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ARTICLE

MEDIA FRAMING OF ARTIFICIAL INTELLIGENCE IN EDUCATION: A CONTENT ANALYSIS OF US NEWS COVERAGE

Enquadramento Midiático da Inteligência Artificial na Educação: Uma Análise de Conteúdo da Cobertura da Imprensa nos Estados Unidos

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ABSTRACT | Purpose: To examine how mainstream US media framed generative artificial intelligence (AI) in education during its early diffusion, assessing whether coverage emphasized problem definition and moral evaluation over pedagogical solutions and institutional innovation. **Method:** A content analysis was conducted using data from the Dow Jones Factiva database. A total of 2,369 items published between January 2023 and September 2025 were screened, resulting in 542 articles with substantive focus on education after applying exclusion criteria. Coding was performed using Dedoose (Version 10), enabling thematic categorization and iterative comparative analysis. In total, 3,469 coded mentions were analyzed. **Findings**: Risk-oriented framing was most prominent (21.6%), including themes such as misinformation, hallucinations, privacy, and academic integrity. This was followed by public perception and debate (15.0%) and industry/education technology (13.4%). Coverage consistently highlighted both opportunities (e.g., tutoring, drafting efficiency, productivity gains) and the need for precaution, with greater emphasis on governance and safety than on pedagogy or professional learning. **Conclusion**: Early media discourse framed AI in education primarily as a policy and risk management issue, with pedagogical transformation remaining secondary. Understanding these framing patterns can support educators and policymakers in balancing precaution with innovation adoption. **Originality/Value**: This study provides empirical evidence on media framing patterns during a critical phase of generative AI diffusion, contributing to discussions on governance, public perception, and the integration of emerging technologies in education.

Keywords | Generative Artificial Intelligence (GAI); Artificial Intelligence In Education; Media Framing; Education Technology

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RESUMO | Objetivo: Analisar como a mídia tradicional dos Estados Unidos enquadrou a inteligência artificial generativa na educação durante sua fase inicial de difusão, verificando se a cobertura priorizou a definição de problemas e a avaliação moral em detrimento de soluções pedagógicas e inovação institucional. **Metodologia**: Estudo de análise de conteúdo com base em dados extraídos da base Dow Jones Factiva. Foram inicialmente identificados 2.369 itens publicados entre janeiro de 2023 e setembro de 2025, dos quais 542 artigos com foco substantivo em educação foram selecionados após critérios de exclusão. A codificação foi realizada com o software Dedoose (Versão 10), permitindo categorização temática e análise comparativa. No total, foram analisadas 3.469 menções codificadas. **Resultados**: O enquadramento orientado a riscos foi predominante (21,6%), incluindo temas como desinformação, alucinações, privacidade e integridade acadêmica. Em seguida, destacaram-se percepção pública e debate (15,0%) e indústria/tecnologia educacional (13,4%). A cobertura evidenciou simultaneamente oportunidades (como tutoria e ganhos de eficiência) e preocupações com precaução, com maior ênfase em governança e segurança do que em pedagogia ou formação docente. **Conclusão:** O discurso midiático inicial posiciona a inteligência artificial na educação majoritariamente como um desafio de políticas públicas e gestão de riscos, relegando a transformação pedagógica a um papel secundário. A compreensão desses padrões de enquadramento contribui para que educadores e formuladores de políticas equilibrem a adoção de inovações com abordagens cautelosas e regulatórias. **Originalidade/Valor**: O estudo oferece evidências empíricas sobre padrões de enquadramento midiático em um período crítico de difusão da IA generativa, contribuindo para o debate sobre governança, percepção pública e integração tecnológica na educação.

Palavras-chave | Inteligência Artificial Generativa (IAG); Inteligência Artificial Na Educação; Enquadramento Midiático; Tecnologia Educacional

INTRODUCTION

Media framing and stakes

News media do more than report on trends in education. They shape public understanding through framing and story selection. Across the education spectrum, coverage has reflected both advances and concerns, highlighting the opportunities to increase productivity and introduce new tools while also drawing attention to significant challenges.

During times of rapid technological change, news coverage often becomes the main space where educators and other stakeholders make sense of new tools before solid research or formal policies are in place. Studies of media suggest that the issues emphasized in reporting can influence institutional decision-making (Chong & Druckman, 2007; Entman, 1993; Scheufele, 1999), including in educational contexts where guidance from policy and research organizations also shapes responses (Klein, 2024; U.S. Department of Education & Office of Educational Technology, 2023; Vilcarino & Langreo, 2025). This dynamic is especially consequential during the early diffusion of innovation when organizations might depend on outside signals to judge risks and benefits in the wake of uncertainty (Rogers, 2003). Findings that many districts are still developing formal guidance indicate that AI-related decisions are unfolding under conditions of uncertainty, heightening the influence of early public narratives on how these technologies are interpreted and acted upon (Eutsler et al., 2025).

Usage and perceptions

AI tools, especially generative AI applications, are increasingly common in schools and universities; reshaping instruction, assessment, and how students learn. Additionally, it impacts how educators teach and conduct assessments as well as how students learn (Pireci Sejdiu & Sejdiu, 2025). In higher education, multi-country surveys of AI usage revealed that significant numbers of undergraduate and graduate students are using AI. The 2024 Global AI Student Survey conducted among 3,839 students in 16 countries by the Digital Education Council (DEC) found that 86.0% of students employed AI tools for tasks such as searching for information (69.0%), checking grammar (42.0%), summarizing documents (33.0%) and creating first drafts (24.0%), most commonly using ChatGPT, followed by Grammarly and Microsoft Copilot (Kelly, 2024). Similarly, a Chegg survey of 11,706 undergraduates in 15 countries mirrored the findings of the DEC study with 80.0% of students reporting reliance on AI to support their university studies. Separately, a recent cross-sectional survey of college undergraduates found that just over half of the respondents felt generally familiar with AI, learning about it primarily online, while only one-third encountered AI in class (Basch et al., 2025). Frequent users reported greater familiarity and more positive views reporting that AI eases learning and improves writing and critical thinking, whereas infrequent users were more likely to view classroom or homework use as cheating and distrust AI's safety (Basch et al., 2025).

K-12 trajectory

In K-12 settings, the pattern of responses to AI mirrored higher education trends to some extent, yet there were some differences. Immediately after ChatGPT's release in late 2022 and early 2023, many school districts and state education departments reacted with concern, issuing warnings about academic dishonesty, and in some cases blocking or banning AI tools outright (Sidorkin, 2025). These early responses, primarily from district leaders and administrators, resembled patterns described in scholarship on moral panic, in which emerging technologies are framed through heightened concern about risk and social disruption (Goode & Ben-Yehuda, 1994). As evidence of educational value emerged and trusted advocates weighed in, schools pivoted from prohibition to responsible use, including professional development and assignment design focused on AI (Sidorkin, 2025). In 2011, researchers reviewed experiments that compared student learning with a human tutor, with computer tutors, and with regular teaching that included no tutoring. The results showed that human tutors and intelligent tutoring systems led to nearly the same gains, suggesting that human tutors may not be more effective than intelligent tutoring systems (VanLehn, 2011). More than a decade later, as generative AI tools entered classrooms, researchers began examining how these tools were actually being used in practice. For example, researchers attempted to track plagiarism, unauthorized collaboration, and excuse-making across three US high schools before and after ChatGPT's release in 2022. Cheating stayed roughly steady but importantly, students said they used chatbots mostly as writing aids rather than using AI to generate entire assignments (Lee et al., 2024).

Teachers, policy and professional learning

Global organizations began examining how teachers themselves interacted with these tools. The Organization for Economic Cooperation and Development's (OECD) *Teaching and Learning International Survey* (TALIS) compared how educators used AI across participating countries and education systems. The US was near the Organisation for Economic Co-operation and Development (OECD) average, with roughly one-third of teachers reporting AI use, which was far below higher adopters such as Singapore. Teachers most often used AI to learn and summarize topics or draft lesson plans, and their top concerns were plagiarism, bias, privacy, and a lack of training (Organisation for Economic Co-operation and Development, 2025). At the policy level, United Nations Educational, Scientific, and Cultural Organization (UNESCO) guidance focused on policy, recommending national regulation, teacher preparation, and privacy protections to keep AI use human-centered in schools (Miao & Holmes, 2023). In the US, AI adoption was rising; by fall 2024, roughly half of the districts in a nationally representative sample had reportedly trained teachers on AI use. Most offerings were optional and internally developed, with reports of availability of such programs higher in low-poverty districts (Diliberti et al., 2025). Content generally centered on AI fundamentals to reduce teacher anxiety, time-saving teacher uses such as lesson planning, classroom integration, basic AI, digital literacy, and privacy.

How coverage has evolved

Early reports of the emergence of this transformative technology were focused on industry. Based on a stratified sample of 399 articles from five leading US newspapers (2009-2018), coverage of AI was dominated by business and technology, with most articles highlighting benefits and drawing primarily on industry voices (Chuan et al., 2019). A country level analysis of AI-based articles in the US reported in the New York Times and Washington Post from 1985-2000 showed that reporting centered around work, art, and education, with an overall optimistic tone. When stories exhibited dystopian framing, however, they were more likely to focus on ethical issues such as algorithmic bias in racial profiling or AI applications that enable weapon systems (Cools et al., 2024). It has been noted that emerging technologies often follow a pattern known as the hype-cycle, described as initial enthusiasm followed by the promise of utopian or dystopian extremes (Bartholomew & Mehta, 2023). Early coverage of AI focused on novelty and innovation; as the tools became part of everyday life, media narratives shifted toward their broader social and ethical implications, including concerns about bias, surveillance, and job displacement.

Study aim

Given the power of the press to formulate opinion and potential to inform the context in which policy decisions are made, the purpose of this study was to examine how mainstream news outlets framed generative AI in relation to education and to assess whether early coverage privileged some interpretive dimensions over others. More specifically, drawing on Entman's

(1993) framing functions, we examined whether coverage predominantly defined AI in education as a problem, attributed causal significance to technological and institutional disruption, advanced moral evaluations, and proposed remedies oriented more toward regulation and oversight rather than pedagogy.

The study was guided by four related analytical expectations. First, consistent with framing theory, we expected problem definition and moral evaluation to be more prominent than pedagogical remedy (Entman, 1993). Second, drawing on agenda-setting, we expected repeated emphasis on cheating, safety, bans, and governance over teaching and learning concerns (McCombs & Shaw, 1972). Third, informed by moral panic scholarship, we expected early coverage to amplify narratives of threat and misuse (Goode & Ben-Yehuda, 1994; Sidorkin, 2025). Fourth, based on the sociology of expectations, it was expected that there would be an oscillation between dystopian and optimistic narratives about AI's future (Borup et al., 2006; Brown & Michael, 2003).

The study period begins in 2023 because the public release of ChatGPT on November 30, 2022 marked a shift from specialized AI applications to tools that were suddenly visible and accessible within everyday educational settings. This reflects an early stage of diffusion, when schools and universities were forming initial interpretations in advance of sustained classroom integration. Rather than offering a census of all news coverage, this study analyzes patterns through which early public discourse constructed AI in education during a moment of uncertainty and rapid institutional response.

METHODS

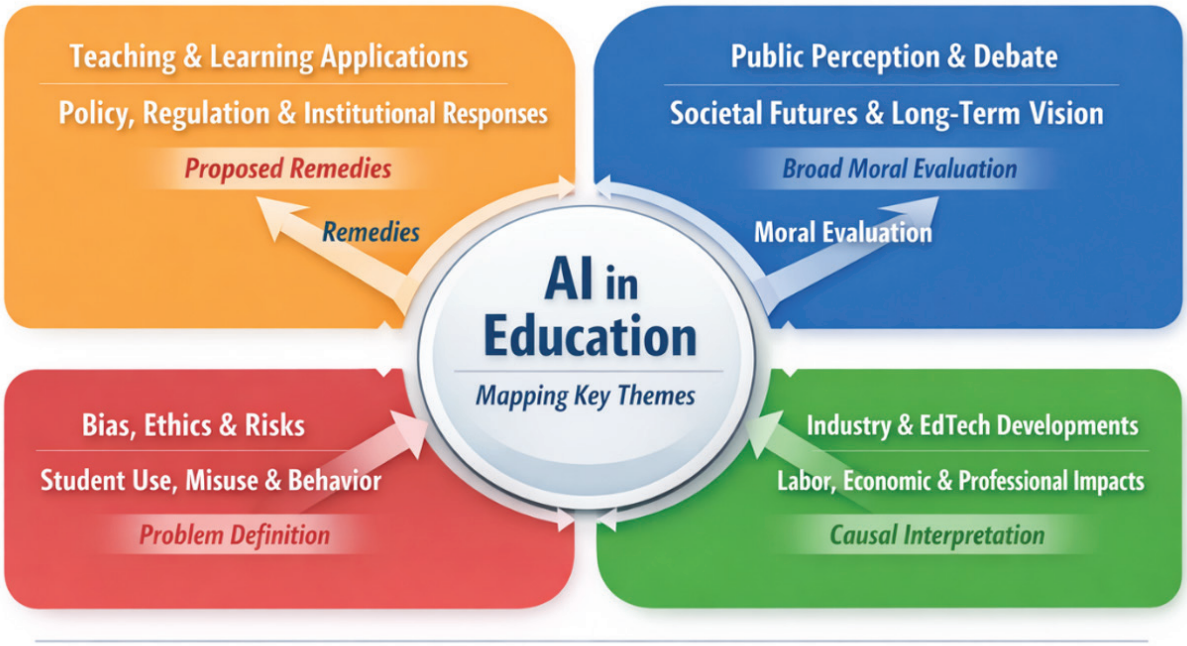
The methods for this study included a framing-oriented content analysis based on prior research (Basch et al., 2020; Basch et al., 2021). We examined the nature and extent of coverage about the impacts and potential implications of AI on education as reported between January 1, 2023, and September 30, 2025 in the online versions of the three most widely circulated U.S. daily newspapers: *The New York Times* (NYT), *Wall Street Journal* (WSJ), and *USA Today*. We identified articles published in the online versions of these print newspapers as well as the web-based versions (nytimes.com, usatoday.com, wsj.com) using the Dow Jones Factiva database. As mainstream journalism, these materials are treated as grey literature, that is, publicly circulating non-peer-reviewed texts analyzed here as cultural and discursive artifacts that help shape public understanding, rather than as empirical evidence in themselves.

Our search strategy included multiple terms and descriptors of our two main concepts, AI and education: (AI or artificial intelligence or CHATGPT or LLM or large language model or natural language processing or deep learning or machine learning or generative AI) and (education or school or college or university or teaching or learning). Our initial searches for the date range January 1, 2023 to September 30, 2025, retrieved over 9,100 results. We determined that reviewing a week of articles each month would provide a robust sample of articles, reports, opinions, and discussion to identify topics and evolving themes about AI and education. To capture discourse across the full diffusion period while maintaining analytic feasibility, we used a constructed-time sampling strategy, reviewing articles published in the Dow Jones Factiva database in the first seven days of

each month between January 1, 2023, and September 30, 2025. This approach allowed consistent temporal coverage and identification of recurring narratives while limiting overrepresentation of single high-profile events. Findings are therefore interpreted as patterns of framing rather than a census of all AI-related reporting. Of the 2,369 headlines and abstracts screened, 1,872 were excluded because they were duplicates, mentioned AI only tangentially, focused primarily on non-educational sectors, or did not include substantive discussions of teaching, learning, educational institutions, or education policy. This strategy may under-represent short-lived spikes tied to a single news event, but it is well suited to identifying recurring frames across the diffusion period.

Using an inductive, constant-comparative approach informed by framing theory, we coded how articles defined educational problems, attributed concerns, evaluated implications, and suggested responses to AI (Entman, 1993). We first open-coded the entire sample to identify broad themes, then iteratively consolidated and elaborated these into a ten-category scheme. Additional subcodes were introduced as finer-grained distinctions surfaced during subsequent passes. The categories included: (1) *Teaching & Learning Applications* (tutoring, assessment, content creation, STEM vs humanities support, tackling challenges, teaching innovation); (2) *Student Use, Misuse & Behavior* (plagiarism/cheating, creative uses, study assistance/responsible use); (3) *Educator Roles & Professional Development* (teacher training, job augmentation, resistance/concerns); (4) *Policy, Regulation, and Institutional Responses* (global policy, bans/restrictions/oversight, curriculum mandates); (5) *Industry & EdTech Developments* (product development/launch, partnerships, commercialization); (6) *Labor, Economic and Professional Impacts* (teacher jobs, labor markets, career readiness); (7) *Societal Futures and Long-Term Vision* (broad foresight-oriented discourse); (8) *Public Perception and Debate* (utopian framing, dystopian framing, neutral, benefits); (9) *Bias, Ethics, and Risks* (bias, privacy/surveillance, misinformation/disinformation/deepfakes, academic integrity, copyright, factual errors/hallucinations, mental health/attention issues); and (10) *Equity, Access & Inclusion* (digital divide, accessibility, and affordability). News reports, features, and opinion/editorial pieces were included and analyzed together, as all were treated as expressions of public discourse rather than as distinct journalistic genres. Coding was conducted by a single researcher, and categories were iteratively refined and revisited across the dataset. The findings should, therefore, be taken as interpretive patterns.

To strengthen analytical consistency, these empirical categories were also interpreted in relation to Entman's four framing functions (Entman, 1993). Teaching & Learning Applications and Policy, Regulation, and Institutional Responses most often captured proposed remedies; Bias, Ethics, and Risks and Student Use, Misuse & Behavior most often reflected problem definition and moral evaluation; Industry & EdTech Developments and Labor, Economic, and Professional Impacts frequently contributed to causal interpretation by locating educational change within technological and market dynamics; and Public Perception and Debate, together with Societal Futures and Long-Term Vision, helped capture broader moral evaluation and anticipatory framing. This mapping was used analytically to interpret the distribution of coded mentions rather than as a rigid one-to-one classification system.



Analytic Framework for Thematic Analysis

Coding was conducted by a single researcher. Because the study was interpretive rather than intercoder-reliability driven, the goal was not to produce nominal agreement coefficients but to identify recurrent framing patterns across the sample. To improve consistency, the coder revisited earlier articles after the category structure had stabilized, compared borderline cases across coding rounds, refined subcode definitions, and checked for internal consistency between code application and thematic interpretation. This retrospective consistency check does not substitute for formal triangulation or double coding; rather, it provides a modest audit of coding stability appropriate to an interpretive design. We therefore present the findings as analytically informed interpretive patterns and acknowledge that alternative coding decisions are possible.

We calculated descriptive statistics, including frequencies, medians, interquartile ranges (IQR), and ranges. All analyses were conducted using IBM SPSS Statistical Software, version 29 (IBM Corp, 2024). This study was deemed non-human subjects research by the IRB at William Paterson University (IRB-FY2025-17).

RESULTS

Of the 2,369 headlines and abstracts identified, 542 (22.9%) were selected as relevant to our aims (Table 1). To interpret these findings in relation to Entman's (1993) framing functions, we examined how coded themes corresponded to problem definition, causal interpretation, moral evaluation, and treatment recommendation. Articles were excluded (n = 1,872) if they mentioned AI only in passing, focused on non-educational sectors, or lacked substantive discussion of teaching, learning, or educational policy. The NYT and the WSJ published the greatest number of articles over the entire

review period with 241 (44.5%) and 234 (43.2%) articles, respectively. The median number of articles per week reviewed was 6 (ranging from 1 to 23) for both NYT and WSJ; USA Today published 30.0% as many total articles.

Table 1. Number of headlines and abstracts retrieved and number meeting inclusion criteria for analysis of artificial intelligence coverage related to education in the online editions of The New York Times, USA Today, and The Wall Street Journal, January 2023 to September 2025. Articles were considered relevant if they included substantive discussion of teaching, learning, educational institutions, or education policy.

Date	# of Headlines/ Abstracts	# of Relevant/ De-duplicated Articles	*NYT*	*USA Today*	*WSJ*
2023					
January 1-7	31	12	6	0	6
February 1-7	41	6	2	1	3
March 1-7	48	16	6	4	6
April 1-7	71	13	3	3	7
May 1-7	97	28	15	4	9
June 1-7	87	23	6	5	12
July 1-7	64	23	13	1	9
August 1-7	54	12	4	2	6
September 1-7	69	15	8	0	7
October 1-7	57	10	2	0	8
November 1-7	82	11	5	1	5
December 1-7	95	19	14	1	4
Total	796	188 (23.6)	84 (44.7)	22 (11.7)	82 (43.6)
Median [IQR]		14.0 [11.3-22.0]	6.0 [3.3-11.8]	1.0 [0.3-3.8]	6.5 [5.3-8.8]
Range		6-26	2-15	0-5	3-12
2024					
January 1-7	58	10	8	0	2
February 1-7	72	22	9	6	7
March 1-7	80	13	5	2	6
April 1-7	83	28	10	4	14
May 1-7	60	6	2	1	3
June 1-7	84	5	2	0	3
July 1-7	58	3	1	1	1
August 1-7	63	25	10	1	14
September 1-7	58	4	3	0	1
October 1-7	51	7	2	2	3
November 1-7	60	9	5	3	1
December 1-7	87	10	5	1	4
Total	814	142 (17.4)	62 (43.7)	21 (14.8)	59 (41.5)
Median [IQR]	61.5 [58.0-82.3]	9.5 [5.3-19.8]	5.0 [2.0-8.8]	1.0 [0.3-2.8]	3.0 [1.3-6.8]
Range	51-87	3-28	1-10	0-6	1-14

Date	# of Headlines/ Abstracts	# of Relevant/ De-duplicated Articles	*NYT*	*USA Today*	*WSJ*
2025					
January 1-7	61	19	7	6	6
February 1-7	71	27	8	2	17
March 1-7	79	19	6	0	13
April 1-7	85	17	8	2	7
May 1-7	69	25	15	3	7
June 1-7	96	24	11	5	8
July 1-7	71	21	11	4	6
August 1-7	107	48	23	2	23
September 1-7	120	12	6	0	6
Total	759	212 (27.9)	95 (44.8)	24 (11.3)	93 (43.9)
Median [IQR]	79.0 [70.0-101.5]	21.0 [18.0-26.0]	8.0 [6.55-13.0]	2.0 [1.0-4.5]	7.0 [6.0-15.0]
Range	61-120	12-48	6-23	0-6	6-23
Grand Total	**2,369**	**542 (22.9)**	**241 (44.5)**	**67 (12.4)**	**234 (43.2)**
Median [IQR]	71.0 [58.0-84.5]	15.0 [10.0-23.0]	6.0 [3.5-10.0]	2.0 [0.5-3.5]	6.0 [3.5-8.5]
Range	31-120	3-48	1-23	0-6	1-23

There were 3,469 coded mentions across the ten themes (Table 2). The most common mentions related to *Bias, Ethics, and Risks* with a total of 748 (21.6%). Articles within this theme with mentions about misinformation/disinformation/deepfakes (109/748, 14.6%) and Factual errors/hallucinations (108/748, 14.4%) together comprised 29.0% of this group. *Public Perceptions & Cultural Narratives* (n = 520, 15.0%) and *Industry and EdTech Developments* (n= 464, 13.4%) were other themes that received considerable attention. Under the *Public Perceptions & Cultural Narratives* theme, general mentions (n = 190/520, 36.5%) and Dystopian framing (n =180/520, 34.6%) were most frequently mentioned. General mentions about *Industry and EdTech Developments* (n = 284/464, 61.2%) accounted for nearly two-thirds of the mentions in this theme. *Societal Futures & Long-term Visions* represented 10.5% of all mentions. The least common mentions focused on *Educator Roles & Professional Development* (n = 140, 4.0%) and *Equity, Access & Inclusion* (n = 135, 3.9%). Within each of these themes, general mentions made up about half of all mentions. Viewed through Entman's framework, the prominence of Bias, Ethics, and Risks and Student Use, Misuse, and Behavior reflects a strong emphasis on problem definition and moral evaluation. In contrast, themes such as Teaching and Learning Applications and Educator Roles and Professional Development (corresponding to treatment recommendations) were comparatively less frequent, indicating more limited attention to pedagogical responses.

The Appendix illustrates the themes with excerpts. *Coverage of Teaching and Learning Applications* included references to tutoring, drafting, and assessment support. *Student Use, Misuse and Behavior* articles addressed cheating concerns as well as study assistance. Reports on *Educator Roles and Professional Development* stressed the need for training, time, and guidance while *Policy, Regulation, and Institutional Responses* covered bans, pilots, and calls for oversight. *Industry and Ed Tech* developments emphasized rapid product launches and partnerships. *Labor, Economic, and*

Professional Impacts discussed workforce implications and skills. *Societal Futures and Long-Term Visions* pieces examined long range scenarios from schooling and credential shifts to realignment in the workforce and modes of governance. This section emphasized longer term structural changes, whereas *Public Perception and Debate* coverage tracked a shift of the aforementioned hype-cycle as well as general sentiment. The *Bias, Ethics, and Risks* theme focused on how risk was framed in terms of privacy, surveillance, misinformation and deepfakes, copyright, and hallucinations. *Equity, Access, and Inclusion* included mentions of uneven resources, accessibility benefits, and persistent digital divides. These excerpts are illustrative rather than exhaustive, indicating a movement from early alarmist framing toward somewhat more classroom-oriented reporting, although governance, risk, and industry perspectives remained more salient than instructional transformation.

Appendix. Representative excerpts illustrating thematic framing of artificial intelligence in education drawn from included articles in the online editions of *The New York Times*, *The Wall Street Journal*, and *USA Today*, January 2023–September 2025.

Theme	Reference	Excerpt
Teaching & Learning Applications	(Agarwal, 2024)	"Consider self-driving car technology. In most cases, drivers are still present, but hybrid technologies, like cruise control, lane departure warnings, automatic braking and parking assists, are augmenting human effort and reshaping what it means to be behind the wheel. The same phenomenon is happening in the classroom. Teachers remain while A.I.-enabled tools — such as tutors, advisers, graders, curriculum navigators and translators — begin to appear, freeing instructors from repetitive tasks and administrative duties. This shift lets teachers focus on what really matters: engaging and inspiring students while improving education quality and access."
Student Use, Misuse, & Behavior	(Nguyen, 2023)	"Homework helper Khan Academy's Khanmigo has several personalized learning tools, including a 'Tutor me' mode and a quiz module for different subjects." "I tried the AI tutor with an AP U.S. History prompt: 'Evaluate the factors behind population movement to America in the 17th century.' While ChatGPT wrote the entire essay for me, Khanmigo replied, 'Religious freedom was one factor. Can you think of other examples?' "I could ask Khanmigo for hints—but it's programmed not to spit out the answer. Kristen DiCerbo, Khan Academy's chief learning officer, said the company relied on tutoring research to create the Khanmigo prompts. When students get frustrated, it can offer a stronger hint, for example. If a student types something off base, Khanmigo redirects the conversation. Any inputs related to hate speech, self-harm or violence trigger a message—'The conversation was unable to be processed'—and an email to the student's parent or teacher, who can review the conversation." "The bigger concern is when the tutor gives the wrong answers, which occasionally happens with math, she said. Khan Academy worked with OpenAI to make GPT-4 better at math. The model is most accurate for questions about widely known K-12 topics but less so with niche subjects, Dr. DiCerbo added."
	(Surjadi, 2024)	"He watched classmates use it to write essays and he grew concerned about its potential to sap creativity."
Policy, Regulation, & Institutional Responses	(Jolly, 2023)	"A recent survey of 1,000 college students in America by the online magazine Intelligent.com also reports nearly 1 in 3 have used ChatGPT on written assignments, even though most think it's 'cheating.'" "New York City and Seattle school districts recently banned ChatGPT from their devices and networks, and many colleges are considering similar steps."
	(Zumbrun, 2023)	"The artificial-intelligence chatbot ChatGPT has shaken educators since its November release. New York City public schools have banned it from their networks and school devices, and professors are revamping syllabi to prevent students from using it to complete homework. The chatbot's creator, OpenAI, unveiled a tool to detect text generated by artificial intelligence to prevent abuse."

Theme	Reference	Excerpt
Industry & EdTech Developments	(Singer, 2025)	"Google and other A.I. chatbot developers are locked in a fierce competition to capture young users. President Trump recently urged schools to adopt the tools for teaching and learning. Millions of teenagers are already using chatbots as study aids, writing coaches and virtual companions."
Educator Roles & Professional Development	(Taylor, 2025)	"So on a more sophisticated level, those professors who really have taught themselves AI and are really thinking through how to use it as a study aid or what one professor called a cognitive amplifier, they're actually having students engage with AI in say, an assignment. So again, it goes back to what I was saying before. They might upload some of their writing and ask AI to critique it. They might put out a question to ChatGPT as they're researching a problem and ask ChatGPT for its thoughts, and they might work with that to guide their own thinking. I think in those instances, what the professors are trying to show students is if you are in control of the tool and you don't just let the tool do the work for you, it can actually be a great device. But I think a lot of professors aren't quite there yet. A lot of them don't feel very comfortable using AI at a very high level."
Labor, Economic, & Professional Impacts	(Surjadi, 2024)	"College students are desperate to add a new skill to their résumés: artificial intelligence. The rise of generative AI in the workplace and students' demands for more hirable talents are driving schools to revamp courses and add specialized degrees at speeds rarely seen in higher education. Schools are even going so far as to emphasize that all undergraduates get a taste of the tech, teaching them how to use AI in a given field—as well as its failings and unethical applications." "The schools are eager to prove their relevance as a path to well-paying jobs as more Americans question the value of a college degree. The students believe the AI skills could make the difference between getting a job and not."
Societal Futures & Long-term Visions	(Morson & Ottino, 2025)	"We are witnessing the emergence of a new version of the old central-planning fallacy -- the belief that complex social systems can be optimized through technological intervention, much as software systems are engineered." "To be sure, technological achievement has been accelerating. Facebook took 10 months to reach a million users in 2004; ChatGPT achieved this milestone in five days in 2022. Yet our record of anticipating the social consequences of new technologies remains abysmal. Once we were told that the internet would make authoritarianism obsolete. No one foresaw internet mobs intimidating people from exchanging opinions. The internet itself serves as a sobering reminder of how transformative technologies can generate effects their creators never imagined."
	(Borchers, 2025)	"Parents have been steering their children into science and technology fields for so long that some of those kids are grown with little ones of their own. Their advice? Careers in the humanities, arts or skilled trades might be safer bets for the next generation." "Bots that write software and perform surgical tasks inspire fear that today's glut of STEM majors are in a bubble, kind of like their predecessors who flooded finance programs in the roaring '80s. From 2009 to 2022, the number of bachelor's degrees awarded in computer science nearly tripled, according to the National Center for Education Statistics." "If the people who work on tech's cutting edge think their children should reverse course, then maybe the rest of us ought to reconsider our parental guidance."
Public Perceptions & Debate	(Fitts, 2023)	"ChatGPT and its artificial intelligence kin may be one of the best things that's happened to universities in a long time. That's important to remember amid all the handwringing (I've done my share) in higher education circles over essay writing and academic rigor in light of this AI marvel." "ChatGPT in academics is a complex issue. It's not your parents' Google, and educational leaders should carefully consider the intersections between the age-old mission of teaching and learning and this new technology."
	(Schechner & Seetharaman, 2023)	"Dario Amodei, leader of AI developer Anthropic, is in the group warning about existential danger. He testified before Congress this summer that AI could pose such a risk to humankind. Sam Altman, head of ChatGPT maker OpenAI, toured the world this spring saying, among other things, that AI could one day cause serious harm or worse. And Elon Musk said at a Wall Street Journal event in May that "AI has a nonzero chance of annihilating humanity "—shortly before launching his own AI company." "Altman, Musk and other top AI executives next week are expected to attend the first in a series of closed-door meetings about AI convened by U.S. Senate Majority Leader Chuck Schumer (D., N.Y.) to consider topics including 'doomsday scenarios.'"

Theme	Reference	Excerpt
Bias, Ethics, & Risks	(Jimenez, 2023)	"Other questions about ChatGPT and similar AI technology involve its cultural competency. Microsoft has come under fire for its Bing AI chatbot, which has offered derogatory ethnic slurs, among other concerns. Ayala, 16, said she is worried about how the information presented by the bot could contribute to 'systematic racism in America,' given other AI-based technology has shown a racial bias."
	(Freeman, 2023)	"Although many academic researchers don't enjoy writing literature reviews and would like to have an AI system do the heavy lifting for them, we have found a glaring issue with using ChatGPT in this role. ChatGPT will cite papers that don't exist. This isn't an isolated phenomenon – we've asked ChatGPT different research questions, and it continually provides false and misleading references. To make matters worse, it will often provide correct references to papers that do exist and mix these in with incorrect references and references to nonexistent papers. In short, beware when using ChatGPT for research."
	(Singer, 2023b)	"Some teachers said they were troubled by the idea of students using A.I. tools to produce college essay themes and texts for deeper reasons: Outsourcing writing to bots could hinder students from developing important critical thinking and storytelling skills." ''Part of the process of the college essay is finding your writing voice through all of that drafting and revising,' said Susan Barber, an Advanced Placement English literature teacher at Midtown High School, a public school in Atlanta. 'And I think that's something that ChatGPT would be robbing them of.'"
Equity, Access, & Inclusion	(Singer, 2023a)	"With generative A.I. technologies proliferating, educators and researchers say understanding such computer algorithms is a crucial skill that students will need to navigate daily life and participate in civics and society. 'It's important for students to know about how A.I. works because their data is being scraped, their user activity is being used to train these tools," said Kate Moore, an education researcher at M.I.T. who helped create the A.I. lessons for schools. "Decisions are being made about young people using A.I., whether they know it or not.' To observe how some educators are encouraging their students to scrutinize A.I. technologies, I recently spent two days visiting classes at the Young Women's Leadership School of the Bronx, a public middle and high school for girls that is at the forefront of this trend. The hulking, beige-brick school specializes in math, science and technology. It serves nearly 550 students, most of them Latinx or Black. It is by no means a typical public school. Teachers are encouraged to help their students become, as the school's website puts it, "innovative" young women with the skills to complete college and "influence public attitudes, policies and laws to create a more socially just society." The school also has an enviable four-year high school graduation rate of 98 percent, significantly higher than the average for New York City high schools. One morning in January, about 30 ninth and 10th graders, many of them dressed in navy blue school sweatshirts and gray pants, loped into a class called Software Engineering 1. The hands-on course introduces students to coding, computer problem-solving and the social repercussions of tech innovations."
	(Closson, 2024)	"As many states retreat from the teaching of race and identity in schools amid rising controversies, the chancellor doubled down on the value of those lessons in New York." "And he said that the rise of artificial intelligence did not represent an alarming threat of chatbot-enabled cheating, but a chance to transform education for the better."

DISCUSSION

This study contributes to existing literature on generative AI in higher education by showing how public narratives surrounding generative AI are constructed during the earliest phases of adoption. While prior research has documented how students, educators, and institutions are using generative AI, our analysis provides context for one important part of the interpretive environment in which those decisions are made. The findings suggest that media coverage tends to frame AI as a risk-management issue rather than a pedagogical one, which could help explain

why institutional responses so often begin with oversight, restriction, and policy formation. This pattern reflects how early-stage technologies are socially negotiated through public discourse before stable professional norms emerge (Borup et al., 2006; Brown & Michael, 2003; Rogers, 2003). Collectively, these perspectives suggest that AI in education was publicly narrated less as a settled instructional resource than as an unstable object of concern whose legitimacy depended on governance.

These findings suggest a "policy-first" framing model of educational innovation, in which emerging technologies initially appear in public discourse as risks requiring oversight and institutional response. Media attention therefore concentrates on misuse, governance, and regulation before sustained focus on pedagogy, teacher learning, or equity. In our sample, themes related to Bias, Ethics, Risks, Public Debate, and Policy dominated coverage, while educator development and equity received comparatively less attention. This pattern also varied by sector: K–12 coverage emphasized cheating, bans, and student protection, whereas higher education coverage more often highlighted workforce relevance and institutional adaptation.

Interpreted through Entman's (1993) framework, this pattern indicates that early media coverage privileged problem definition and moral evaluation over treatment recommendations. While causal interpretations appeared in references to technological disruption and market dynamics, comparatively less attention was given to pedagogical remedies or educator-focused solutions. This imbalance helps explain why AI in education was publicly constructed more as a governance and risk issue than as a domain of instructional innovation.

Further, the findings from this study illustrate how popular news media, which operate within particular editorial perspectives, are shaping public narratives about generative AI in education. Read through a framing lens, the news stories not only described generative AI, but defined problems, diagnosed causes, presented moral dilemmas, and suggested remedies, with responsible use and oversight frequently presented as the remedy (Entman, 1993). In agenda-setting terms, the emphasis was on cheating, bans, and other threats with less attention to discussions about professional learning, pedagogical innovation, and governance (McCombs & Shaw, 1972). Consistent with prior research on the sociology of expectations, this work noted varied perspectives from alarmist and speculative to more practical, classroom-oriented reporting (Borup et al., 2006; Brown & Michael, 2003). In times of technological flux, the perceptions can pull from both dystopian and utopian perspectives (Cave et al., 2024; Jasanoff & Kim, 2015). Nevertheless, the dominance of bias, ethics, and risk frames indicates that moral and safety concerns remain central in communication to the public, potentially shaping how educational institutions interpret generative AI as a problem requiring oversight rather than a tool for teaching and learning.

Risk discourse was a persistent theme. While journalism often presented AI tools as promising (e.g., for tutoring, drafting, and assessment), coverage repeatedly cautioned about bias, hallucinations, misinformation and deepfakes, privacy and surveillance, factual errors, and academic integrity. This dual pattern, framing AI as both a source of opportunity, and a source of risk, has been documented in broader studies of how emerging technologies are covered in the media (Beck, 2009). Although we did not conduct a time-series analysis, this coverage of concern related to the early diffusion of AI in education is consistent with spikes in anxiety reported by

other scholars when public attention intensifies (Bartholomew & Mehta, 2023; Goode & Ben-Yehuda, 1994; Hilgartner & Bosk, 1988). Student use narratives also presented a moral paradox with AI as a shortcut and a form of support. This is consistent with findings from a survey that reported frequent users of AI reporting benefits while infrequent users tend to assume use as cheating or unsafe (Basch et al., 2025).

In our sample, news about educational technology mostly focused on product launches, company partnerships, and commercialization milestones. This emphasis reflects a broader shift in public services like education towards platform infrastructures and data-driven systems (Van Dijck et al., 2018), and the way institutions respond with media and platform logics (Couldry & Hepp, 2013). Prior research in education also shows a consistent pattern whereby investors and vendors tend to set the agenda, and their priorities end up defining what counts as innovation. (Selwyn, 2022; Williamson et al., 2023).

Overall, the findings portray AI in education as tools that can be leveraged but must be carefully managed. Commercial offerings shape what is possible, yet everyday pedagogy remains experimental, suggesting a mismatch between the speed of technological promotion in public discourse and the slower development of classroom practice and educator preparation. As scholars and practitioners conduct and synthesize studies of how AI actually works in real classrooms, building an empirical classroom evidence base, the conversation will likely shift from whether AI can be used to what it takes to use it well, for whom, and with what outcomes. In that process, educator and student voices should be centered around implementation and evaluation to ensure effective and equitable integration (Miao & Holmes, 2023; Organisation for Economic Co-operation and Development, 2025; UPCEA, 2025). Future research can incorporate surveys or focus groups to understand how different audiences interpret these media narratives. While this analysis provides an initial descriptive account of media coverage, there are several limitations that should be acknowledged.

This study focused exclusively on three major US newspapers. While these publications are influential, they only represent a segment of national journalism. Therefore, the findings may not capture local, regional, or specialized journalism. The sampling strategy (reviewing one week of coverage per month) provided a sample that was not exhaustive and not necessarily representative of all coverage. Rapid or event-driven development may be missed in sampling intervals. The analysis relied on English-language articles, which can exclude perspectives from systems that might frame AI differently. The coding categories were subjective and involved a single researcher, which may introduce interpretive bias. Therefore, the findings should be understood as exploratory patterns of media framing rather than statistically generalizable results. In addition, although media discourse may shape institutional agendas and policy conversations, this study does not demonstrate a direct causal effect of news coverage on educational policy decisions. This study is limited to media framing and does not take audience reception into account. Despite limitations, this study offers a foundation for future studies on coverage of AI in education and its association with policy agendas, classroom practice, and equity.

CONCLUSION

Framed through Entman's functions, these findings suggest that early discourse emphasized defining risks and evaluating implications more than proposing pedagogical solutions. Overall, the findings suggest that understanding AI use in education requires attention to the public narratives shaping how institutions respond to technological change. More specifically, the study indicates that early mainstream coverage framed AI in education primarily through risk, controversy, and institutional response, with pedagogy and professional learning receiving comparatively less sustained attention. Future research can examine how specific media framings relate to educational decision-making and practice. Such work could build on the framing model proposed here and examine whether this pattern varies across K–12, higher education, and different media environments. This can help clarify how public discourse influences the pace and adoption of AI in education.

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