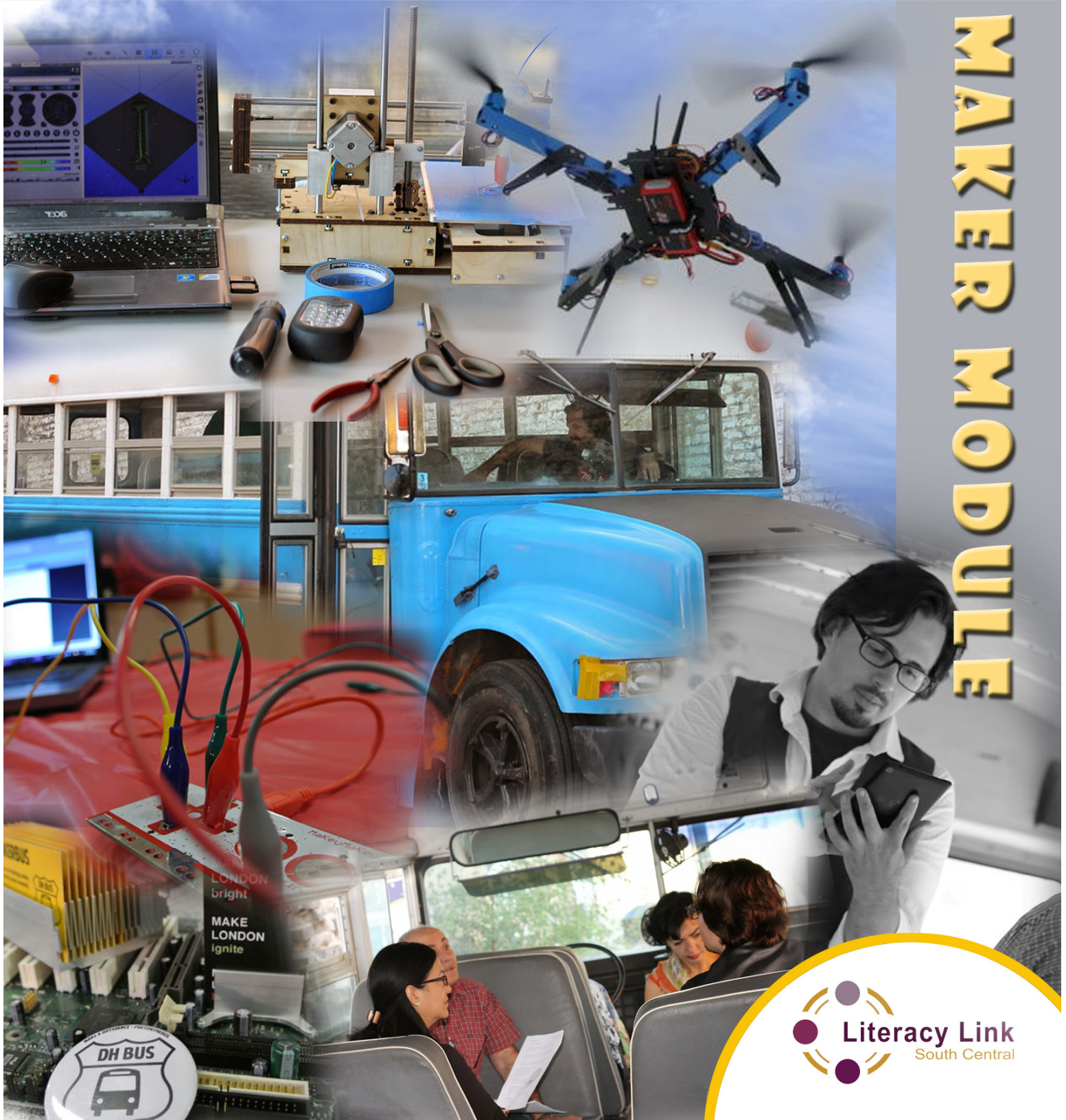




# GET ON THE BUS



**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	Leap Motion	QR Codes
Bluetooth	Macrophotography	Tiny Scan
Dropbox	MaKey MaKey	Word Lens
Evernote	Portable Podcasting	The World of 3D

**Literacy Link South Central (LLSC)** wishes to acknowledge the valuable contributions made by the following consultants, project staff and partners:

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ONTARIO**



## Book the Bus! Order Sheet

Brought to you through a partnership between Literacy Link South Central and the MakerBus, Maker Modules offer interactive fun that engages learners at any skill level. The bus provides an environment to freely try new things and increase learners' comfort level with digital technology. The MakerBus facilitator will guide your learners through their modules, and answer their questions while they learn. Practitioners are encouraged to join in the fun!

### **The MakerBus experience will offer you:**

- visits in 1 hour blocks of time (maximum 2 hours in total)
- up to 3 short modules per 1 hour block (fewer if complex modules are chosen)
- pre- and post-visit activities to help prepare learners for their experience on the bus, and reinforce their learning following the visit
- learning material aligned to the OALCF
- the use of maker tools and equipment

### **Space requirements:**

1. parking for the MakerBus
2. a 6ft table or similar sized workspace
3. access to electrical outlets close to where the bus parks

### **You have 2 options in selecting modules:**

1. individually
2. in pre-determined "combos"

**Option 1** - please select 3 modules for your learners to experience:

**\* These modules can take up to 30 minutes each, depending on the number of learners**

☐ Augmented Reality

☐ Bluetooth

☐ Dropbox

☐ Leap Motion

☐ Macrophotography\*

☐ MaKay MaKey

☐ Portable Podcasting\*

☐ QR Codes

☐ TinyScan

☐ Word Lens

☐ The World of 3D\*

☐ Evernote



Name of Literacy Program \_\_\_\_\_

Street Address: \_\_\_\_\_

Contact person(s): \_\_\_\_\_

Telephone number(s): \_\_\_\_\_

Date and time you would like the MakerBus to visit (please offer at least 2 options):

\_\_\_\_\_  
\_\_\_\_\_

Total number of students: \_\_\_\_\_





**Option 2** - please select 1 combo with a specific focus:

☐ **Digitizing History**

- The World of 3D
- Podcasting
- TinyScan

**Digitizing History** gives learners the option of making digital copies of their beloved items. This combo offers a glimpse of how technology can make digitizing your personal history possible.

☐ **Hands-On Making**

- MaKey MaKey
- The World of 3D
- Macrophotography

**Hands-On Making** introduces you to the world of the maker movement with some of its most exciting, hands-on tools. Learners will have the opportunity to touch the technology and manipulate it while they learn.

☐ **Understanding Apps**

- Augmented Reality
- Word Lens
- QR Codes
- TinyScan

**Understanding Apps** allows you the opportunity to try downloading and deleting on portable devices like smartphones and tablets. This combo, with 4 complementary modules, provides insight and answers concerns about apps.

☐ **Artsy Fartsy**

- Bluetooth
- Portable Podcasting
- Macrophotography

**Artsy Fartsy** brings together the arts and technology. Learners will play music, create a minipodcast and print out photo they've taken using a hand-made macro (up close) lens.

Once your form is complete, please email it to the MakerBus at [dhmakerbus@gmail.com](mailto:dhmakerbus@gmail.com)



## Learners, it's time to get on the bus!

The MakerBus offers the following exciting learning experiences:

### Augmented Reality

Reality is what we experience through our senses like our eyes.

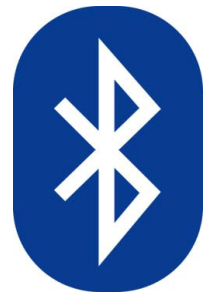
Augmented Reality (AR) blends reality and the internet by adding graphics, videos and extra digital content to the reality around you.

With just a smartphone or tablet and an AR app, you are able to explore the world differently.



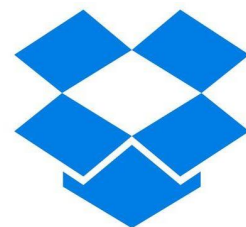
### Bluetooth

You have probably seen people walking around seemingly talking to themselves, only to find out that they are actually talking on the phone with a small headset just over their ear. The technology that makes this possible is called Bluetooth. It allows you to connect devices without using cords. This module will give you an opportunity to learn and use Bluetooth.



### Dropbox

Today, you have a variety of options to virtually save your documents, photos and videos. Cloud storage allows you to safely keep your important digital content online and access it anywhere, at any time, for free. Dropbox is one option for using cloud storage. Learn how to use and save on the cloud.



## Evernote

If you have ever taken notes but left them at home when you needed them at work, then Evernote can help. You can take a photo, write a note, or even take an audio note and open it up on any device you have handy. That means, you can make your grocery list, or “to do” list on your desktop, but use your smartphone to check it. Or you can work on a project with a friend.



## Leap Motion

"In just one hand, you have 29 bones, 29 joints, 123 ligaments, 48 nerves and 30 arteries. That's sophisticated, complicated and amazing technology (times two). Yet it feels effortless." The Leap Motion controller allows you to use your hands like a computer mouse just by waving them in the air. Change the way you interact with your computer!



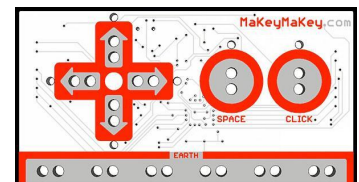
## Macrophotography

This activity gives you an opportunity to become a macro-photographer by making a \$70 macro lens out of your mobile phone and a dollar store laser pointer. To complete the experience, you will take amazing up-close photos, and then wirelessly print out a photo to show off your work.



## Makey Makey

Tired of the same old way of doing things? Want to change things up and do something fun for a change? The MaKey MaKey is "An Invention Kit for Everyone" and gives you the chance to replace a standard computer keyboard with fruit, glasses of water and more. It's learning fun!



## Portable Podcasting

Podcasting allows you to record and save audio content using the power of the internet. You can listen to podcasts others have recorded, much like radio on demand. You can also record your own stories and thoughts then share them with others. With this module, you will be using the Blue Snowball Microphone and Audacity to create a mini-podcast and have a MP3 copy of it after.



## QR Codes

If you have ever wondered about the purpose of these little squares with odd designs, then you are about to be amazed at how much information they can connect you to. Want great deals, discounts and direct access to websites? Sometime it only takes scanning a QR code. QR codes are gateways to more content in magazines, movie posters and advertisements. Learn about them and begin scanning.



## Tinyscan

Do you need to send a document but don't have access to a fax machine? Do you have a legal document that's falling apart but you want to preserve? Is there a love letter, diploma or perhaps your resume that you would like to have on hand in case you need it? This module will help you make a digital copy of your valuable documents using your smartphone or tablet.





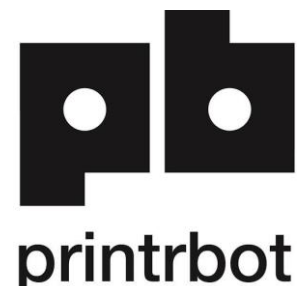
## Word Lens

Turn your phone into an instant translator that does not rely on the internet! For those who like to travel, this application (app) provides a convenient option to allow you to translate text from one language to another. Although the choice of languages is limited, this app provides a quick and easy tool for students to more fully use their smartphones.



## World of 3D

Printing is evolving and has moved beyond just putting ink on paper. Now, printing can be done in three dimensions... meaning with the right equipment you can print solid objects like cups, machine parts or tools. See a 3D printer in action, and learn how this technology is becoming more accessible.



---

*Tear off and hand in*

Name: \_\_\_\_\_

**Check off your top 3 choices:**

- |  |  |
|--|--|
| <input type="checkbox"/> Augmented Reality | <input type="checkbox"/> MaKay MaKey         |
| <input type="checkbox"/> Bluetooth         | <input type="checkbox"/> Portable Podcasting |
| <input type="checkbox"/> Dropbox           | <input type="checkbox"/> QR Codes            |
| <input type="checkbox"/> Evernote          | <input type="checkbox"/> TinyScan            |
| <input type="checkbox"/> Leap Motion       | <input type="checkbox"/> Word Lens           |
| <input type="checkbox"/> Macrophotography  | <input type="checkbox"/> The World of 3D     |

## Practitioners, it's time to get on the bus!

Choose from the following exciting Maker Modules for your learners:

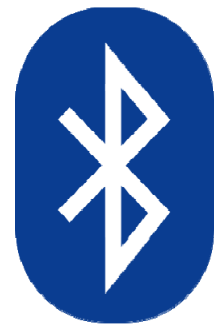
### Augmented Reality

Augmented Reality (AR) is an eye-opening application of technology that has been the playground of scientists and computer geeks-until now! AR blurs the line between reality and the internet by adding graphics, videos and extra digital content for the user. Introduce your learners to a whole new way to explore the world with just a smartphone or tablet and an Augmented Reality application (app).



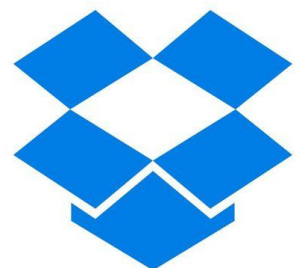
### Bluetooth

Is not answering your phone while driving a new form of torture for you or your learners? Avoid getting a ticket by using Bluetooth in your vehicle. Let the Makerbus provide the technology to introduce your learners to Bluetooth and its possible applications beyond hands-free phone calls. This session provides a practical and easy to use way for learners to more fully use their smartphones, as learners will pair a smartphone to the wireless speaker on the MakerBus.



### Dropbox

Let us teach your learners how to save important documents or photos to Dropbox and access them anywhere, at any time, for free. If your learners have ever been unable to access documents when they needed them, they will appreciate the benefits of being able to retrieve their files using any system, anywhere in the world, just by signing in to their cloud storage account.



## Evernote

Notetaking software is becoming a popular and convenient way to take notes in class. Evernote allows you to take text notes, audio notes, photos and even written notes. You can then access them anywhere, on any other device you use, or share them with a friend. You can even import photos, files and websites. It is an easy way to make sure you don't forget your grocery list on the fridge, or your "to do" list at home.



## Leap Motion

"In just one hand, you have 29 bones, 29 joints, 123 ligaments, 48 nerves and 30 arteries. That's sophisticated, complicated and amazing technology (times two). Yet it feels effortless."



Allow the MakerBus to introduce Leap Motion, a fun and playful way to manipulate images on the screen just by waving your hands in the air! Learners will expand their knowledge beyond the keyboard, and gain a new appreciation for what [computers can do](#).

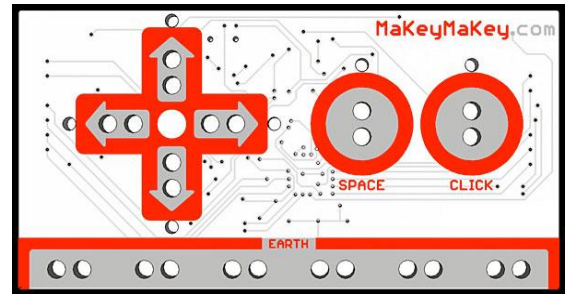
## Macrophotography

Inspire your learners to become "Makers" by turning a laser pointer, a bobby pin and a smartphone into a macro lens. This hands on activity encourages "play". Reducing your learners' fear of technology and increasing their willingness to explore is the focus of this task. Their reward will be a very close up photo that they took and printed using a wireless printer.



## MaKey MaKey

It is rare when adults get to play to learn. Enjoy this opportunity to replace a computer keyboard with an assortment of fruit, glasses of water, or other objects that conduct electricity. Allow the MakerBus to demonstrate that learning can be fun



for both you and your students! Experiment with conductivity to play the piano or Tetris.



## Portable Podcasting

Let the MakerBus bring portable podcasting to your classroom. Introduce your learners to the possibilities of creating their own talk-show, or showcasing their favourite music. Take the fear out of technology through experimentation and supported hands-on learning.

## QR Codes

If you have ever wondered about the purpose of the little squares with odd designs that you see in advertisements, then you and your students will be amazed at how much they connect you to. These increasingly common symbols, called QR codes, are gateways to more content. They enable users to interact with magazines, movie posters and advertisements. Introduce your learners to another way to fully utilize their smartphones in a fun and practical way.



## Tiny Scan

Tiny Scan is an application that your learners may not have discovered. Using a smartphone to save a copy of a document is convenient, but may also save the day if your learners need to have a copy of something that may be impossible to remove, like a page from a book they cannot take out of the library, but need for an assignment.



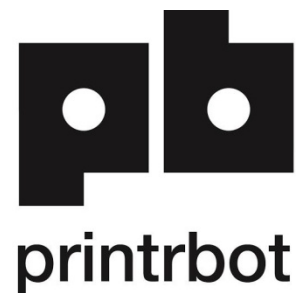
## Word Lens

Turn your phone into an instant translator that does not rely on the Internet! For those who like to travel, this application (app) provides a convenient option to allow you to translate text from one language to another. Although the choice of languages is limited, this app provides a quick and easy tool for learners to more fully use their smartphones.



## The World of 3D

Scanning a document and then printing it produces an identical, 2-dimensional representation of the original... but what if the item you want to reproduce is 3-dimensional, like a statue or a vase? Scanning an object in 3D and sending it to a 3D printer allows you to do exactly that. Learn how 3D scanning and printing work, and see the transition from an original object, to a 3D scan, to reproducing the object using a 3D printer. This module will engage your learners in discussing the impact this technology can have on our world. Take advantage of the rare opportunity to see 3D technology in action on the MakerBus.



After making your selections, use the **Book the Bus! Order Form** to let us know which modules or combinations you have chosen.