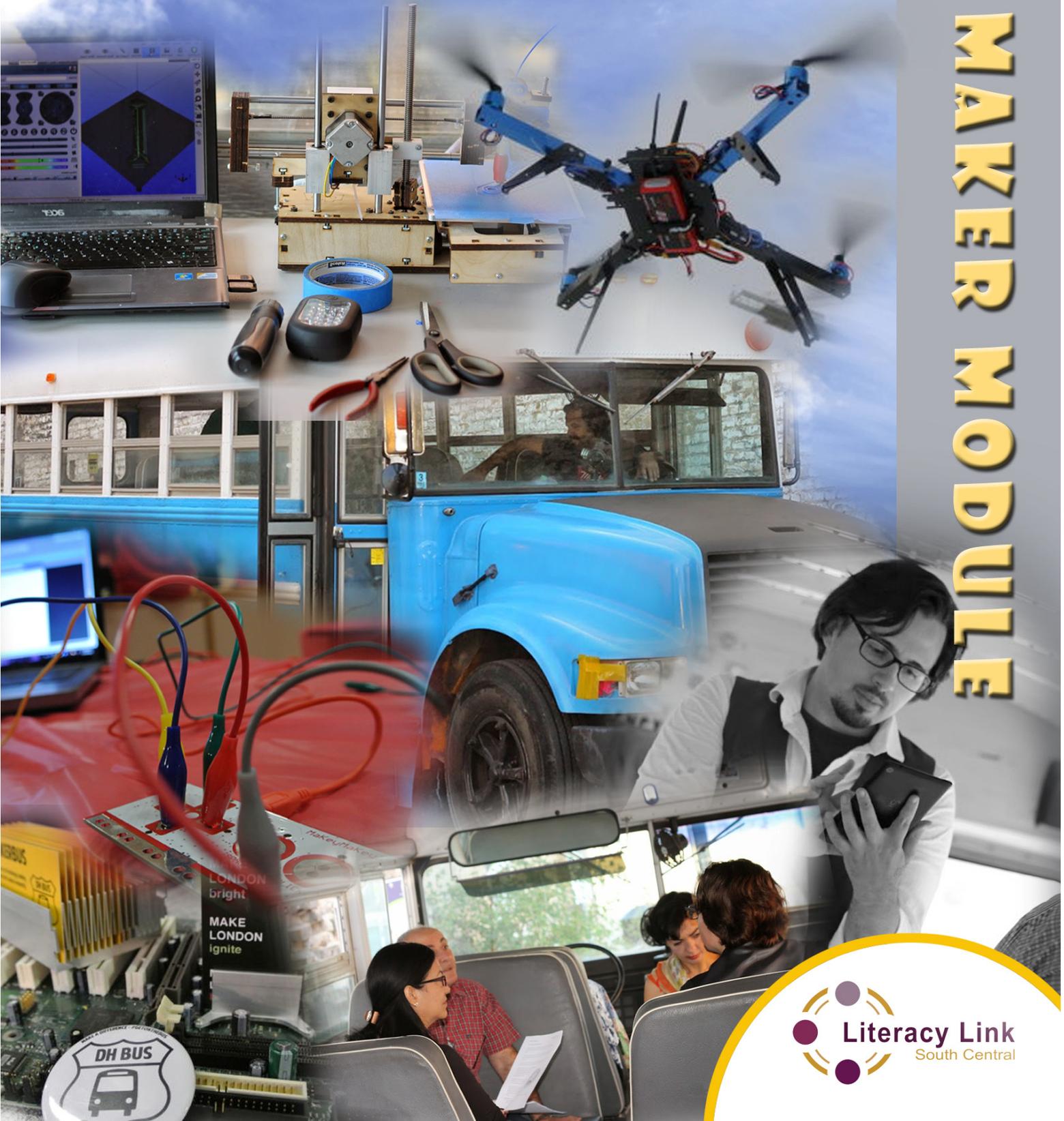




QR CODES

MAKER MODULE



Acknowledgements

These Maker Modules were prepared for the Literacy Link South Central project “Using Technology to Facilitate Connections between Literacy and the Broader Community” (2014). Maker Modules available in this series include:

Augmented Reality
Bluetooth
Dropbox
Evernote

Leap Motion
Macrophotography
MaKey MaKey
Portable Podcasting

QR Codes
Tiny Scan
Word Lens
The World of 3D

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**EMPLOYMENT
ONTARIO**

Introduction

To successfully complete this MakerBus Module, you will need:

1. Notes to the Literacy Practitioners
2. QR Codes Pre Visit Activity
 - estimated time is 5 minutes
 - optional pre visit lesson, “Downloading and Deleting Applications (app)”
3. QR Codes MakerBus Module
 - estimated time is 15 minutes
4. QR Codes Post Visit Activity
 - estimated time is 15-20 minutes
5. Evaluation Forms (optional)
 - learners’ feedback is submitted immediately following the visit
 - practitioners’ feedback to be submitted following the completion of any Post Visit Activities
6. Equipment List:
 - smartphones with ScanLife installed
 - tablets with ScanLife installed
 - laptop with access to the internet
 - The MakerBus Wi-Fi hotspot and its password
 - QR codes to scan



Notes to the MakerBus Facilitator: For this module, learners will be asked to download an app on their own smartphones or tablets. Some learners may be hesitant to do this, so please provide additional devices.

All instructional materials are available on the Literacy Link South Central (LLSC) website, should you need additional copies. Please visit: <http://www.llsc.on.ca/>.

QR Codes Notes to Literacy Practitioners

Learning Objectives:

1. Identify QR codes
2. Create a QR code
3. Use a QR scanner to open a QR code



Notes to Practitioners:

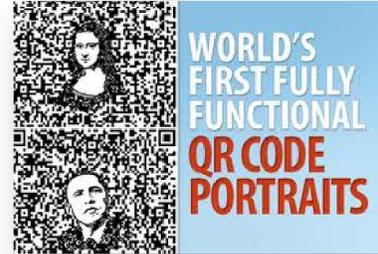
The optional Pre Visit Activity for this module is designed to determine if users are familiar with this technology, and allow those who may know more to share their knowledge with those who are less familiar. It is estimated to take about 5 minutes. Competencies for this Pre Visit Activity include: B2.1.

The time on the bus will give learners more information on QR Codes, will allow them an opportunity to create one, and then use a QR scanner to open one. We recognize that learners may be reluctant to download an application on their own device, so additional smartphones and tablets will be available for their use if they are needed. Competencies for the MakerBus Module include A1.2; A3 and D2.

The Post Visit Activity asks users to look at one practical application of this technology, and then consider other possible uses. In order to complete the Post Visit, having a device with a QR scanner available in the classroom is necessary. Looking at more codes on the internet is intended to give learners an opportunity to use a skill they are comfortable with to apply their knowledge to a new technology, hopefully increasing their comfort with technology and their ability to find more information. Discussing potential misuses of this type of technology will help develop critical thinking skills. Competencies for the Post Visit Activity include: B2.1; D1 and F.

QR Codes Pre Visit Activity

Learner Handout



Let's talk:

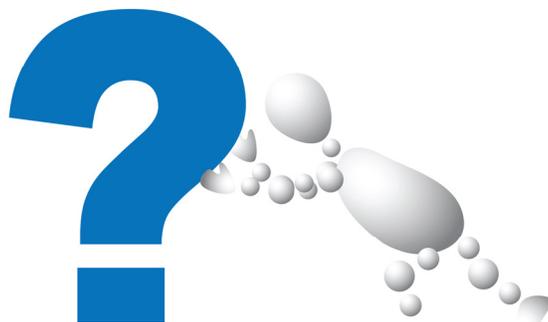
1. Have you seen symbols like this before? Where?

2. Do you know what they do? Describe it here:

3. If you do know how they work, share what you know with the class.

4. How can this technology be helpful?

5. What else would you like to learn about QR codes?



QR Codes MakerBus Module

Have you ever seen QR codes before? These symbols are gateways to more content and interaction in magazines, movie posters and advertisements. ScanLife is one of many free mobile applications (apps) that help you interact with QR codes.



You will learn:

1. what QR codes are
2. how to create a QR code
3. how to use a QR scanner to open a QR code

Part 1: What are QR codes?

QR stands for Quick Response. It's a method to quickly scan a code with an app on your smartphone or tablet. Your phone will respond to scanning the code by opening a website, email, Facebook link or other digital content.

The QR code is a box which usually has 3 smaller boxes in the corners and what looks like static lines in the middle. The pattern helps the QR code to store information you should be linked to when you scan it. This is called "encoding".



Benefits of using QR codes include:

- direct link to a website or other digital content
- accessing more content or information about a certain product, restaurant, etc.
- possible deals like discounts and coupons may be encoded

Part 2: Create a QR Code

For this activity, you are going to learn how to create a QR code that will link to a specific website.

Using a laptop on the MakerBus:

1. click on Google Chrome to open the web browser
2. type `qrcode.kaywa.com` in the search bar, and hit Enter



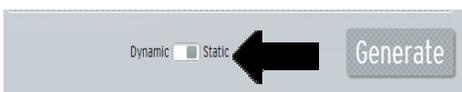
You are on the Kaywa website, where you are able to easily create QR codes for free.

Creating a QR Code

1. click the field next to URL (Uniform Resource Locator -- links for websites



2. type the MakerBus website in the available space -- `www.makerbus.ca`
3. click the toggle to Static instead of Dynamic
4. click the Generate button to create the QR code



To save your QR code:

1. Right click on the QR code
2. Click on Save image as...
3. Browse to the location you want to save the QR code (ex. The desktop, my pictures or my documents, etc.)
4. Name the QR code and then click save

Note: Don't close the website, as you will be using the QR code you just created in Part 3.

Congratulations! You have made a QR code. Let's scan the code and see what happens.

Part 3: Use a QR scanner to open a QR code

Here is what you need to open a QR code:

1. A smartphone or tablet *
*If you do not have a smartphone or tablet with a QR scanner installed, MakerBus devices are available for your use. If you are interested in learning how to download using your own device, please ask for the Generic Pre Visit Activity - Downloading and Deleting Applications.
2. A QR application (app)**
**You will be using the ScanLife app, which provides users a way to scan and open QR codes using a phone or tablet.
3. Data or Wi-Fi on the smartphone or tablet. Wi-Fi is available on the MakerBus. Please ask the MakerBus facilitators for the password.

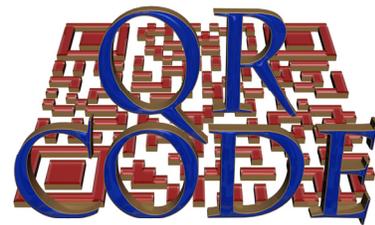


Scan a QR Code

1. Find and click on the ScanLife on your device
2. When open, scan the QR that you created
3. Click on Go when the "Launch website" appears



QR codes are everywhere. Use a QR scanner to see what the code has in store for you!



QR Codes Post Visit Activity

Learner Handout

Demonstrate your learning:

1. Go to the following website:

<http://hamroad.com/jia-jia-and-lin-lin-panda-bear-cubs-the-chinese-community-of-london/>

2. Did you see the QR Code?

3. What kind of content do you think is embedded in it?

4. Explore the attached QR codes.

5. Did you see some with images embedded into the codes? What else did you see or learn?

6. How do businesses benefit by using QR Codes?

7. Think about where else QR codes could be useful? Jot down some notes:

8. As a class, brainstorm possible uses for QR Codes that you would like to see.

9. Remembering that QR Codes can link to any information, as a class, discuss if there are any potential misuses of this technology.

