

## Using Humanizing Data Expression to Make Meaning of AI with BIPOC Youth

This study presents a conceptualization of *humanizing data expression* that emerges from work with young people who help drive a humanizing vision forward. We propose leveraging the creative and expression-driven literacies of youth to help disrupt inequities in education and technology, as a humanizing way forward. We have, in prior explorations, outlined how youth voice can expand our understandings of history (McBride et al., 2022), how youth’s critical perspectives of technology can offer robust future visions (Lee et al., 2022), and how ethics of care and belonging can push the field of digital education in more humanizing directions (Clark et al., in press). Here we consider the implications of such understandings for an AI-driven technological landscape and present our framework Humanizing Data Expression (HDE)—a way of writing with and about AI-powered, data-driven technologies that disrupts pervasive patterns of dehumanization occurring with and beyond digital tools. We argue that this framework is critical to widening and deepening information literacy. This moment is an opportunity to amplify voices and perspectives historically excluded from design conversations, and to powerfully expand our social imagination.

### Research Context: YR Media

Every year at YR Media, between 150 and 200 young people enroll in six months of stipended after-school media education classes led by peer teachers alongside adult faculty. Eighty-five percent of participants are BIPOC and/or attend schools serving communities contending with economic distress. Graduates of the media education program apply for paid internships across the organization’s departments (e.g., newsroom, design, peer education, etc.), where they produce digital media stories covering education, health, technology, politics, identity, and arts and culture. An additional 140 youth creators contribute content from across the country, reaching millions via YR Media’s own site and social feeds as well as outlets including PRX podcasts, NPR, and The Washington Post. Youth participants in YR Media programming receive culturally responsive youth development, mental health and well-being support as well as resources for education and career advancement.

In 2019, YR Media received funding from the National Science Foundation to cover artificial intelligence. From a content point of view, YR Media journalists and designers explored the impact of AI — its merits, applications, and harms — across all of the organization’s news beats. In this sense, the coverage captured the reach of emerging technology into every corner of our lives. YR Media journalists wrote about AI tools that applied to a range of tasks: discovering songs, creating poetry and essays, synthesizing voices, sorting social media content, flagging possible misconduct, obtaining therapy via a chatbot, and more.

YR Media’s approach is grounded in a model of collegial pedagogy, which emphasizes co-creation and authentic audiences for data literacy practices and media products (Chávez & Soep, 2005; Clark et al., in press). Enacting this approach, we began by (1) learning about the topic with youth colleagues, uncovering their initial thoughts, understandings, perspectives, and

even misunderstandings of AI. Then, we dove into the world of AI by (2) exploring and tinkering with the affordances, limitations, and ramifications of these tools. In so doing, we unlocked the black boxes of algorithms, data inputs, variables, and other abstractions determined by human influence. Finally, the first two steps were always in service of (3) creating publicly-disseminated stories that provide youth creators with a platform to talk back and inform others, frequently peers.

## **Research Methods**

For this article, we identified 35 stories (textual, audio, video, multimodal, interactive) that the organization's young creators produced about AI between 2019 and 2023. All of the stories were written by young people who had participated in YR Media's media education programs, and who had consented to have their stories public and published online. We generated this corpus by reviewing YR Media technology coverage over this time period to identify content that took more than a glancing look at AI. To ensure that our corpus reflected the organization's intersectional approach, we included stories that were expressly about AI as well as some from other areas of daily and feature coverage where AI played a role in a larger phenomenon — for example, an interview with a young “fansubber” who wrote English subtitles for films released outside the US and experimented with AI to speed up the translation process.

Once we had identified the corpus of AI stories, we reviewed them to identify emerging literacy practices evident in the texts. We asked ourselves the basic question: How do young creators make sense of AI in these stories and demonstrate their understandings for themselves and their anticipated audiences? In this first-cycle coding, we differentiated themes that surfaced with sufficient frequency to serve as useful analytical categories (Miles et al., 2014). To ensure alignment in our application of the categories, we cross-checked one another's codes and refined them based on what we were seeing in the youth media content and our own deliberations. For example, we consolidated from an initial set of six literacy practices to the four that we present here. Finally, once we had coded all 35 stories, we identified passages within them that exemplified each practice and analyzed those excerpts for a fuller understanding of the literacy practice in play.

## **Humanizing Data Expression Across Four AI literacy Practices**

To demonstrate the concept of HDE, we lay out four literacy practices from the stories of young journalists. These practices reveal that young people (1) contextualized data to carry out inquiries and develop arguments, (2) unveiled authorship and demystified data by engaging with AI developers who advocate for its responsible use, (3) grappled with the limitations of the datasets that train AI algorithms, (4) playfully manipulated, challenged, and remixed data and the AI platforms to offer their sociopolitical analysis of AI systems. In these four literacy practices, we outline young people's creative, critical, and social ways of engaging AI technologies, and their adjacent public expression of their learning.

## **DISCUSSION & IMPLICATIONS**

This examination of a corpus of 35 youth-created stories about AI offers a snapshot of how young people are making sense of AI in their everyday lives. From surveillance technologies to music, from healthcare to clothing, and from social media to grief, we found that young people have deep insights, opinions, criticisms, celebrations, and profound concerns about the impact of AI in their current and future lives, for themselves and for society. In these young journalists' meaning-making process of AI, new literacies were formed: contextualizing, unveiling, grappling, and playing to deepen their comprehension and use of AI tools. The four literacy practices demonstrate HDE in a context of youth media composition and creation.

Humanizing data expression is anchored in storytelling—its core elements have to do with the task of communicating with and about data. The literacy practices emergent in this study revealed that young people engaged in media creation about AI strengthen their critical consciousness by inquiring about the data behind the AI. As shown in the Erase Your Face interactive, students grappled and played with how they would trick the facial detection software in order to take control of their own privacy and outsmart the technologies that could otherwise cause harm. Across this and several other examples, audience awareness helped further the storytelling and expressive goals of their work.

## **CONCLUSION**

The future of AI literacy must keep the human central, and in a way that is particularly cognizant of and responsive to social inequities. Just as reading and writing are social practices representing communicative relationships between author and reader, a situated context for communicating about and with AI and data is important for robust sensemaking. HDE helps bring forth critical considerations by recognizing, describing, and socioculturally situating the human behind the machine, in front of the machine, and impacted by the machine.

The four youth literacy practices explored here showcase HDE in practice. Other cases could be different: research might explore HDE as evident in youth analyses of big datasets, or HDE as understanding how youth create stories with data (data journalism), or HDE as how youth decide to leverage data in decision-making around creating content (audience analytics). Future studies might examine the implications of such literacy practices for youth themselves, or relevant shifts in identity, agency, etc.

Among majority BIPOC, LBGTQAI2+ youth and others who contend with multiple systems of domination, we see a gravitation towards lenses of critique. Many recognize that these tools have been developed in ways that do not represent their identities, perspectives, nor positionalities, and that they fall short or miss the mark entirely. HDE offers a framework to explicitly address these missed opportunities, through an encouragement of play and remixing the tools in the interests of their communities. It is our belief the HDE framework can welcome, embrace, and integrate a multitude of perspectives, especially those historically marginalized, within the building and expanding of AI literacies.

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