

Ethical & Equitable Artificial Intelligence

How education professionals can adapt to changing technology **without compromising on values.**

How can AI help achieve ethics and equity goals?

Rapid progress in artificial intelligence (AI) has brought us tools like chatbots and predictive analytics. These technologies offer new ways to support potentially vulnerable students, closing gaps and improving outcomes. However, used improperly, they can also introduce bias and other problems. That's why, in a world increasingly powered by AI, it's essential to adopt these tools responsibly. Achieving this requires **strong values**, **subject matter expertise**, and **technical expertise**. ASA Research can work with you to understand your values, then lend our expertise to translate them into AI solutions that advance your ethics and equity goals.



Why does AI make ethics and equity so complicated?

Solutions built on AI have huge potential, but like any powerful tools, their impact depends on how they're used. Most AI is built on data from the real world, and the real world is imperfect. For instance, if a chatbot learns language from problematic message boards, it might say harmful things. AI can also make it tempting to cut corners around oversight and accountability. For example, if a human delegates decisions to a flawed predictive algorithm, it can be hard to catch mistakes and make amends. Finally, as AI gains momentum in education and daily life, some adopters mistakenly believe that relying on it or "following the data" will solve questions of ethics and equity automatically. However, these challenges require care and diligence to overcome.

What makes ASA's ethics and equity process different?

As a core part of each project, ASA will align solutions with the ethics and equity progress that's most important to you, and we'll work together to implement them responsibly. This is powered by ethics and equity standards that we co-create with you and your stakeholders, and that we use to design, test, and fine-tune our AI solutions. This part of a typical project looks like this:

ASA's Ethics & Equity Process:



What does ethical and equitable AI look like?

A responsible AI implementation looks different for every project, organization, and technology. Below are two examples of the many ways that chatbot and predictive analytics solutions can be implemented with ethics and equity as priorities.

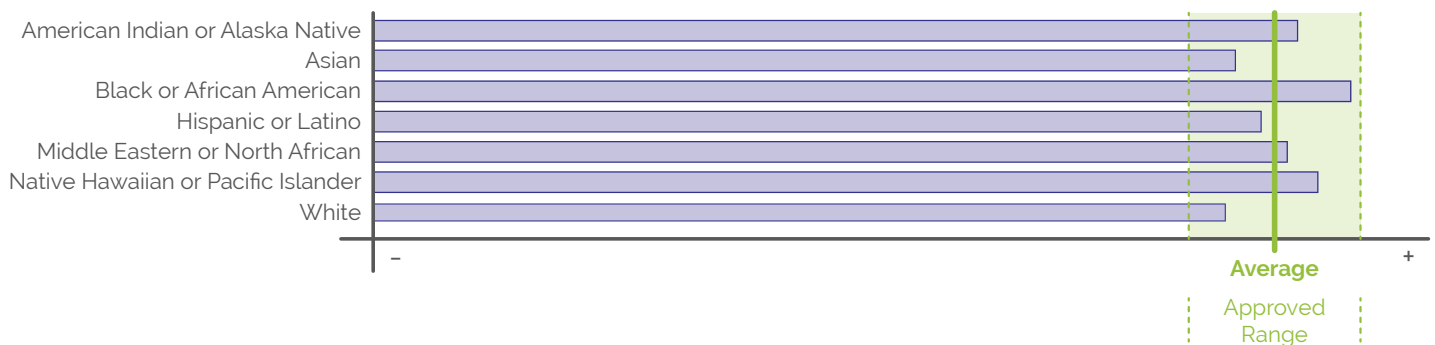
Chatbots

Consider an AI-powered chatbot that helps students navigate the billing and financial aid process. Students can text a designated phone number and receive personalized guidance from an AI language model that draws on official university sources. When necessary, the bot can offer to refer students to traditional human-powered resources. Once implemented, such a chatbot might connect vulnerable students with information and resources that are traditionally difficult to navigate, improving equity in both access and outcomes. Further, it could provide high-quality responses across languages and dialects. It could keep conversations private (except as mandated). Stakeholders might test the bot and provide feedback on its responses. And responses could be grounded in official sources, with requests directed to human experts when desired.

Predictive Analytics

Consider a predictive model that helps advisors identify students who may be at risk of a negative outcome. Predictions from the model are one of several sources that advisors consult periodically when deciding which students to reach out to for follow-up meetings. Such a model might bring resources to students less likely to access them conventionally, improving outcomes for vulnerable students and narrowing gaps. It could be tuned to provide accurate predictions for students of all racial backgrounds, avoiding harmful bias, as shown in the hypothetical chart of predictive accuracies below. Its use might be openly documented, but its predictions kept private to advisors. Finally, the predictions it generates could be integrated with advisor expertise and lived experience, with downstream outcomes measured for evaluation.

Prediction Accuracy by Race/Ethnicity



Can AI be harmful even if intentions are good?

Good intentions are not enough – care and expertise are needed to implement AI in an ethical and equitable way. Because AI exists in an imperfect world, it can internalize human prejudice and structural inequity from sources far outside your organization. To vet any solution for ethics and equity (AI or not), a shared framework of ethics and equity is necessary. We believe that such a framework can only be created together, in the context of your organization and its diverse stakeholders. Our team can facilitate that process – we won't impose a one-size-fits-all standard, but we can share takeaways from the ones we have worked with.

What makes our team trustworthy?

ASA Research is an interdisciplinary team of subject matter experts and technologists. As an SBA-certified Small, Women-Owned Business, we help you implement the best available tools in a way that aligns with your goals and **your values**. We are also established leaders in the field of AI ethics and equity, and we have presented our work across the US and published in the scholarly literature. We focus not only on the best technologies, but on helping you use them to do good.