

# Al Toolkit for Teacher Librarians

This toolkit, created by California School Library Association and International Association of School Librarianship, is an ongoing collection of free resources for teacher librarians to use as part of their library program and to inform their own professional growth. Most resources are comprehensive or collections rather than single lesson plans, for instance. A shorted link to this toolkit is <a href="http://tinyurl.com/TLAIToolkit">http://tinyurl.com/TLAIToolkit</a>

## Overview and General Educational Guidance

- <a href="https://tech.ed.gov/ai/">https://tech.ed.gov/ai/</a>U.S. Department of Education Office of Educational Technology on Al
- <a href="https://www2.ed.gov/documents/ai-report/ai-report.pdf">https://www2.ed.gov/documents/ai-report/ai-report.pdf</a> U.S. Department of Education Al report
- <a href="https://unesdoc.unesco.org/ark:/48223/pf0000386693">https://unesdoc.unesco.org/ark:/48223/pf0000386693</a> UNESCO guidance for generative AI in education and research
- <a href="https://go.ncdpi.gov/Al\_Guidelines">https://go.ncdpi.gov/Al\_Guidelines</a> North Carolina generative Al implementation recommendations and considerations for PK-13 public schools
- <a href="https://ospi.k12.wa.us/student-success/resources-subject-area">https://ospi.k12.wa.us/student-success/resources-subject-area</a>
  Washington state human-centered Al guidance for K-12 public schools
- <a href="https://www.cde.ca.gov/ci/pl/aiincalifornia.asp">https://www.cde.ca.gov/ci/pl/aiincalifornia.asp</a> California Department of Education Information regarding the role of artificial intelligence (AI) in California K-12 education; includes an AI resource kit (largely based on TeachAI)
- <a href="https://caeducatorstogether.org/groups/jm45qd3n/ai4ca-artificial-intelligence-for-californi">https://caeducatorstogether.org/groups/jm45qd3n/ai4ca-artificial-intelligence-for-californi</a> a California educational resources about AI (requires registration)
- <a href="https://www.teachai.org/toolkit">https://www.teachai.org/toolkit</a> TeachAl Al guidance for school toolkit; lots of good tips for schools
- <a href="https://ai4k12.org/">https://ai4k12.org/</a> National guidelines for K-12 AI education and resources

## Repositories and Bibliographies on AI in Education

- <a href="https://library.fiu.edu/ai">https://library.fiu.edu/ai</a> extensive list of resources on artificial intelligence, ChatGPT, writing with AI assistance, AI academic productivity tools, plagiarism, prompt engineering, GPT misinformation and hallucinations, AI image tools, AI literacy, and discussions related to AI ethics
- https://quides.masslibsystem.org/ai/schools
  Massachusetts Al LibGuide

- <a href="https://iste.org/ai">https://iste.org/ai</a> ISTE resources for AI in education
- <a href="https://www.smcoe.org/for-schools/district-instructional-services/gen-ai.html">https://www.smcoe.org/for-schools/district-instructional-services/gen-ai.html</a> San Mateo County Office of Education GenAl resources
- <a href="https://tinyurl.com/LibrarianAIresources">https://tinyurl.com/LibrarianAIresources</a> Special Library Association list of AI resources for librarians
- <a href="https://elink.io/p/ai-chatqpt-904c000">https://elink.io/p/ai-chatqpt-904c000</a> Good resources about AI, not just for librarians
- <u>bit.ly/ai-in-ed-resource</u> Al in education resource directory
- <a href="https://aieducator.tools/">https://aieducatalog.cset.tech/</a>
- https://www.controlaltachieve.com/2024/02/teach-students-ai.html
- https://tinyurl.com/aiCAPSPD Hall Davidson's list of Generative AI resources
- <a href="https://journal.canadianschoollibraries.ca/ai-in-education/">https://journal.canadianschoollibraries.ca/ai-in-education/</a>
  Relevant books about AI in education
- <a href="https://guides.lib.purdue.edu/c.php?g=1371380&p=10135071">https://guides.lib.purdue.edu/c.php?g=1371380&p=10135071</a> Purdue University Al LibGuide, including Al in K12

## Librarians' Roles in Al

- https://www.ifla.org/g/ai/generative-ai/
- <a href="https://open.umn.edu/opentextbooks/textbooks/1479">https://open.umn.edu/opentextbooks/textbooks/1479</a> Artificial intelligence and librarianship (3rd ed.). M. Fricke
- <a href="https://dpi.wi.gov/sites/default/files/imce/imt/pdf/Al\_Guidance\_6-5-24.pdf">https://dpi.wi.gov/sites/default/files/imce/imt/pdf/Al\_Guidance\_6-5-24.pdf</a> Wisconsin Al guidance for enhancing K-12 and library education
- <a href="https://guides.lib.unc.edu/generativeAl/ai-libraries">https://guides.lib.unc.edu/generativeAl/ai-libraries</a>
  Al for media and journalism, focusing on libraries
- <a href="https://www.slj.com/story/Librarians-Can-Play-a-Key-Role-Implementing-Artificial-Intellig-ence-in-Schools">https://www.slj.com/story/Librarians-Can-Play-a-Key-Role-Implementing-Artificial-Intellig-ence-in-Schools</a> article and
  - https://www.slj.com/story/an-ai-toolboxlfor-librarians-artificial-intelligence
- <a href="https://www.linkedin.com/pulse/ai-education-opportunity-school-libraries-elizabeth-hutchinson/">https://www.linkedin.com/pulse/ai-education-opportunity-school-libraries-elizabeth-hutchinson/</a> article with some sources and her video
  <a href="https://www.youtube.com/watch?v=QqTIM2bsTB0">https://www.youtube.com/watch?v=QqTIM2bsTB0</a>
- <a href="https://digitalcommons.fiu.edu/glworks/145/">https://digitalcommons.fiu.edu/glworks/145/</a> ChatGPT is a Liar and other Lessons Learned from Information Literacy Instructors
- https://www.youtube.com/watch?v=nnkgHXYszew School libraries and Al
- <a href="https://drive.google.com/file/d/1rqv4AeO7J090aFo2VhSnv5uKE1n3746w/view">https://drive.google.com/file/d/1rqv4AeO7J090aFo2VhSnv5uKE1n3746w/view</a> PPT on teaching about AI (includes examples by topic)
- <a href="https://www.slideshare.net/nickpoole/leading-responsible-ai-the-role-of-librarians-and-inf">https://www.slideshare.net/nickpoole/leading-responsible-ai-the-role-of-librarians-and-inf</a> <a href="mailto:ormation-professionals">ormation-professionals</a> <a href="PPT">PPT</a> by British librarians for librarians
- https://elissamalespina.substack.com/ Al school librarians newsletter

## Frameworks and Standards

#### General

- https://unesdoc.unesco.org/ark:/48223/pf0000380602 UNESCO K-12 Al curricula
- <a href="https://libraryready.ai/wp-content/uploads/2024/12/Al-Scope-and-Sequence.pdf">https://libraryready.ai/wp-content/uploads/2024/12/Al-Scope-and-Sequence.pdf</a> New York School Library System Al curriculum scope and sequence
- https://er.educause.edu/articles/2024/6/a-framework-for-ai-literacy
- https://newslit.org/educators/resources/6-things-to-know-about-ai/
- <a href="https://www.ilogroup.com/wp-content/uploads/2024/03/Framework-for-Implementing-Artificial-Intelligence-Al-in-K-12-Education\_v1.0.pdf">https://www.ilogroup.com/wp-content/uploads/2024/03/Framework-for-Implementing-Artificial-Intelligence-Al-in-K-12-Education\_v1.0.pdf</a>
- <a href="https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools">https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools</a>
- <a href="https://www.media.mit.edu/projects/impact-ai-k-12/overview/">https://www.media.mit.edu/projects/impact-ai-k-12/overview/</a> MIT Impact.Al framework
- https://digitalpromise.org/initiative/artificial-intelligence-in-education/ai-literacy/

#### How Al Works (including Industries)

- <a href="https://www.khanacademy.org/computing/code-org/x06130d92:how-ai-works/x06130d92:what-is-ai/v/how-ai-works">https://www.khanacademy.org/computing/code-org/x06130d92:how-ai-works/x06130d92:what-is-ai/v/how-ai-works</a>
- <a href="https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelli
- https://kids.britannica.com/students/article/artificial-intelligence-Al/272968
- https://www.gptechblog.com/5-diagrams-to-help-you-understand-generative-ai/
- https://www.weka.io/learn/guide/ai-ml/what-is-ai/
- https://www.youtube.com/watch?v=R9OHn5ZF4Uo How Als, like ChatGPT, learn
- <a href="https://www.youtube.com/watch?v=X-AWdfSFCHQ">https://www.youtube.com/watch?v=X-AWdfSFCHQ</a> How chatbots and large language models work (for middle and high school)

## Al Impact on Society

- <a href="https://www.youtube.com/watch?v=hJP5GqnTrNo">https://www.youtube.com/watch?v=hJP5GqnTrNo</a> How AI could save (not destroy) education
- <a href="https://www.niemanlab.org/2020/07/biased-algorithms-on-platforms-like-youtube-hurt-pe">https://www.niemanlab.org/2020/07/biased-algorithms-on-platforms-like-youtube-hurt-pe</a> ople-looking-for-information-on-health/
- <a href="https://www.youtube.com/watch?v=uXbi3JqZiGA">https://www.youtube.com/watch?v=uXbi3JqZiGA</a> Al in everyday life: How Al impacts you (for middle and secondary school)
- <a href="https://www.youtube.com/watch?v=2-PUjaqAXwM">https://www.youtube.com/watch?v=2-PUjaqAXwM</a> Advantages and disadvantages of AI (for middle and secondary school)
- https://www.voutube.com/watch?v=ttlOdAdQaUE What is artificial intelligence (for K-6)

## Consuming AI (e.g., discernment)

- Al Text Detectors: Try <u>GPTZeroLinks to an external site.</u> or <u>DetectGPTLinks to an external site.</u>
- Al Image Detectors: Try Maybe Al Image DetectorLinks to an external site., Optic Al or Not DetectorLinks to an external site. or Illuminarty's Al Image DetectorLinks to an external site.
- https://docs.google.com/presentation/d/1ADoqCSeBFaspv0qqiHqQmsdwazdqLjpASpJT utgmcNU/edit#slide=id.q1cc76543f64 0 246 Al text detectors
- <a href="https://www.cnn.com/interactive/2023/07/business/detect-ai-text-human-writing/">https://www.cnn.com/interactive/2023/07/business/detect-ai-text-human-writing/</a> How to tell when you're reading something written by AI (can be used as a warm-up exercise)
- <a href="https://www.techlearning.com/news/navigating-ai-biases-in-the-classroom">https://www.techlearning.com/news/navigating-ai-biases-in-the-classroom</a>
- https://elearn.eb.com/real-vs-ai-images/#:~:text=Students%20should%20look%20for%2 <u>0unnatural,or%20unrealistic%20lighting%20and%20shadows</u>. Spotting AI: with images to test (good warm-up activity) and criteria for spotting AI images; further resources included

#### Using Al

- <a href="https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02">https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02</a>
- https://www.aifire.co/p/top-ai-cheatsheets-2024
- <a href="https://www.k12promptguide.com/home">https://www.k12promptguide.com/home</a> Includes an introduction, strategies and use cases
- <a href="https://www.kubrio.com/articles/introduction-to-prompt-engineering-an-overview-for-kids">https://www.kubrio.com/articles/introduction-to-prompt-engineering-an-overview-for-kids</a>
  Includes activities; can be shared with parents

#### **Ethics**

- https://drive.google.com/drive/folders/1rL4dJ\_nxM3V5wfRcgEsnapkpwsKQKS1b Al Ethics for K!2 schools
- https://www.whitehouse.gov/ostp/ai-bill-of-rights/ U.S. Whitehouse AI Bill of Rights
- <a href="https://youthmedia.kged.org/gen-ai-guidelines">https://youthmedia.kged.org/gen-ai-guidelines</a>
- https://apastyle.apa.org/blog/how-to-cite-chatgpt
- https://libguides.wintec.ac.nz/academic-integrity/using-ai-tools#:~:text=You%20may%20 be%20required%20to,generative%20AI%20(GenAI)%20tools
   Academic integrity sources
- <a href="https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-genAl">https://library-guides.ucl.ac.uk/referencing-plagiarism/acknowledging-genAl</a>

## Al Tools

- <a href="https://www.scisdata.com/connections/issue-126/empowering-school-library-staff-to-navigate-the-ai-frontier/">https://www.scisdata.com/connections/issue-126/empowering-school-library-staff-to-navigate-the-ai-frontier/</a>
- <a href="https://www.aifire.co/p/top-ai-cheatsheets-2024?utm\_source=www.aifire.co&utm\_medium=newsletter&utm\_campaign=ai-agents-beyond-rag#69-50-ai-tools-to-replace-hardwork">https://www.aifire.co/p/top-ai-cheatsheets-2024?utm\_source=www.aifire.co&utm\_medium=newsletter&utm\_campaign=ai-agents-beyond-rag#69-50-ai-tools-to-replace-hardwork</a>
- <a href="https://www.techlearning.com/how-to/ai-starter-kit-for-teachers">https://www.techlearning.com/how-to/ai-starter-kit-for-teachers</a> Linked description and use of tools by use
- https://nesslabs.com/artificial-creativity
  Al tools by objective
- <a href="https://aieducator.tools/">https://aieducator.tools/</a> Repository of AI tools and ways to use them
- <a href="https://educraft.tech/best-100-ai-apps-for-teachers/">https://educraft.tech/best-100-ai-apps-for-teachers/</a> Popularity of AI tools by use
- <a href="https://theresanaiforthat.com/">https://theresanaiforthat.com/</a>
- <a href="https://www.intellum.com/resources/blog/16-ai-tools-for-education-content-creation">https://www.intellum.com/resources/blog/16-ai-tools-for-education-content-creation</a>
- https://ediscoverytoday.com/2023/07/21/120-mind-blowing-ai-tools-artificial-intelligence-trends/

# **Productivity Ideas**

- <a href="https://liferarian.com/librarian-role/9-ways-to-use-ai-tools-to-enhance-your-professional-li">https://liferarian.com/librarian-role/9-ways-to-use-ai-tools-to-enhance-your-professional-li</a> fe-as-a-librarian-4325/
- <a href="https://www.aiforeducation.io/prompts/">https://www.aiforeducation.io/prompts/</a> GenAl chatbot prompt library for educators
- <a href="https://www.disco.co/blog/how-ai-generated-learning-content-works-tools-examples-for-content-works-tools-examp
- https://slidesgo.com/ai-presentations
- https://libguides.northwestern.edu/ai-tools-research/librarians
- <a href="https://www.youtube.com/live/OWVtN8S8\_I0?feature=share">https://www.youtube.com/live/OWVtN8S8\_I0?feature=share</a> Create engaging lessons with ChatGPT: A guide

## Curriculum, Teaching and Learning

## Teaching and Learning

- <a href="https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf">https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf</a> U.S. Department of Education Office of Educational Technology Artificial intelligence and the future of teaching and learning
- https://openai.com/index/teaching-with-ai/
- https://ascd.org/el/articles/using-ai-to-fuel-engagement-and-active-learning

- <a href="https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02">https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02</a>
- <a href="https://www.techlearning.com/news/5-things-ai-can-and-can-not-do-for-students">https://www.techlearning.com/news/5-things-ai-can-and-can-not-do-for-students</a>

## Cross-grades

- https://unesdoc.unesco.org/ark:/48223/pf0000380602 UNESCO K-12 Al curricula
- https://www.ed.gov/sites/ed/files/2023/12/S411C230070\_Concord-Consortium-Inc-Narrative Redacted 508 QC.pdf Al across the curriculum for virtual schools
- <a href="https://www.cde.ca.gov/ci/pl/aiincalifornia.asp">https://www.cde.ca.gov/ci/pl/aiincalifornia.asp</a> California Department of Education Information regarding the role of artificial intelligence (AI) in California K-12 education, with ideas by grades and subject matter; includes an AI resource kit (largely based on TeachAI)
- <a href="https://iste.org/ai">https://iste.org/ai</a> See the hands-on activities for different grade levels
- <a href="https://www.aiforteachers.org/activities">https://www.aiforteachers.org/activities</a> lists activities about AI for different grade levels
- <a href="https://www.aiforteachers.org/lesson-plans-2">https://www.aiforteachers.org/lesson-plans-2</a> Al lessons grouped by elementary, middle grades, and secondary school
- <a href="https://www.ailiteracyday.org/curriculum-resources">https://www.ailiteracyday.org/curriculum-resources</a> Al activities clustered by time frame
- <a href="https://media-and-learning.eu/type/news/101-creative-ideas-to-use-ai-in-education-a-cro">https://media-and-learning.eu/type/news/101-creative-ideas-to-use-ai-in-education-a-cro</a> wdsourced-collection/
- https://www.edsurge.com/research/guides/ai-is-for-everyone-everywhere
- <a href="https://www.commonsense.org/education/lists/lessons-and-tools-for-teaching-about-artificial-intelligence">https://www.commonsense.org/education/lists/lessons-and-tools-for-teaching-about-artificial-intelligence</a>
- https://www.magicschool.ai/ai-literacy
- https://www.flintk12.com/ai-literacy-for-students
- <a href="https://lokisloop.org/misinfoplaypack/">https://lokisloop.org/misinfoplaypack/</a> University of Washington Misinformation Play Pack

## **Elementary School**

- <a href="https://www.media.mit.edu/projects/primary-ai-ed/overview/">https://www.media.mit.edu/projects/primary-ai-ed/overview/</a>
- <a href="https://www.hurix.com/why-and-what-to-teach-ai-curriculum-for-students/">https://www.hurix.com/why-and-what-to-teach-ai-curriculum-for-students/</a> targets K-5 students
- <a href="https://richardccampbell.com/the-best-resources-for-teaching-artificial-intelligence-to-kids">https://richardccampbell.com/the-best-resources-for-teaching-artificial-intelligence-to-kids</a> <a href="https://richardccampbell.com/the-best-resources-for-teaching-artificial-intelligence-to-kids">https://richardccampbell.com/the-best-resources-for-teaching-artificial-intelligence-to-kids</a>

#### Middle School

- https://www.media.mit.edu/projects/ai-ethics-for-middle-school/overview/
- <a href="https://codehs.com/course/ms-intro-ai/overview">https://codehs.com/course/ms-intro-ai/overview</a> Introduction to AI for middle school
- https://www.commonsense.org/education/collections/ai-literacy-lessons-for-grades-6-12

- <a href="https://link.springer.com/article/10.1007/s40593-022-00298-y">https://link.springer.com/article/10.1007/s40593-022-00298-y</a> AI + ethics curricula for middle school youth; research article with links to projects; accompanies <a href="https://raise.mit.edu/daily/">https://raise.mit.edu/daily/</a>
- <a href="https://www.sciencebuddies.org/projects-lessons-activities/artificial-intelligence/middle-school">https://www.sciencebuddies.org/projects-lessons-activities/artificial-intelligence/middle-school</a>

## Secondary School

- https://libquides.northwestern.edu/ai-tools-research/librarians
- <a href="https://craft.stanford.edu/">https://craft.stanford.edu/</a>
  Free resources to teach secondary school students in all subject matters about AI
- <a href="https://codehs.com/course/hs-intro-ai/overview">https://codehs.com/course/hs-intro-ai/overview</a> Introduction to AI for secondary school
- https://codehs.com/course/hs-intro-ai/overview
- <a href="https://xqsuperschool.org/education-policy/using-generative-ai-in-high-school-classroom">https://xqsuperschool.org/education-policy/using-generative-ai-in-high-school-classroom</a>
  <a href="https://xqsuperschool.org/education-policy/using-generative-ai-in-high-school-classroom">https://xqsuperschool.org/education-policy/using-generative-ai-in-high-school-classroom</a>
- <a href="https://www.commonsense.org/education/collections/ai-literacy-lessons-for-grades-6-12">https://www.commonsense.org/education/collections/ai-literacy-lessons-for-grades-6-12</a>
- https://www.researchgate.net/publication/365253406 Al Curriculum for European High
  h\_Schools\_An\_Embedded\_Intelligence\_Approach
- https://ocw.mit.edu/courses/res-mas-002-day-of-ai-spring-2022/

## Subject-Specific Resources

See https://tinyurl.com/AITeacherToolkit

## Warm-Up Activities

- <a href="https://teachingcommons.stanford.edu/teaching-guides/artificial-intelligence-teaching-guides/artificial-intelligenc
- https://hookedoninnovation.com/2023/11/07/12-ai-enhanced-icebreakers-to-motivate-learners/ 12 Al icebreakers
- https://www.verizon.com/learning/static/documents/standalone/lesson\_1169/p\_5302/Science%20\_%20AI%20Snapshots%20\_%20aiEDU.pdf AI snapshots
- <a href="https://www.ailiteracyday.org/curriculum-resources">https://www.ailiteracyday.org/curriculum-resources</a> Al activities clustered by time frame
- https://www.whichfaceisreal.com/
- https://elearn.eb.com/real-vs-ai-images/#:~:text=Students%20should%20look%20for%2 0unnatural,or%20unrealistic%20lighting%20and%20shadows. Spotting Al: with images to test
- <a href="https://medium.com/@socialcreature/ai-and-the-american-smile-76d23a0fbfaf">https://medium.com/@socialcreature/ai-and-the-american-smile-76d23a0fbfaf</a> How Al misrepresents culture through a facial expression
- <a href="https://roft.io/">https://roft.io/</a> Real or fake text game
- https://www.teachertoolsai.com/warm\_up Generate AI warm-ups for subject matter

# **Professional Development**

- <a href="https://www.techlearning.com/news/10-free-ai-trainings-and-certifications-for-educators">https://www.techlearning.com/news/10-free-ai-trainings-and-certifications-for-educators</a>
- <a href="https://libraryready.ai/">https://libraryready.ai/</a> New York PD for school libraries to lead Al adoption
- https://www.nnlm.gov/guides/opencourse/generativeai Generative AI for library services
- <a href="https://www.aiforeducation.io/home/#ResourceCenterHPanchor">https://www.aiforeducation.io/home/#ResourceCenterHPanchor</a> and https://www.aiforeducation.io/prompt-engineering-for-educators-webinar
- <a href="https://teach.kged.org/p/genai">https://teach.kged.org/p/genai</a> Public TV GenAl resources and PD for educators
- https://elissamalespina.substack.com/ Al school librarians newsletter
- https://gptcentral.beehiiv.com/archive?\_bhlid=94f1b8dc24407b372f5f9bd3fcb52018a858
  4eaa&utm\_campaign=how-where-to-learn-ai-for-free&utm\_medium=newsletter&utm\_so\_urce=qptcentral.beehiiv.com\_a list of free Al courses
- See also <a href="https://tinyurl.com/IASLAITeacherToolkit">https://tinyurl.com/IASLAITeacherToolkit</a> section on professional development