To offer our communities access to new activities & opportunities and to reduce the cost to our branches in seeking out third-party planned programming, Wheatland Regional Library chose to develop a set of Makerspace Programming kits that would support branches seeking to develop Science, Technology, Engineering, Art, and Mathematics-based (STEAM) programming in-house.

We received support from the Provincial Library and Literacy Office through a grant opportunity and proceeded to plan and purchase 5 differently-styled kits. Some kits came with enough materials that we chose to split them into 2 smaller kits to allow for more branches to have access at once.

**Makerspace Programming Kits:**

* Strawbees – simple engineering (1 kit)
* Cubelets – basic robotics (1 kit of 40)
* Ozobots – basic computer code with colours (2 kits of 10 or 1 kit of 20)
* 3Doodler Pens – artistic 3D construction (2 kits of 6 or 1 kit of 12)
* Sphero – basic to advanced computer code (1 kit of 3)

**Staff Training**

In order to encourage our branch staff to try some new programming ideas and offer opportunities to our rural communities to engage with STEM principles, we planned and conducted 4 hands-on training sessions from mid-February to early March.

These training sessions included discussions about the concept of makerspaces and why it is important to let patrons feel that it is ok to fail, and gave time to experience each of the makerspace kits one-on-one.

There was a total of three trained staff that specialized in one or more of the kits, as well as informed themselves as to the details and workings of the others, in order to provide enough support to our learning librarians.

The sessions were set up with one kit per station. We allowed for time for explanations about the kit and set-by-step instruction on how to use the kit where possible. While four of the kits were easy to instruct on while the librarians followed, Sphero was more difficult due to the limitation of needing a smart device in hand, such as a tablet or smartphone, during the explanation about how it works. However, the hands-on period following the explanation was able to make up for this when the librarians were able to test out the Sphero for themselves.

**Additional Resources**

For more information on any of these kits, visit one of the links below:

<http://www.sphero.com/> - Sphero website

<http://edu.sphero.com/> - Sphero education website

<http://ozobot.com/> - Ozobot website

<http://www.modrobotics.com/> - Cubelets website

<http://the3doodler.com/> - 3Doodler Pens website

<http://edu.the3doodler.com/> - 3Doodler education website

<https://strawbees.com/> - Strawbees website

<http://education.strawbees.com/> - Strawbees education website

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