**AFCEA CERTS 2020 – STEM and beyond, building the talent pipeline – Resources for K12 STEM (not a comprehensive list at all!  Check for state and local universities, non profits, government resources)**

**United States STEM Education Strategic Plan – Dec 2018.** https://www.whitehouse.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf

**STEM Learning Ecosystems -** https://stemecosystems.org/

Summary - STEM Ecosystems were identified in a December 2018 federal report as the top strategy for improving STEM literacy, ensuring a strong workforce and global competitiveness for all, and an important means to support diversity, equity, and inclusion in a thriving STEM workforce. Website has a great map showing existing STEM Learning Ecosystems across the nation.  Locating existing networks could possibly be a great starting place for exploring /implementing a STEM Learning Ecosystem in your area.

**Design for Success: Developing a STEM Ecosystem- Great research completed by the University of San Diego**. http://stemecosystems.org/wp-content/uploads/2017/01/USD-Critical-Factors-Final_121916.pdf

Summary - One approach to bridge STEM learning across settings and sectors is called STEM Learning Ecosystems. According to a recent report on the approach "a STEM learning ecosystem encompasses schools, community settings such as after-school and summer programs, science centers and museums, and informal experiences at home and in a variety of environments that together constitute a rich array of learning opportunities for young people"

**Charting A Course for Success: America's Strategy for STEM Education -** https://www.whitehouse.gov/wp-content/uploads/2018/12/STEM-Education-Strategic-Plan-2018.pdf

**National Alliance for Partnerships in Equity – (NAPE) STEM Equity Rubric**

https://napequity.org/stem/stem-equity-project/imstem/stem-equity-program-evaluation-rubric

Summary (How to use the rubric) - The rubric is intended to be used primarily as a guide for program leaders to self-evaluate how well their programs meet the standards of equity in STEM education and design strategies to grow toward "accomplished" in every attribute.  The rubric could also be used by other STEM stakeholders when making funding or partnership decisions through a lens of equity.

**Georgia STEM/ STEAM Business, Community, Industry, Post-Secondary Partnerships Document- A guide for supporting STEM/STEAM schools.**

http://www.stemgeorgia.org/wp-content/uploads/2018/08/Georgia-STEM.-STEAM-Partnership-Guide-1.pdf

**Girl Scouts Nation's Capital STEM/Cyber Badges**

https://www.girlscouts.org/en/our-program/badges/badge_explorer.html

and, see attachment 2-page STEM badge map.

**Connected Science Learning**: A publication from the NSTA about connecting in- and out-of-school science learning, frequently featuring articles with detailed examples about how the academic, research, or industry communities effectively engage with in-school student population http://csl.nsta.org/

**Science Task Screener & EQuIP (Educators Evaluating the Quality of Instructional Products)**: Check-lists and rubrics to assess curriculum materials for alignment with the Next Generation Science Standards https://www.nextgenscience.org/taskscreener

**Next Gen Storylines**: Samples of classroom-based investigations directed by student questions for learning driven by student exploring phenomena or solving problems https://www.nextgenstorylines.org/

**EdReports**: Reviews of dozens of K12 instructional materials for ELA/literacy, math, and science programs https://www.edreports.org/

**California Academy of Sciences**: Lesson plans, videos, and toolkits for teachers or educators, even if you are not in CA https://www.calacademy.org/educators

**Phenomena in the Classroom**: Two attachments describing content-driven learning vs. phenomena-driven learning and examples for select standards of how instruction looks different.

**Interest & Achievement Gaps in Elementary STEM**: Four attached publications about the importance and impact of STEM in the early grades

**Science from Scientists' Website –** https://www.sciencefromscientists.org/

**Girls Who Code -** https://girlswhocode.com/

**Thomas Jefferson High School Partnership Fund** – https://www.tjpartnershipfund.org/ and see the Excel spreadsheet attachment with STEM resources for TJPF – focuses on either National or Northern Virginia programs and entities.

**Society of Women Engineers K12 STEM resources -** https://research.swe.org/swe-programs-additional-resources/

**100in10 – 100,000 STEM teachers in 10 years (began in 2012 and goals are for 2021) -** https://100kin10.org/

**MIT Edgerton Center K12 Teacher Resources -** https://edgerton.mit.edu/k-12/teacher-resources/k-12-curriculum

**Cyber Education Grants**: https://www.cyberbit.com/blog/cybersecurity-training/cyber-security-grants-

for-education/ or check for State level opportunities (e.g., Go Virginia Grant)

**More Diversity Organizations / Resources / Programs for Kids**:

- International Consortium of Minority Cybersecurity Professionals' Educational Security Operations Centerhttps://www.icmcp.org/educational-security-operations-centers-esoc-
- Women's Society of CyberJutsu's Girls Academy: https://womenscyberjutsu.org/mpage/CGA_Home
- Girl's Who Code: https://girlswhocode.com
- Black Girls Code: http://www.blackgirlscode.com
- Code Fellows Diversity Scholarship Fund: https://www.codefellows.org/diversity-scholarship-fund/
- Thinkful Scholarship for Women and Veterans: https://www.thinkful.com/bootcamp/web-development/flexible/
- ACM SIGHPC/Intel Computational & Data Science Fellowships:  https://www.sighpc.org/for-your-career/computational-data-science-fellowships
- Claim Academy Women in Technology & Minority Scholarships: https://claimacademystl.com/financing/index.html
- Ada Developers Academy Tuition-free Developer Training & Paid Internship for women and gender diverse people:  https://adadevelopersacademy.org

List of Coding Bootcamp Scholarships (current as of August 2019):

https://www.coursereport.com/blog/every-coding-bootcamp-scholarship-course-report