Coding in the Elementary and Middle School Library
Shari Anderson and Meredith Fickes
Lincoln Public Schools
Elementary Activities

- Digital or Robots
  - Bee Bots
  - Code-a-Pillar
  - Code & Go Mouse
  - Code.org
  - Dash & Dot/Cue
  - Kodable
  - Osmo
  - The Foos

- Unplugged Activities
  - Challenge Code
  - Library Algorithms
Bee Bots
Code-a-pillar
Code & Go Mouse
Dash & Dot/Cue
Osmo-Coding with Awbie
Ozobots
Kodable
The Foos
Library Algorithms

Algorithm for checking out
1. Walk in the library
2. Put my old book's back
3. Get a shelf marker
4. Go to the genre: young book
5. Put shelf marker in
6. See if I want it or put it back
7. Go to the non-fiction or look at books side
8. Get books
9. Go check out
10. I go sit down

1. Walk in the library
2. Get a shelf marker
3. Go look for book
4. 1 choose book 1 non-fiction book 2 other
5. If you put shelf marker in the shelf then you pull shelf marker
6. Then go to the checkout counter
7. You're done
8. 
9. 
10. Check out again
Coding Games

Let’s Go Code:
Middle School

- More about collaboration with staff
- Most use Sphero
Math

- Coding Stations
  - Osmo, Sphero, Google Coding, Makerspace building challenges
- Sphero
  - Use Sphero to draw shapes
  - Calculate distance, angles,
Science

- Mars Rover Robot--map out tour of Mars hot spots.
- Sphero
  - Program space orbits
  - Acceleration, Speed
Social Studies

Sphero guide through different battles
Lessons for Multiple Curricular Areas

- Bloxels
- Clue for Breakout.edu
- Design Thinking--building structures, coding Sphero for structures.
- Coding Breakouts
Coding Books--Resources

https://docs.google.com/document/d/1mMN_qiSI8ChbTqB-BfzCLbbSdBda0V27RETiCYyqipo/edit?usp=sharing
Internet Resources

- Code.org
- Code with Google
- Scratch