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Using AI Tools to Augment Undergraduate Reporting

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Abstract

This teaching article outlines how students study popular media texts that create historical and fUndergraduate journalism students can experience information overload during reporting when faced with myriad online sources. Some default to keyword searches and select secondary rather than primary materials. As students shift from web searches to AI-enabled tools, they will engage with even fewer original sources. Authoritative-sounding AI responses, which can include factual errors and hallucinations, may mislead inexperienced students who do not understand the technology's limitations. This paper presents pedagogical strategies for integrating AI into undergraduate journalism to address challenges students experience with information gathering. It argues that narrow integration of AI can strengthen students' reporting and prepare them to navigate its future use in professional newsrooms.

Introduction

In a survey of publishers, 87% said generative AI was transforming their newsrooms (Newman & Cherubini, 2025). As AI impacts news-gathering practices, educators must adapt instruction to equip students with essential skills. This article explores how AI-powered tools can help student journalists improve sourcing, develop nuanced pitches and engage in data analysis. The strategies draw from a review of academic literature, industry publications, conference presentations, practitioner interviews and training courses.

The Problem

Shift from Search to Summaries

Students can struggle to identify credible sources in online research (Breakstone et al., 2021) and rely on search engines (Tylor, 2015) or turn to platforms like TikTok (Intelligent, 2023). While young people are heavy consumers of online information, a Stanford study concluded that their ability to evaluate it was "bleak" (Wineburg et al., 2016).

AI will change how students find and evaluate sources when reporting. An Inside Higher Ed survey found 42% of students used AI tools as "advanced search engines" (Flaherty, 2025), while a Digital Education Council (2024) survey found 69% of students used them for information seeking. Student misconceptions about how large language models generate responses may lead them to believe that AI tools function as a "front-end for Google" or are "pulling information from somewhere on the internet" (Veenstra et al., 2024).

Yet the accuracy of generative AI tools varies widely (Liu et al., 2023) and they can be unreliable

when citing sources (European Broadcasting Union & BBC, 2025; Jaźwińska & Chandrasekar, 2025). AI search discourages engagement with original sources by design. Perplexity says it aims to eliminate the "need to click on different links, compare answers, or endlessly dig for information" (Srinivas, 2024). A Pew Research Center study found that when an AI summary appeared in a search, only 8% of users clicked a traditional result link and 1% clicked a summary source link (Chapekis & Lieb, 2025).

Errors and Hallucinations

Proponents suggest AI tools will become more accurate as models improve but others argue that hallucinations are an intrinsic feature (Banerjee et al., 2025; Xu et al., 2024). A significant safeguard against AI-related errors is journalists' expertise (Meir, 2023; *The New York Times*, 2024). Experienced reporters can distinguish accurate information from convincing hallucinations, but journalism students may be vulnerable when an AI tool "churns out flawed content with encyclopedic authority" (Wineburg & Ziv, 2024).

Reliance on AI-generated summaries may weaken students' ability to independently evaluate evidence. Studies suggest AI dependence can lead to increased cognitive offloading and decreased critical thinking (Gerlich, 2025; Kosmyna et al., 2025). Students seem to recognize this drawback. One study found that 55% of students who used AI for coursework said it made them "think less deeply" (Flaherty, 2025).

Strategies for sourcing, story ideas, and data analysis

Targeted use of AI to expand and expedite reporting, rather than to generate copy, can avoid some of these pitfalls while encouraging deeper engagement with original sources. Educators can start with professional newsroom guidelines. Human oversight, ethical review and transparency should guide AI use, with readers informed if generative AI substantially contributed to a story (*The New York Times*, 2024). Transparency can affect reader trust. One survey found 94% of respondents wanted journalists to disclose AI use (Walsh, 2024). *Times* staff suggest that AI tools are most useful for work requiring speed and efficiency rather than "craft, taste and expertise" (Freedman & Varón, 2025). The Associated Press advises that AI-generated information should be treated as unvetted source material, subject to standard verification practices (Meir, 2023).

Sourcing: Discovery, Access and Orientation

One study of student AI use found 76.9% did not verify responses adequately (Martín-Moncunill & Alonso Martínez, 2025). To counter this possibility, instructors should position AI tools as a means of finding sources rather than generating answers (Junnarkar, 2025a). AI-powered semantic search can broaden the range and relevance of resources in queries by interpreting meaning and intent (Kasenchak, 2019). This can be beneficial for students who lack domain-specific vocabulary for a topic.

Including context, constraints and scope of inquiries in prompts can improve relevance of results (Alvarado et al., 2025). Using prompt templates and teaching students to refine and compare queries can make them more sophisticated users.

Multimedia and deep search tools enable students to search across media types to background story subjects (Caplan, 2025). Audio and video files can be transcribed by Google Pinpoint or OpenAI's Whisper. AI-assisted translation of non-English materials can facilitate outreach to more communities.

Students can use AI to create a "beat memo" that outlines relevant institutions, stakeholders and policy issues. One example is DeepDive.nyc, which uses AI to identify information from city agencies, nonprofits and experts (McKenna, 2023). Students select a topic and receive overviews with verified source links. Instructors can create similar resources by configuring AI tools to respond to queries using vetted materials.

Anchoring AI responses to specific documents can increase their accuracy and make claims easier to verify (European Broadcasting Union, 2025; Lewis et al., 2020). Tools like NotebookLM supply source links in their summaries. Uploading materials reduces, but does not eliminate, the risk of error (Albrecht-Crane, 2025; Magesh et al., 2024; Ouellette et al., 2025).

Finding Story Ideas with AI Tools

Professional journalists increasingly use data mining and machine learning to identify story ideas (Diakopoulos, 2019). AI tools make this more accessible for students, allowing them to scan public records, political discourse, social media and civic meetings to gauge public sentiment and develop story angles. Instructors can upload government reports, city council transcripts, department press releases or links to open data portals and students can query these materials

to identify trends, policy issues or performance problems. AI tools can also quickly scan social media posts, community bulletin boards and feedback forums.

While AI has been used to interfere in elections (Trauthig et al., 2025), it's also being deployed to increase transparency in government. Civic Sunlight, Digital Democracy, LocalLens and Citymeetings.nyc all use AI to generate transcripts or summaries of public proceedings. These summaries surface story ideas, but details must be confirmed; one analysis found AI tools performed well on short meetings but not longer ones (Schellmann, 2025).

Facilitating Investigative and Data Journalism

In recent years, Pulitzer Prize-winning journalists have used custom machine-learning tools to analyze records, scour satellite imagery and extract insights (Deck, 2024, 2025). News organizations are using AI to make data-driven reporting more accessible across the newsroom (Newman & Cherubini, 2025; Simon, 2024). *The New York Times*, for example, has developed Cheatsheet, a tool that extracts, summarizes, translates and categorizes information (Freedman & Varón, 2025; Nguyen, 2025).

AI tools can assist students by transforming unstructured records, identifying patterns in large datasets and scaffolding students' development of quantitative analysis skills. Large language models are particularly effective for transforming raw materials, such as reports, emails and social media, into analyzable formats (Diakopoulos, 2023; Lucas, 2025; Willis, 2025). Using AI to mine large datasets for "needles in a haystack" is a "sweet spot" for the technology (Freedman, 2025). Tools like Google Pinpoint, which primarily retrieves material from uploaded documents, can make this more practical in the classroom.

Studies show students frequently find data tasks daunting (Bhaskaran et al., 2024; Hewett, 2016). AI tools can support students in cleaning, analyzing and visualizing data. Instructors note that AI tools can support technical aspects of the work while cautioning against using them for substantive quantitative analysis (Junnarkar, 2025b; Reilley, 2025). AI tools function as guides rather than calculators, helping students interrogate datasets (Junnarkar, 2025b; Reilley, 2025). They can translate plain-language instructions into spreadsheet formulas, identify problems in data formatting, provide step-by-step guidance for tasks such as creating pivot tables and suggest appropriate data visualizations (Junnarkar, 2025b; Reilley, 2025).

Conclusion

As journalism instructors integrate AI into their curricula, a central question is which activities can be outsourced and which, if delegated, may prevent students from developing core journalistic skills. The challenge, as Kwame Anthony Appiah (2025) argues in "The Age of De-Skilling," is "deciding, without nostalgia and inertia, which skills are keepers and which are castoffs." This paper suggests ways AI can augment student reporting to improve sourcing, sharpen story ideas and reduce barriers to data journalism without undermining critical instruction. It also argues that repeated exposure to the strengths and limits of the technology, paired with ethical guidance on AI use and disclosure, will help students thrive in a future where digital and data literacy are essential (Marr, 2022; World Economic Forum, 2025).

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