Talking about Artificial Intelligence

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What is the Issue?

Artificial intelligence (AI) is everywhere: in the movies, in the news, on the internet, and in our smartphones and devices. And yet, conversations about AI in schools often do not go beyond utopian tropes, like driverless cars and smart assistants, and dystopian stereotypes, like killer robots. Not only are these missed opportunities to give students a more realistic sense of AI, they are also a missed opportunity to talk about society, democracy, and civil rights, bridging to other subject areas like social studies, humanities, civics, and mathematics.

Why it Matters to You

Teachers should help students see through Al hype to the real applications of Al in society, whom it helps, and whom they sometimes hurt.

District staff and **PD providers** should highlight the opportunities to link AI to other subject areas.

School leaders should understand that teaching about AI is part of teaching computer science, but also about other subjects, such as math, statistics, and civics, and hire teachers that can link these subjects.

Attending to Equity

Discussing AI at the intersection of civil rights is fundamentally about addressing issues of diversity, equity, and inclusion in society. This is because dominant groups often adopt AI to address problems that serve dominant groups. Marginalized groups, including anyone that is exceptional in some way—having an uncommon name, a unique body, a special set of needs around transportation—are generally excluded by AI, because AI is only good at finding common patterns. Marginalized groups by definition do not fit the common patterns. Students, teachers, and school leaders alike must recognize that AI is not purely about technology and computer science, but also about issues of fairness and rights.

Questions to Think About

- Are there discussions of civil rights in existing curriculum that could be updated to engage the tradeoffs of AI?
- What kinds of AI do students have in their homes and schools that might pose issues of fairness or reinforce inequities?

Moreover, it may not be the future we want. For example, many police departments use AI that uses historical crime data to determine where they police; this perpetuates the racially biased past of policing into the future.

- **2** Data encodes the values of the people who create it. Any AI that uses that data will inherit those values. For example, many AI facial recognition algorithms used to detect faces in images only work on lighter male faces, because the data that software developers used only included lighter male faces. The Black men and women are not only not detected correctly by facial recognition, but often misidentified.
- **3** The use of data to shape AI can harm people in unequal ways. For example, AI is used in TSA scanners at U.S. airports to detect "anomalies" on people's bodies. These scanners may make some travelers feel safer traveling. However, transgender and disabled people are disproporitionatey pulled aside for body searches because their bodily diversity was not included in data sets.

Read the forthcoming book from the University of Washington, Critical Computing Education: Methods for Secondary Education online for free at **http://criticalcsed.org.**

Recommended Actions You Can Take Read the forthcoming book from the University of W

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and finding patterns in it, not by writing computer programs that determine AI features. It's the pattern finding that makes AI powerful, but also which can lead to harm. For example:

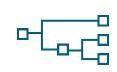
Data is always a record of the past. Any AI that uses data will perpetuate the past, which may not predict the future.

Most modern AI works by gathering large amounts of data

This work is funded by the Washington State Legislature through a grant with the Office of Superintendent of Public Instruction.







Things to Consider