



AI Toolkit for K12 Teachers

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 share with their teachers to use as part of their classroom practice and to inform their own professional growth. Most resources are comprehensive or collections rather than single lesson plans, for instance.

A shortened link to this toolkit is <https://tinyurl.com/TeacherAIToolkit>

Overview and General Education Guidelines

- <https://tech.ed.gov/ai/> U.S. Department of Education Office of Educational Technology on AI
- <https://www2.ed.gov/documents/ai-report/ai-report.pdf> U.S. Department of Education AI report
- <https://unesdoc.unesco.org/ark:/48223/pf0000386693> UNESCO guidance for generative AI in education and research
- <https://www.unicef.org/innocenti/projects/ai-for-children> UNICEF guidance on AI for children
- https://go.ncdpi.gov/AI_Guidelines North Carolina generative AI implementation recommendations and considerations for PK-13 public schools
- <https://ospi.k12.wa.us/student-success/resources-subject-area> Washington state human-centered AI guidance for K-12 public schools
- <https://www.cde.ca.gov/ci/pl/aiincalifornia.asp> 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 and ai4K12)
- <https://www.teachai.org/toolkit> TeachAI AI guidance for school toolkit; lots of good tips for schools
- <https://ai4k12.org/> National guidelines for K-12 AI education and resources
- <https://www.cde.ca.gov/ci/pl/aiincalifornia2023.asp> California Dept. of Education AI guidance
- <https://www.techlearning.com/how-to/ai-starter-kit-for-teachers>
- <https://www.techlearning.com/how-to/ai-literacy-6-resources-for-teachers>
- https://guides.masslibsystem.org/ld.php?content_id=71600665 Genesee Valley BOCES ChatGPT and generative AI for school administrators
- <https://www.techlearning.com/how-to/ai-starter-kit-for-teachers> Links to AI information for teachers
- <https://www.aiedu.org/> Educational resources and professional development
- https://aigoestoschool.com/2024/10/31/a-schools-roadmap-integrate-and-create-policies-for-generative-ai/?utm_source=substack&utm_medium=email Portugal's policies for AI in school

- <https://www.cgcs.org/genaichcklist> K-12 generative AI readiness checklist
- <https://all4ed.org/future-ready-schools/emerging-practices-guides/demystifying-artificial-intelligence-ai-for-k-12/>

Repositories and Bibliographies on AI in Education

- <https://library.fiu.edu/ai> 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://guides.masslibsystem.org/ai/schools> Massachusetts AI LibGuide
- <https://www.smcoe.org/for-schools/district-instructional-services/gen-ai.html> San Mateo County Office of Education GenAI resources
- <https://iste.org/ai> ISTE resources for AI in education
- <https://www.cosn.org/tools-and-resources/resource/artificial-intelligence-ai-in-k-12/>
- <https://www.pensandpixels.org/> Resources on Gen AI in education
- bit.ly/ai-in-ed-resource AI in education resource directory
- <https://aieducator.tools/> and <https://aieducatalog.cset.tech/>
- <https://www.controlaltachieve.com/2024/02/teach-students-ai.html>
- <https://tinyurl.com/aiCAPSPD> Hall Davidson's list of Generative AI resources
- <https://docs.google.com/document/d/1EWHN6OJtMpY2nC857jVUIFRwz1CW3n2OBhz1ixTv52c/edit?tab=t.0#heading=h.nj23sjpi5u97> AI for teachers resource list
- <https://journal.canadianschoollibraries.ca/ai-in-education/> Relevant books about AI in education
- <http://www.pearltrees.com/joycevalenza/ai-instructional-tools/id68070667> AI instructional tools by Joyce Valenza

Frameworks and Standards

General

- <https://unesdoc.unesco.org/ark:/48223/pf0000380602> UNESCO K-12 AI curricula
- <https://libraryready.ai/wp-content/uploads/2024/12/AI-Scope-and-Sequence.pdf> New York School Library System AI 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/>
- https://www.ilogroup.com/wp-content/uploads/2024/03/Framework-for-Implementing-Artificial-Intelligence-AI-in-K-12-Education_v1.0.pdf
- <https://www.education.gov.au/schooling/resources/australian-framework-generative-artificial-intelligence-ai-schools>

- <https://www.media.mit.edu/projects/impact-ai-k-12/overview/> MIT Impact.AI framework
- <https://digitalpromise.org/initiative/artificial-intelligence-in-education/ai-literacy/>
- <https://school-education.ec.europa.eu/en/discover/news/ai-teaching-and-learning>

How AI Works (including Industries)

- <https://www.khanacademy.org/computing/code-org/x06130d92:how-ai-works/x06130d92:what-is-ai/v/how-ai-works>
- <https://www.simplilearn.com/tutorials/artificial-intelligence-tutorial/what-is-artificial-intelligence#:~:text=Put%20simply%2C%20AI%20systems%20work,features%20in%20the%20analyzed%20data.>
- <https://kids.britannica.com/students/article/artificial-intelligence-AI/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 AIs, like ChatGPT, learn
- <https://www.youtube.com/watch?v=X-AWdfSFCHQ> How chatbots and large language models work (for middle and secondary school)

AI Impact on Society

- <https://www.youtube.com/watch?v=hJP5GqnTrNo> How AI could save (not destroy) education
- <https://www.youtube.com/watch?v=uXbi3JqZiGA> AI in everyday life: How AI impacts you (for middle and secondary school)
- <https://www.youtube.com/watch?v=2-PUjaqAXwM> Advantages and disadvantages of AI (for middle and secondary school)
- <https://www.youtube.com/watch?v=ttlOdAdQaUE> What is artificial intelligence (for K-6)

Consuming AI (e.g., discernment)

- **AI Text Detectors:** Try [GPTZeroLinks to an external site.](#) or [DetectGPTLinks to an external site.](#)
- **AI Image Detectors:** Try [Maybe AI Image DetectorLinks to an external site.](#), [Optic AI or Not DetectorLinks to an external site.](#) or [Illuminarty's AI Image DetectorLinks to an external site.](#)
- https://docs.google.com/presentation/d/1ADoqCSeBFaspv0qqiHqQmsdwazdqLjpASpJTutgmcNU/edit#slide=id.g1cc76543f64_0_246 AI text detectors
- <https://www.cnn.com/interactive/2023/07/business/detect-ai-text-human-writing/> How to tell when you're reading something written by AI (can be used as a warm-up exercise)
- <https://roft.io/> Real or fake text game (can be used as a warm-up exercise)
- <https://elearn.eb.com/real-vs-ai-images/#:~:text=Students%20should%20look%20for%20unnatural.or%20unrealistic%20lighting%20and%20shadows.> Spotting AI: with images to test (good warm-up activity) and criteria for spotting AI images; further resources included

- **Viewfinder.** <https://www.lib.montana.edu/responsible-ai/viewfinder/> Facilitates ethical reflection about AI scenarios in libraries and archives from different stakeholder perspectives

Using AI

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

Ethics

- https://drive.google.com/drive/folders/1rL4dJ_nxM3V5wfRcgEsnapkpwsKQKS1b AI Ethics for K12 schools
- <https://www.whitehouse.gov/ostp/ai-bill-of-rights/> U.S. Whitehouse AI Bill of Rights
- <https://youthmedia.kqed.org/gen-ai-guidelines>
- <https://www.descript.com/blog/article/what-copyright-law-says-about-ai-generated-content>
- <https://apastyle.apa.org/blog/how-to-cite-chatgpt>
- https://www.researchgate.net/publication/362415295_AI_Ethics_Curricula_for_Middle_School_Youth_Lessons_Learned_from_Three_Project-Based_Curricula research article with curricula
- https://courses.pepperdine.edu/access/content/user/cheard/Twine/Generative_AI_Syllabus_Statement.html Generative AI syllabus statement tool
- <https://www.linkedin.com/feed/update/urn:li:activity:7047482487668633600/> How to cite AI tools - International Baccalaureate

AI Tools

- Aieducator.tools. (2026). *AI tools for education, reviewed by real educators.* <https://aieducator.tools/> Repository of AI tools and ways to use them
- AI Fire Moderator. (2025, July 22). *The 2025 video revolution: 9 AI tools to transform your content.* AI Hub. <https://community.aifire.co/c/beginner-tutorials/the-2025-video-revolution-9-ai-tools-to-transform-your-content>
- Generoso, A. (2026, May 15). *Best AI teaching tools for teachers in 2026.* Edcafe AI. <https://www.edcafe.ai/blog/best-ai-teaching-tools>
- Neil Chase Film. (2026). *AI for creatives.*

<https://neilchasefilm.com/category/ai-content-creation/>

- ProjectPals. (2026). *AI tools for student projects*.
<https://projectpals.com/ai-in-education/ai-tools-for-student-projects/>

Productivity Ideas

- <https://www.aiforeducation.io/prompts/> GenAI chatbot prompt library for educators
- <https://www.disco.co/blog/how-ai-generated-learning-content-works-tools-examples-for-course-creators#:~:text=AI%2Dgenerated%20learning%20content%20uses,learner%20styles%20and%20knowledge%20levels.>
- <https://slidesgo.com/ai-presentations>
- <https://www.teachingchannel.com/k12-hub/blog/65-ai-prompts-for-lesson-planning/>
- https://www.youtube.com/live/QWVtN8S8_I0?feature=share Create engaging lessons with ChatGPT: A guide
- <https://autoclassmate.io/tools/activation-and-engagement-activity-generator/>
- https://www.teachertoolsai.com/warm_up Generate AI warm-ups for subject matter

Curriculum, Teaching and Learning

Teaching and Learning

- <https://www.ed.gov/sites/ed/files/documents/ai-report/ai-report.pdf> 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>
- <https://www.edweek.org/technology/what-is-age-appropriate-use-of-ai-4-developmental-stages-to-know-about/2024/02>
- <https://dugi-doc.udg.edu/bitstream/handle/10256/26302/EN%20From%20chalk%20to%20chip%20UdG.pdf?sequence=1> University of Girona ebook *From Chalk to Chip* about using AI in the classroom
- https://courses.pepperdine.edu/access/content/user/cheard/Twine/Generative_AI_Syllabus_Statement.html Generative AI syllabus statement tool
- <https://www.edweek.org/technology/ai-and-equity-explained-a-guide-for-k-12-schools/2024/06>
- <https://www.edutopia.org/article/how-ai-will-impact-the-future-of-teaching-a-conversation-with-sal-khan>
- <https://libraryready.ai/wp-content/uploads/2024/12/AI-Scope-and-Sequence.pdf> AI Scope and Sequence

Cross-grades

- <https://unesdoc.unesco.org/ark:/48223/pf0000380602> UNESCO K-12 AI curricula
- https://www.ed.gov/sites/ed/files/2023/12/S411C230070_Concord-Consortium-Inc-Narrative_Redacted_508_QC.pdf AI across the curriculum for virtual schools
- <https://www.cde.ca.gov/ci/pl/aiincalifornia.asp> 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)
- <https://iste.org/ai> See the hands-on activities for different grade levels
- <https://www.aiforteachers.org/activities> lists activities about AI for different grade levels
- <https://www.aiforteachers.org/lesson-plans-2> AI lessons grouped by elementary, middle grades, and secondary school
- <https://teach.kqed.org/p/partner-with-genai> AI curriculum for grades 6-12
- <https://www.ailliteracyday.org/curriculum-resources> AI activities clustered by time frame
- <https://media-and-learning.eu/type/news/101-creative-ideas-to-use-ai-in-education-a-crowdsourced-collection/>
- <https://www.edsurge.com/research/guides/ai-is-for-everyone-everywhere>
- <https://www.common sense.org/education/lists/lessons-and-tools-for-teaching-about-artificial-intelligence>
- https://www.digitaltechnologieshub.edu.au/teach-and-assess/classroom-resources/topics/artificial-intelligence/?anchor=headingai-accordion_2_0
- <https://www.magicschool.ai/ai-literacy>
- <https://www.flintk12.com/ai-literacy-for-students>
- <https://lokisloop.org/misinfoplaypack/> University of Washington Misinformation Play Pack
- <https://www.ibo.org/programmes/artificial-intelligence-ai-in-learning-teaching-and-assessment/> guidelines for the IB - International Baccalaureate
- https://learn.wab.edu/ld.php?content_id=52014270 Evaluating 13 scenarios of AI in student coursework

Elementary School

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

Middle School

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

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

Secondary School

- <https://craft.stanford.edu/> Free resources to teach secondary school students in all subject matters about AI
- <https://codehs.com/course/hs-intro-ai/overview> Introduction to AI for secondary school
- <https://codehs.com/course/hs-intro-ai/overview>
- <https://xqsuperschool.org/education-policy/using-generative-ai-in-high-school-classrooms/>
- <https://www.commonsense.org/education/collections/ai-literacy-lessons-for-grades-6-12>
- https://www.researchgate.net/publication/365253406_AI_Curriculum_for_European_High_Schools_An_Embedded_Intelligence_Approach
- <https://pds.ibo.org/ai-in-the-classroom-for-dp-educators/#/> IB in the classroom for DP educators

Subject-Specific Resources

Language Arts

- <https://www.verizon.com/learning/lesson-plans/lessons/AI-Snapshots-English/1168> 45 language arts warm-ups about AI
- <https://www.youtube.com/watch?v=5RlrzSAEUqs> AI for ELA with Khan Academy
- https://repository.isls.org/bitstream/1/8737/1/ICLS2022_2106-2107.pdf Examining learning opportunities for integrating AI education in English language arts classrooms (research article)
- <https://bera-journals.onlinelibrary.wiley.com/doi/full/10.1111/bjet.13460> AI and English language teaching: Affordances and challenges (research article)
- <https://aiandwriting.hcommons.org/resources/> MLA - CCCC Join task force on writing and AI

Social Studies

- <https://www.eschoolnews.com/digital-learning/2024/04/23/digital-tools-ai-enhance-social-studies/>
- <https://www.youtube.com/watch?v=36gGhn66sU8> National Council for History: The AI advantage in K-12 education

- https://www.researchgate.net/publication/381300497_The_Future_of_Elementary_Social_Studies_Harnessing_AI's_Potential_Through_Evidence-Based_Practices (research article)

Math

- <http://tinyurl.com/EmpowerSTEAMai>
- https://www.csforall.org/projects_and_programs/ai-and-data-science-education/
- <https://nextwavestem.com/stem-artificial-intelligence>
- <https://concord.org/our-work/research-projects/multidisciplinary-ai-education-with-storyq/>
- <https://ai.thestempedia.com/docs/curriculum/skill-development-courses/artificial-intelligence-for-kids-block-coding-curriculum/>

Sciences

- <http://tinyurl.com/EmpowerSTEAMai>
- <https://nextwavestem.com/stem-artificial-intelligence>
- <https://ai.thestempedia.com/docs/curriculum/skill-development-courses/artificial-intelligence-for-kids-block-coding-curriculum/>
- <https://www.sciencebuddies.org/projects-lessons-activities/artificial-intelligence/middle-school>

Arts

- https://www.scirp.org/pdf/jcc2024125_51732691.pdf Discussion of AI in visual art education (research article)
- <https://campus.collegeforcreativestudies.edu/academic-affairs/ai-guidelines-art-education/>
- <https://phys.org/news/2024-02-ai-art-generators-classrooms.html>
- <https://musiceducation.arts.ufl.edu/resources/ai-music-teaching-assistant/>
- <https://jeffjc.medium.com/ai-teaching-instruments-in-music-education-04611ef6e1fd>
- <https://codehs.com/curriculum/projects/proj-ai-music>
- <https://classtechtips.com/2024/08/21/ai-music/>
- <https://kripeshadwani.com/ai-music-generators/>

Physical Education

- <https://www.supportrealteachers.org/ai-uses-in-pe.html>
- <https://www.youtube.com/watch?v=jrMXwYbXyTE> Exploring AI-enhancement assessment for health and physical education
- <https://richardccampbell.com/chatgpt-the-new-virtual-assistant-for-pe-teachers/>
- <https://www.capnpetespowerpe.com/single-post/harnessing-the-power-of-ai-in-physical-education-enhancing-efficiency-and-effectiveness>
- <https://www.nature.com/articles/s41598-024-53964-7#:~:text=An%20emerging%20sports%20training%20approach,athletic%20abilities%2C%20and%20training%20requirements>. Physical education teaching mode assisted by AI assistance (research article)

Technical Education

- <http://tinyurl.com/EmpowerSTEAMai>
- <https://nextwavestem.com/stem-artificial-intelligence>
- <https://www.teachai.org/cs> Guidance on the future of computer science education in an age of AI
- <https://ocw.mit.edu/courses/res-mas-002-day-of-ai-spring-2022/>
- <https://codeorg.medium.com/what-is-the-future-of-k-12-cs-education-in-an-age-of-ai-17a03187c005>
- <https://www.gcpsk12.org/programs-and-services/college-and-career-development/academies-and-career-technical-and-agricultural-education/artificial-intelligence-and-computer-science>
- <https://www.exploringcs.org/for-teachers-districts/artificial-intelligence> Computer science unit

Warm-Up Activities

- <https://teachingcommons.stanford.edu/teaching-guides/artificial-intelligence-teaching-guide/warming-ai> Stanford University warm-up activities about AI
- <https://hookedoninnovation.com/2023/11/07/12-ai-enhanced-icebreakers-to-motivate-learners/> 12 AI icebreakers
- https://www.verizon.com/learning/static/documents/standalone/lesson_1169/p_5302/Science%20_%20AI%20Snapshots%20_%20aiEDU.pdf AI snapshots
- <https://www.ailliteracyday.org/curriculum-resources> AI activities clustered by time frame
- <https://www.whichfaceisreal.com/>
- <https://elearn.eb.com/real-vs-ai-images/#:~:text=Students%20should%20look%20for%20unnatural,or%20unrealistic%20lighting%20and%20shadows>. Spotting AI: with images to test
- <https://medium.com/@socialcreature/ai-and-the-american-smile-76d23a0fbfaf> How AI misrepresents culture through a facial expression
- <https://roft.io/> Real or fake text game
- https://www.teachertoolsai.com/warm_up Generate AI warm-ups for subject matter

Professional Development

- <https://www.techlearning.com/news/10-free-ai-trainings-and-certifications-for-educators>
- <https://teach.kqed.org/p/genai> Public TV GenAI resources and PD for educators
- <https://teach.kqed.org/p/genaiom/how-to/ai-starter-kit-for-teachers> AI starter kit for teachers from *Tech & Learning*
- <https://docs.google.com/presentation/d/1Q2pYWGdQ-b85XCUJemYKQeJZ7OdR52hVU>

[bfehojngQ/edit#slide=id.g259636fe844_4_12](#) Thorough PPT for teachers, with examples of uses

- <https://learn.microsoft.com/en-us/training/educator-center/topics/ai-for-education>
- <https://dogtrax.edublogs.org/2023/08/10/generative-ai-presentation-school-libraries-and-ell-students/> Interactive workshop for teachers
- <https://teachingcommons.stanford.edu/teaching-guides/artificial-intelligence-teaching-guide/integrating-ai-assignments> Online tutorial on integrating AI into assignments and assessments
- <https://grow.google/ai-for-educators/>
- <https://www.flintk12.com/ai-literacy-for-teachers>
- <https://code.org/ai/pl/101> AI for teachers from CODE.org
- <https://www.aiforeducation.io/home/#ResourceCenterHPAnchor> and <https://www.aiforeducation.io/prompt-engineering-for-educators-webinar>
- <https://ditchthattextbook.com/ai-edu/> AI for educators book
- <https://news.theaiexchange.com/> newsletter
- <https://aipedagogy.org/> AI Pedagogy Project by MetaLab at Harvard
- <https://tcea.org/courses/artificial-intelligence-educator/> low-cost course on AI for teachers
- <https://www.aib.it/corsi/ia-alfabetizzazione-biblioteca-scolastica/> Italian course on AI in education
- <https://ai.wharton.upenn.edu/> Wharton School of Business coverage of AI
- https://gptcentral.beehiiv.com/archive?_bhlid=94f1b8dc24407b372f5f9bd3fcb52018a8584eaa&utm_campaign=how-where-to-learn-ai-for-free&utm_medium=newsletter&utm_source=gptcentral.beehiiv.com A list of free AI courses
- https://www.flintk12.com/ai-literacy-for-teachers?utm_source=chatgpt.com AI Literacy for Teachers (self-paced)
- https://grow.google/ai-for-educators/?utm_source=chatgpt.com Generative AI for Educators with Gemini (self-paced)
- https://code.org/en-US/professional-learning/artificial-intelligence-101?utm_source=chatgpt.com AI 101 for Teachers (recorded videos)
-