Digital Skills for a Global Society

Digital Literacy Teaching Strategies - Subject Specific
GetDigitalSkills.org

ELA

- ELA is centered on literacy so the key is to make the learning relevant to the digital world.
- Use student interest in the internet and hot topics to reflect, think, write, and share digitally.
- Additional resources:
  NCTE's Definition of Literacy in a Digital Age
  Teaching ELA Online: Digital Literacy Connections to English Language Arts
  Integrating Digital Literacy Into English Language Instruction: Companion Learning Resource
  How to teach Digital Literacy (Middle School ELA)
  Being Literate in the Digital Age
  English Language Arts Guidance - English Language Arts (CA Dept of Education) - s
  Sample Lessons for Teaching Digital Literacy :: CCSS ELA: Writing to Inform, Argue, and Analyze (only available until January 2022)

Social Studies/History

- Social studies and history provide a great opportunity to remind students that the tools might be new but many of the underlying communication elements are as old as the spoken word. Technology simply amplifies and accelerates the best and worst elements of communication.
- Reflect on the ten themes from the National Council for the Social Studies (NCSS) that include individual development and identity; power, authority and governance; science, technology and society; civic ideals; production, distribution, and consumption; global connections etc.
- With history, challenge students to consider what historical figures/movements/events might have been impacted by technology - for better and worse.
- Additional resources:
  Inquiry and Teaching with Primary Sources to Prepare Students for College, Career, and Civic Life | Social Studies
  High-Leverage Critical Thinking Teaching Practices

  Teaching Social Studies Online: Digital Literacy Connections to Civics and History

  Digital Literacy

  What's New about Fake News? Integrating Digital History for Media Literacy | Social Studies

  Making The Case For Elementary Social Studies: Media Literacy

Math

- Math is the language of the internet. Make the connection between math and computational thinking including four key concepts: decomposition, pattern recognition, abstraction, and algorithmic thinking as well as probability, algebra, and graph theory. Internet math has also become its own subject.
- Additional resources:
  ISTE Standards for Educators: Computational Thinking Competencies
  Computer Science, Computational Thinking, and Coding Defined
  How Math and English Teachers Encourage Civic Engagement

Science

- The Next GeneApplied Scienceration Science Standards align with digital literacy skills in areas such as crosscutting concepts; science and engineering practices to understand how the digital world is developed; and core ideas that inform the past, present and future of technology development.
- Aspects of the scientific method relate well to the observation and analysis required for digital literacy.
- Psychology and biology (ie, human evolution, physiology) provide the opportunity to reflect on how cognition and bias impact digital literacy.
- Students can search for information on earth and environmental science to identify reliable sources of information.
- Use The 17 UN Sustainable Development Goals to explore global perspectives, solutions, and validity of information.
- Consider how biology and all sciences are now as much about analysis of data as well as physical properties.
- Additional resources:
  How to Develop Middle and High School Students' Science Media Literacy
  Classroom Resources from NCSE
  Digital Literacy - Science

Applied Science

- Digital literacy is one of the applied sciences.
- Other applied sciences such as software engineering, computer science, game development, and artificial intelligence require perspectives on ethics, equality, sustainability, business, and economics as part of a broader digital literacy understanding.
- The digital world holds great promise for health and wellness as well as challenges related to privacy.
- Additional resources:
  CSTA K-12 CS Standards
  UNESCO SDG - ISTE Standards crosswalk