NISS K-12 Webinar Resource List
Anna Bargagliotti, Christine Franklin, and Rob Gould

Important Reports

Pre-K-12 Guidelines for Assessment and Instruction in Statistics Education II (GAISE II) https://www.amstat.org/asa/education/Guidelines-for-Assessment-and-Instruction-in- Statistics-Education-Reports.aspx

The Statistical Education of Teachers (SET): https://www.amstat.org/asa/files/pdfs/EDU-SET.pdf

The NCTM Catalyzing Change Reports: https://www.nctm.org/Standards-and- Positions/Catalyzing-Change-Additional-Resources/

Very Recent Articles Describing Examples of Data Science at the School Level

Harvard Data Science Review (HDSR) Journal– Two articles introducing GAISE II and Level A. Articles on Level B and Level C to appear later in 2021 https://hdsr.mitpress.mit.edu/pub/cqncbp3l/release/3 https://hdsr.mitpress.mit.edu/pub/wqoysrrt/release/2?readingCollection=3572f4eb

Ask Good Questions Blog – "Lizards and Ladybugs" https://askgoodquestions.blog/2020/08/10/58-lizards-and-ladybugs-illustrating-the-role-of- questioning/

Significance Journal - "As Covid makes clear, statistics education is a must"

https://rss.onlinelibrary.wiley.com/doi/full/10.1111/1740-9713.01509

Association for Women in Mathematics (AWM)

https://awm-math.org/wp-content/uploads/2020/10/AWM-News-NovDec-2020-PRINT.pdf

Journal of Statistics and Data Science Education (JSDSE) – "What is a Good Statistical Question" https://www.tandfonline.com/doi/full/10.1080/26939169.2021.1877582

General Resources

Visit the wealth of K-12 teacher resources at the ASA education link: https://www.amstat.org/asa/education/K-12-Educators.aspx

Census at School: https://ww2.amstat.org/censusatschool/

The Statistics Teacher: https://www.statisticsteacher.org/

STEW Lesson Plans: https://www.amstat.org/asa/education/stew/home.aspx

This is Statistics – explore careers in Statistics: https://thisisstatistics.org

Software

CODAP – open source: https://codap.concord.org/

Art of Stat – open source applets: https://artofstat.com

Curriculum

The Mobilize Introduction to Data Science (IDS) Course (open source)
https://www.introdatascience.org/

Assessment

Levels of Conceptual Understanding in Statistics (LOCUS) – NSF Grant – Pre-K-12 Assessment
https://locus.statisticseducation.org

Great Blogs

Skew the Script: https://skewthescript.org/

Ask Good Questions: https://askgoodquestions.blog/

High Quality Free Professional Development

Amplifying Statistics and Data Science in Classrooms: http://go.ncsu.edu/amplifystats

InSTEP: http://instepwithdata.org

To be published in 2021 by Joint ASA-NCTM committee:

Book: *Statistics and Data Science for Teachers* – book will be open source

check here for updates: https://www.amstat.org/AMSTAT/Education/K-12- Educators/ASA/Education/K-12-Educators.aspx?hkey=66767c1e-fea8-43ea-8665-12bf718997f6

Other Resources

Teacher Meet Ups K-12 Chats

ASA: https://www.youtube.com/channel/UCESYnsheh2TclJlZW13sdBQ

The Messy Data Coalition https://messydata.org/

International Statistical Review – "Statistics and the Modern Student"

https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1751-5823.2010.00117.x

Special Edition of *Teaching Statistics*: "Teaching Data Science and Statistics: senior school or introductory tertiary" An international collection of invited and submitted articles on research and practice.

Journal of Statistics and Data Science Education, Volume 29, Issue sup1 (2021): Computing in the Statistics and Data Science Curriculum

"Ensuring that mathematics is relevant in a world of data science" - https://www.ams.org/publications/journals/notices/201709/rnoti-p986.pdf