Artificial Intelligence Resources Annotated Bibliography

Resources for District Teams

Gallagher, H. A., Yongpradit, P., & Kleiman, G. (August, 2023). *From reactive to proactive: Putting districts in the AI driver's seat [Commentary]*. Policy Analysis for California Education. https://edpolicyinca.org/newsroom/reactive-proactive

> In this 7-page commentary, the authors recommend that districts engage in three overlapping stages to address AI. They suggest starting immediately with the first two steps: 1) creating policy to address AI and 2) facilitating organizational learning by leveraging early adopters' learning. Later, they assert districts should progress to the third stage: using the learning from Stage 2 to focus on how to spread AI equitably to improve student outcomes while attending to equity and the potential human costs.
>
> This article could be a helpful starting place for district leadership teams to read and discuss this together as it provides one process through which they can draft an AI policy as well as links to resources at the end of the article. If printing the article to share with others, here is a more printer-friendly version.

Horn, E. (2023, August 10). *How to create a responsible use policy for AI [Blog]*. TCEA blog Tech Notes. https://blog.tcea.org/responsible-use-policy-ai/

> This blog outlines a 9-step process for creating a responsible use policy (RUP) for AI that focuses on the "dos" of what is acceptable with AI. Horn also links to many resources for creating an RUP that a committee of multiple stakeholders and the community can review and process together.
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> Horn succinctly offers a helpful process as and a robust list of resources (i.e., a compilation of classroom generative AI policies currently being used, a national computer science framework, and AI curriculum–noting a few of these resources are also included in this annotated bibliography). It could be another helpful starting point for district leadership teams to read and discuss together as it provides another process through which they can draft an AI policy. If printing the article to share with others, here is a more printer-friendly version.

Office of Educational Technology (May 2023). *Artificial Intelligence and the Future of Teaching and Learning: Insights and recommendations.* U.S. Department of Education. https://tech.ed.gov/ai/

> This 71-page report outlines what AI is as well as the opportunities and challenges of AI. It articles four key foundations to guide creating AI policies: 1) center people (parents, educators, and students) by protecting human decision making and judgment; 2) advance equity by examining data quality and algorithmic bias as well as shifting from deficit-based to asset-oriented models; 3) ensure safety, ethics, and effectiveness; and

4) promote transparency. These four key foundations are applied to making recommendations about how AI could affect student learning, teaching and planning, formative assessment, and research and development.

A bit of a dense read, this report could provide helpful citations when creating district policies. Another potential use is jigsawing it by topics (see the Table of Contents)--for example, the section on Teaching could ground a discussion about the opportunities and concerns about how AI could alleviate or add to teacher planning time as well as the danger of increased teacher surveillance. Finally, a few pages could be helpful to reference in discussions of AI including:

- A diagram of all the components, types, and subfields of AI to illustrate the variety in AI and how it is far more than just ChatGPT (p. 11)
- Using the Open Questions about AI to frame ongoing discussions about: Learning (p. 23); Teaching (p. 34); and Formative Assessment (p. 43)
- Recommendations for desired qualities of AI tools and systems in education (p. 55)

Denver University. *Sample syllabus statements [Webpage]*. https://otl.du.edu/plan-a-course/teaching-resources/sample-syllabus-statements/

While the University of Denver does not yet have a school-wide policy, they offer sample policies under "AI Tools in the Classroom." In that section, there is a link to Policies related to ChatGPT and other AI Tools that outline for students what is helpful about AI platforms, the limitations, and the course principles for using AI. The framing for students is clear, concise, and nuanced as it balances the benefits and limitations.

Duke Learning Innovation. *AI and teaching at Duke: Guidance for instructors [Webpage]*. https://learninginnovation.duke.edu/ai-and-teaching-at-duke/

Duke University compiled resources for their instructors that includes a guide to writing artificial intelligence policies and examples of designs of AI assignments (both are similar to others resources provided in this document). Something unique about their page as you scroll down, they use succinct and compelling titles and graphics to communicate about the shortcomings of AI, opportunities that AI may provide, points for speaking to students about AI, recommendations for course policies, and the limitations of AI Detection Software. The content and formatting could work well to screenshot and use in Powerpoint presentations (including a citation to Duke of course).

Forest Park School District Board and AI. (2023, August) Forest Park School District Artificial Intelligence Policy

Forest Park School District, a K-8 school district in Illinois developed and published an AI policy under the leadership of superintendent Dr. Elizabeth Alvarez this fall and used AI to help create it. For districts interested in creating a policy, it can be helpful to have sample ones to riff off of and/or to spark discussion for other ideas.

Meisner, C. (2023, August 29). *ChatGPT is everywhere in this district. Here's what it looks like*. EducationWeek. https://www.edweek.org/technology/chatgpt-is-everywhere-in-this-district-heres-what-it-looks-like/2023/08

> This news article provides a case study of a district in Kansas that has embraced artificial intelligence technology into all their work, training their staff this summer and reducing the stigma for teachers using it to stream their day-to-day work. It notes the guardrails they have included for students (i.e., if students are using AI in the classroom, they must be supervised) and for staff to not compromise student data (i.e., staff must sign into Bing Chat Enterprises so they are not using the public model of ChatGPT). It highlights examples across teachers, administrators, coordinators, and instructional coaches of how they are using it to communicate and adapt texts, identify research, as well as conduct initial brainstorms for identifying student feedback, lesson planning, and gamifying lessons.
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> While many districts may not necessarily jump so wholeheartedly into generative AI use, this article could spark conversations of where and how districts want to begin exploring AI or deepen their use.

Miller, M. (2023, March 14). *Setting school policy about AI: A cautionary tale [Blog]*. Ditch that Textbook. https://ditchthattextbook.com/ai-conversations/

> In February 2023, a Florida high school found that students were using artificial intelligence assistants like ChatGPT to do their schoolwork. Miller analyzes the school's reactionary response, unpacking where their responses were inappropriate, unfair, and contradicted their stated mission.
>
> It is an interesting case study that illustrates how schools and districts will want to have policies in place and engage in probing before turning to punishments. It can help spark discussions of how to ensure academic integrity while also preparing students for the future where they will be using AI.

Resources for Principals and Teachers in Creating Guidelines for Using AI with Students

Miller, M. (2023, August 7). *10 AI discussions schools should have now [Blog]*. Ditch That Textbook. https://ditchthattextbook.com/ai-discussions/

> Miller poses 10 discussion questions for schools to begin having about AI including: "What AI-related student behavior do we want to avoid?"; "How can–and should–students use AI responsibly?"; and "What skills–in general and AI-related–will students need to prepare for their future? For each question, he includes a few thoughts.
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> This blog could be a good entry discussion for district leadership to have with principals, that then principals could turnkey and use with their teachers to gather their input on creating an AI policy. It is a fast read that frames 10 thoughtful discussion questions,

inviting educators to grapple together with the current use of AI in classrooms and how we are preparing students to use AI in the future in college and their careers.

ISTE. *Bringing AI to school: Tips for school leaders*. https://qrcodes.pro/7anUhS

This six-page guide provides a concise overview of what AI is and what it is not, guiding questions for leaders, and recommended steps to take. It also includes links to many resources from ISTE (International Society for Technology in Education).

For more ISTE AI resources, check out: https://beta.iste.org/artificial-intelligence-in-education

Schmidli, L. *Considerations for using AI in the classroom [Website]*. University of Wisconsin-Madison. https://idc.ls.wisc.edu/guides/using-artificial-intelligence-in-the-classroom/

University of Wisconsin-Madison offers steps for educators to consider how to transparently try out AI in their courses. The latter half of the website includes some crowdsourced ideas for: how to explore the capabilities and limitations of AI in their classrooms; integrating AI into the writing process; and establishing norms and boundaries for using AI.

While other resources in this annotated bibliography include similar steps, the crowd sourced ideas are specific, interesting examples to discuss and potentially try out.

Curts, E. (2023, June 3). *10 questions for student AI guidelines [Blog]*. Control Alt Achieve. https://www.controlaltachieve.com/2023/06/10-questions-for-student-ai-guidelines.html

This blog offers 10 questions to help teachers develop a set of AI guidelines. Curts includes example answers as well as the responses he got when he asked ChatGPT and Bard to then formulate his answers into a set of guidelines for students.

The questions and sample responses could spark rich discussions among educators in developing AI guidelines across a department, grade, and/or school. These questions are similar to the ones Miller offers in "10 AI Discussions Schools Should Have Now", except they are more concrete and personalized to the specific teacher and discipline; Miller's questions push more for collective thinking (in the use of "we") about the AI skills that students will need in the future.

Keller, A. (2023, May 24). *Acceptable use policy for AI in the English Language Arts classroom [Blog]*. Teacher Tech: Paperless is not a pedagogy. https://alicekeeler.com/2023/05/24/acceptable-use-policy-for-ai-in-the-ela-classroom/

Keller offers some suggested guidelines to include in an acceptable use policy on a syllabus for an ELA class. This blog includes a chart of acceptable and unacceptable uses as well as sample acceptable and unacceptable prompts for students to ask ChatGPT.

This resource provides concrete ideas for creating a policy for upper grade elementary, middle school, and high school ELA classes as well as courses with writing (e.g., social studies and humanities) to create their own classroom policy.

Eaton, L. (2023, January 16; last updated 2023, September 13). *Syllabi Policies for AI Generative Tools [Googledoc]*. https://docs.google.com/document/d/1RMVwzjc1o0Mi8Blw_-JUTcXv02b2WRH86vw7mi16W3U/edit

This resource was created for the purposes of sharing and helping other instructors see the range of policies developed by other educators to help in the development of their own for navigating AI-Generative Tools. For a Spanish version of these policies, check out this resource by Tatiana Torres Zapata. Currently, the majority of policies included are from college and university syllabi in the US and around the world. These examples let educators see the range of policies as well as the expectations about appropriate use of AI that students will have when they enter college.

Furze, L. *Artificial intelligence policy in secondary schools [Website]*. https://leonfurze.com/2023/02/23/artificial-intelligence-policy-in-secondary-schools/comment-page-1/

This webpage is a comprehensive resource for the 11 components Furze advocates that middle and high schools should consider as they are developing AI policies, including ethical considerations, data privacy, academic integrity as well as the process considerations of professional development for staff and community engagement. Furze also includes a Sample School Policy Template that can be downloaded as a Word document that includes the 11 areas and questions for school teams to consider as they generate their policy.

OpenAI. *Guidelines for educators [webpage]*. https://help.openai.com/en/collections/5929286-educator-faq

OpenAI, the creator of ChatGPT, created an FAQ for educators.

Curricular Resources

The Daily-AI Workshop Curriculum. https://raise.mit.edu/daily/

The Daily-AI workshop is a curriculum designed by MIT educators that features hands-on and computer-based activities for middle schoolers on AI concepts, ethical issues in AI, creative expression using AI, and how AI relates to our future. This curriculum gives students experience training and using machine learning to make predictions, investigate bias in machine learning applications, use generative adversarial networks to create novel works of art, and learn to recognize the AI they interact with daily and in the world around us. The content of the 3 units can be viewed on the left column by using

the hyperlink above as well as the resources here. Each unit includes slides, scripts, and online resources, and they are open source.

This curriculum could be a learning resource for a few middle school teachers to teach, adapt, and share their learning as part of the Stage 2 learning recommended by Gallagher et al.

MIT AI Ethics Education Curriculum. https://www.media.mit.edu/projects/ai-ethics-for-middle-school/overview/

This middle school curriculum is another open source resource where through a series of lessons and activities, students learn technical concepts—such as how to train a simple classifier—and the ethical implications those technical concepts entail, such as algorithmic bias. Components of this curriculum were included in the Daily-AI Workshop Curriculum.

AI4All Open Learning. https://ai-4-all.org/resources/

AI4ALL Open Learning offers free high school curriculum and teacher resources so that educators of any subject can increase access to AI education in their communities. The AI4ALL Open Learning curriculum is interdisciplinary and approachable for people without CS or math backgrounds. AI4ALL is a US-based nonprofit dedicated to increasing diversity and inclusion in AI education, research, development, and policy.

ISTE Hands-On AI Projects for the Classroom. https://iste.org/areas-of-focus/AI-in-education

The Hands-On AI Projects for the Classroom guides from ISTE provide elementary, secondary, elective, and computer science teachers with free curricular resources about AI across various grade levels and subject areas. Each guide includes background information and four student-driven projects that directly relate to subject area standards, while providing foundational learning on what AI is, how it works, and how it impacts society. The guides are available in multiple languages.

AI Resources for Teacher Planning and Preparation

Eduaide.Ai. https://www.eduaide.ai/#features

Eduaid.AI leverages the power of Large Language Models (like ChatGPT) to support teachers with instructional planning. It includes a lesson plan builder (with question generators and discussion prompts), an assessment builder, a feedback bot, Eduaide Chat, language preferences, and a Teacher's Assistant to streamline administrative duties.

It was created by teacher for teachers and is already being used by over 100,000 educators. My quick take is that it can quickly generate a lot of information, and I wonder

if this will replace Teachers Pay Teachers. Similar to Teachers Pay Teachers, likely there will be some great things and some not so great things. It is something for districts, principals, and teacher educators to explore because teachers will be using it, if they are not already.

ChatPDF. https://www.chatpdf.com/

ChatPDF is available for students, teachers, and researchers to input PDFs and have the content summarized and answer questions. ChatPDF accepts PDFs in any language and can chat in any language. It is free to insert texts up to 120 pages and then it requires a paid version.

Where to Follow Updates in AI

TeachAI https://teachai.org/

A coalition of technology and educational organizations (including the CA Dept of Ed and a "who's who" in education and technology–it is an impressive coalition) have teamed up to support TeachAI, a Code.org-led effort to help educators both use artificial intelligence in the classroom and explain to their students how the technology works. TeachAI will be producing guidelines for policymakers, administrators, educators, and companies in best practices for safely using AI in education.

You can sign up for free to join TeachAI as well as to receive updates. While it does not currently have policy or resources, it should soon.

Professional Development Resource

ISTE Professional Development. https://www.iste.org/professional-development/iste-u/artificial-intelligence

For 6-12 schools or districts seeking professional development on AI, ISTE offers Artificial Intelligence Explorations and Their Practical Use in Schools where participants learn to identify the various types of AI, hear about AI technologies on the horizon and build some of their own tools to make AI concrete and accessible for them and their students. It is a 15-hour, self-paced course with ongoing instructor support. No previous knowledge of AI or experience coding is required. The cost is $186 for members and $249 for non-members.

Additional Multimedia Resources

Grant, A. (2023, March 21). *ChatGPT did NOT title this podcast (w/ Allie Miller & Ethan Mollick)*. [Audio Podcast]. Rethinking with Adam Grant. https://www.ted.com/podcasts/rethinking-with-adam-grant/chatgpt-did-not-title-this-podcast-w-allie-miller-ethan-mollick

Organizational leadership professor Adam Grant interviews Allie Miller, an AI entrepreneur, and Ethan Mollick, a management professor Wharton who studies and teaches innovation and entrepreneurship and whose X feed many follow to learn about AI. They discuss what chatbots like ChatGPT can and can't do as well as the potential advantages, limitations, and dangers. This podcast is also available on Apple and Spotify.

At 54 minutes, it is an interesting conversation from the perspective of an AI entrepreneur and professors who teach entrepreneurship and are connected to industry leaders about the current and anticipated future uses of AI in careers. It has important implications for what AI skills we teach students–like the ability to ask chatbots questions that elicit the best information. Also, it raises an intriguing (and debatable) idea about how Generative AI might remove the barrier of writing for more people.

Digital Futures Institute. (2023). Analyzing ChatGPT as a Class with Pam Koch (No. 4) [Web video series episode]. In *AI in the Classroom*. Teachers College, Columbia University. https://www.tc.columbia.edu/digitalfuturesinstitute/ai-in-education/ai-in-the-classroom-series/

In this 11 minute video interview, Professor Pam Koch shares how she opted to address the advances in AI with her students right at the beginning of Spring Semester 2023, and together they analyzed the capabilities as well as the limitations of recent tools like Chat GPT.

While Professor Koch teaches at the graduate level, her approach is applicable from upper elementary through high school. As an alternative to a text, this video could be watched and discussed with principals or with teachers as ways teachers can analyze with their students the capabilities and limitations of recent AI tools.

The Digital Futures Institute series includes four other videos to represent important conversations around AI like Minne Atairu, an interdisciplinary artist and a Digital Content Manager at Columbia University. She shares her experience employing AI tools, both as an artist and as an educator working with students in Harlem, and her experience with Black misrepresentation in AI Algorithms.