Below we collate and post resources that were mentioned in the webinar (Integrating Computer Science and Computational Thinking in the Pre K-8 Grades). and associated chat.

If you missed the webinar you can view it at: https://stemtlnet.org/theme/june2020-expertpanel

We have collated:

- Resources and Research on Equity
- Useful Websites mentioned
- Robot Kits and Apps (with grade level recommendations)

Resources and Research on Equity:

Video: Kamau Bobb, Sr Director of the Constellations Center for Equity in Computing, Georgia Tech. *Unpacking Equity*:
https://www.youtube.com/watch?v=Pti9hkvU_dw&feature=youtu.be

Report: *Teaching Tolerance Anti-bias Framework*, Teaching Tolerance Project of the Southern Poverty Law Center:
https://www.tolerance.org/sites/default/files/general/TT%20anti%20bias%20framework%20pamphlet_final.pdf

Joy Buolamwini is the Poet of Code. She founded the Algorithmic Justice League to create a world with more ethical and inclusive technology. Her TED Featured Talk on algorithmic bias has over 1 million views.
Website: https://www.poetofcode.com/
TED Talk: https://www.ted.com/speakers/joy_buolamwini
Algorithmic Justice League: https://www.ajlunited.org/

ECEP = Expanding Computing Education Pathways Alliance seeks to increase the number and diversity of students in the pipeline to computing and computing-intensive degrees by promoting state-level computer science education reform.
https://ecepalliance.org/
https://ecepalliance.org/sites/default/files/ECEP_Flyer_0.pdf
Here is an article about ECEP's broadening participation in computing work and the CAPE (Capacity, Access, Equity, and Participation) Framework:
https://ecepalliance.org/news/three-models-driving-ecep-ecep-state-efforts

Sapna Cheryan's research at the University of Washington, Stereotypes, Identity, and Belonging Lab: https://depts.washington.edu/sibl/gender-and-stem/

MIT TSL Project is helping teacher educators use digital simulations to practice engaging with difficult equity-related scenarios: https://tsl.mit.edu/fellowships/inspire-cs-ai/

CS4IL: coalition in IL dedicated to achieving world-class K-12 CS education for every student, in every school, throughout IL: https://www.cs4il.org/

Report: *2018 NSSME+: Status of High School Computer Science*, Horizon Research: http://horizon-research.com/NSSME/wp-content/uploads/2019/05/2018-NSSME-Status-of-High-School-Computer-Science.pdf

Book: *Rac(e)ing to Class: Confronting Poverty and Race in Schools and Classrooms,* H. Richard Milner IV
https://www.amazon.com/Rac-ing-Class-Confronting-Classrooms/dp/1612507867

Book: *Ethical Algorithm: The Science of Socially Aware Algorithm Design*, by Aaron Roth & Michael Kerns
https://www.amazon.com/Ethical-Algorithm-Science-Socially-Design/dp/0190948205

Useful websites:

- https://www.commonsense.org/
- https://code.org/
- https://csunplugged.org/en/
- https://girlswhocode.com/
- https://www.washington.edu/accesscomputing/
- https://code.org/educate/csp
- https://www.handsoncoding.org/ - launching latinosincoding.org soon
- https://www.csforallteachers.org/
- https://csunplugged.org/en/
- https://github.com/touretzkyds/ai4k12/wiki (AI4K12 guidelines)

Robot Kits and Apps (with grade level recommendations)

- Dash and Dot from Wonder Workshop (elementary grades)
- Robot Mice (kindergarten)
- Bee-Bots (PreK-3)
- Robot Mice (cheaper alternative to Bee-Bots)
- Dash robots (grades 1-2)
- LEGO WeDo 2.0 (grade 3)
- LEGO EV3 or Spike Prime (grade 5)
- LEGO EV3 (grades 3-5)
- Micro:Bits with servos and sensors (grade 3 and up)
- Makeblock is coming out with a new elementary robot that I hear is AMAZING

- MakeyMakey (grade 3). Did the DollE 1.0 activity: https://www.instructables.com/id/Making-and-Literacy-With-Doll-E-10/
- Code.org has lessons where you program a partner to create cup stack designs
- Free app from The New York Hall of Science - https://nysci.org/school/resources/the-pack/ (computing and environment)
- Fall Block-Based: https://docs.google.com/document/d/1WgMPEQyHTaSBtfP7eyPHd0WyuswdLy-OJ6Xq59F9N0k/edit?usp=sharing
- Spring PBL App Development: https://docs.google.com/document/d/1GTqXdvayJXNSFpMDlxff0-f8uXevshfIGVCGZRqdVts/edit?usp=sharing

Coming soon!

- EiE is creating a CS curriculum that aligns with their engineering challenges. They will be launching CS units in late July, early August. Check: http://eie.org/
- Makeblock is coming out with a new elementary robot that is supposed to be amazing.