

Article

Teaching the AP Stylebook to Novice Journalism Students: A Mixed-Methods Study Exploring Pedagogical Uncertainty and Perceived Learning Barriers

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Abstract

The Associated Press (AP) Stylebook, endearingly called “the journalist’s bible,” contains thousands of entries outlining style rules and situational guidance. Designed initially for practitioners, the AP stylebook is a seminal resource at many journalism education programs. Its density and complexity as a learning material inherently poses cognitive load risks for novices—and yet—it remains notably under researched. This explanatory sequential mixed methods study explored journalism instructor axiology, pedagogy, and perceptions of teaching effectiveness when introducing AP Style to novice students. Findings revealed that while AP Style remains a pillar of U.S. journalism curriculum, experienced instructors sometimes feel uncertain about the effectiveness of their introductory pedagogy. They described a hodgepodge of methods and design constraints often incongruous with knowledge of human cognitive architecture. We problematize these findings through cognitive load research, recommend Cognitive Apprenticeship Model principles to reduce load-inducing strategies, and suggest directions for future research.

Keywords: Cognitive Apprenticeship Model; journalism education; AP Style; journalism pedagogy; explanatory sequential mixed methods; element interactivity; cognitive load



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1. Introduction

The Associated Press (AP) Stylebook is emphasized immediately in most journalism and mass communication (JMC) programs in the U.S. It offers guidance to journalists on topics ranging from grammar and capitalization to coverage considerations on complex issues like race and abortion. In the post-truth era, its importance cannot be understated. The stylebook’s editors uphold language standards and provide guidance using fact-based descriptions of everything from blizzards to geopolitical boundaries. For example, when the AP recently refused to change its stylebook entry from Gulf of Mexico to Gulf of America, the Trump administration angrily criticized the organization and revoked reporter access to multiple events (Folkenflik, 2025).

At the same time, the AP Stylebook is a dense, tedious resource. The 57th print edition was released in 2024 containing journalistic guidance on thousands of entries spanning

500-plus pages. In 2015, the AP launched an online stylebook with additional entries, real-time updates, and an ask-the-editor feature (The Associated Press, 2015). Thus, the stylebook poses a pedagogical predicament for journalism instructors, especially at the introductory level. It poses a fascinating challenge for navigating the interplay of instructional design, pedagogy, research on expertise development, and cognitive architecture. Education researchers have spent decades studying the effects of cognitive load on memory and learning (Sweller et al., 2019) and how awareness of that literature informs instructional practices in higher education (Betts et al., 2019). The mind has a limited capacity for processing new information into long-term memory storage, and cognitive overload most frequently occurs when novice learners engage with new, complex subject matter without sufficient instruction, practice, and feedback. Instruction that ignores cognitive architecture is correlated with higher rates of attrition in postsecondary programs, both online and face to face (Tyler-Smith, 2006). The nature of AP Style instruction in journalism education theoretically increases the potential for these types of outcomes. Students may feel overwhelmed by the stylebook's (a) largesse, (b) voluminous applications to journalism work, (c) restrictiveness, and/or (d) confusing search features (DiNicola, 1994).

Yet empirical research into the teaching and learning of AP Style is scarce and both instructor and student perceptions are noticeably underrepresented. These gaps are worth addressing as journalism programs grapple with contemporary challenges such as enrollment decline (Cummins et al., 2023), industry layoffs (Fischer, 2023), fewer copy editors (Vento, 2023), and a teaching force with inconsistent training in pedagogy and instructional design (Peirce & Martinez, 2012). Academic leaders are weighing difficult curricular decisions that emphasize emergent areas of study like news products, AI, vertical video, and audience metrics against traditional curricular foci. With a finite number of credit requirements in a typical undergraduate major, curricular trade-offs are inevitable.

The purpose of this explanatory sequential mixed-methods study was to better understand U.S. journalism educator axiology, pedagogy, and perceptions of teaching effectiveness related to the introduction of The AP Stylebook to novice students. This study draws from two frameworks: the Cognitive Apprenticeship Model (Collins et al., 1991; Collins & Kapur, 2022) of instruction for developing expertise in a complex domain, and cognitive load theory (Sweller, 1988; Sweller et al., 2019). Findings explore (a) how the AP stylebook is introduced to novice students, (b) the preferred pedagogical approaches that seek to develop AP style competency over a full course, (c) instructor perceptions of those pedagogical approaches, and their effectiveness, and (d) the degree of emphasis of AP Style knowledge in introductory level journalism courses. This contributes new understanding for how journalism educators negotiate the multifaceted challenges of AP Style instruction with novices. We also problematize the cognitive load risks baked into basic AP Stylebook learning tasks and instructor perceptions and call for future research into their possible effects on learning.

2. Focus and Impact: The Modern JMC Program

Journalism and mass communication (JMC) programs have historically offered a balanced curriculum featuring a broad liberal arts education mixed with applied skills courses—mainly reporting, editing, writing, filming, and/or recording (Dickson & Brandon, 2000). The rapid evolution—and disruptive nature—of digital media has prompted calls for journalism programs to expand curriculum that accounts for such innovation. Scholarship both empirical and conceptual has either identified or encouraged journalism education efforts to create curricular space for specialized subfields like artificial intelligence (Arzuaga, 2022; Sen, 2025), coding (Royal, 2017), data analysis and visualization (Bhaskaran et al., 2024), news products and audience analysis (Royal et al., 2020), computer/algorithmic

programming (Gillmor, 2016; Kothari & Hickerson, 2020), entrepreneurship (Deuze, 2017; Gillmor, 2016), digital news literacy (Morris & Yeoman, 2023) trauma literacy (Ogunyemi & Price, 2023), mobile news video (Adamson, 2020), and other multimedia techniques. What role AP Style instruction plays in this new curricular space is unclear; there is little published research on AP Style instruction in higher education JMC programs. What has been published is addressed in the next section.

This spike in journalism specializations imperils undergraduate journalism curriculum with risk of diminishing returns. Think of the metaphor a mile wide and an inch deep. For example, a systematic review of research into data journalism training found that programs struggled in three key areas: one, a lack of curricular availability to give students sufficient time and practice for deep learning; two, the persistence of student perceptions of math-fear; and three, the complexities involved with interdisciplinary learning tasks that require contextualized knowledge from two or more domains (Bhaskaran et al., 2024). Industry veterans with hiring power have expressed concern that journalism graduates enter the job market with technological savvy but lack traditional skills like news judgment, critical thinking, and storytelling (Ferrucci, 2017). Deuze (2006) referred to this trend as reflective of “a product-oriented teaching culture” at the expense of a “process-focused learning culture” (p. 30). Journalism educators must re-consider whether to prioritize preparing students for industry employment versus educating “super citizens” trained to excel broadly in the information age, according to Deuze (2006, 2017). A longitudinal analysis of hundreds of thousands of job posts indicated that journalism organizations still emphasize traditional skills like writing and reporting but also seek proficiency in multimedia storytelling methods (Bernhard & Russmann, 2024).

These findings are representative of a larger corpus that has documented various challenges faced by modern journalism educators. However, Solkin’s (2022) thematic analysis uncovered little to no empirical research into assessment and evaluation practices in journalism education, noting his concern that student perceptions of their own learning experiences were largely absent. He also found “very few authors” who drew from education theory in their research, a deficit that continues today. This knowledge gap is especially relevant to this study, as concepts like the teaching hospital model, educational paradigms, active learning strategies, experiential learning, and others are periodically mentioned. Though each is connected to processes of teaching and learning, none are pedagogical frameworks that were created to guide instructional practices through evidence-supported knowledge of how the human brain learns.

3. AP Style Instruction: A Cognitive (Load) Conundrum

3.1. *A Complex Yet Fundamental Competency*

The AP Stylebook was first published in 1953 as a 60-page writing and editing guide for Associated Press journalists (The Associated Press, 2024). In 2024 the AP published its 57th print edition containing thousands of entries over 502 pages. Digital subscribers can access the complete repository online, with access to additional resources like the “Ask the Editor” function. An international contingent of newsrooms, public relations firms, and college student media organizations apply the stylebook’s writing rules and coverage guidelines daily. U.S. journalism and public relations programs have acknowledged ranking AP Style competency as a program-level key learning objective (KLO) (Massé & Popovich, 2007; Wenger & Owens, 2012), though we could not find more recent data. This approach can serve the dual purpose of supporting program alignment with the Accrediting Council on Education in Journalism and Mass Communication’s (ACEJMC) standard on curriculum and instruction (ACEJMC, n.d.).

While the AP stylebook originally focused on capitalization, punctuation, grammar, and spelling rules, it expanded to include subjective guidance on a range of context-dependent themes: media law, inclusive reporting and storytelling practices, data visualization, and anonymous sourcing, for example. Journalists regularly encounter news judgment and editing scenarios that cognitive psychologists categorize as “ill-defined” or “ill-structured” problems. Jonassen (2000), drawing from seminal scholarship, characterized ill-structured problems as possessing multiple solution paths, containing unknown elements, and involving “multiple criteria for evaluating solutions” (p. 67) that often necessitate judgment calls that draw upon knowledge from multiple intersecting domains. Thus, the AP Stylebook engenders domain-specific instructional complexities that do not exist within academic style guides like APA, Chicago, and Harvard (J. D. Martin et al., 2019). The potential for high element interactivity in novice tasks for AP Style learners is central to understanding why.

3.2. Element Interactivity and Instructional Design for Novices

Cognitive Load Theory (CLT) uses knowledge of human cognitive architecture—particularly the role of working memory in knowledge accumulation—to inform instructional principles (Sweller, 1988; Sweller et al., 2019; Sweller, 2024). A person who encounters novel information must first process that novel information through their working memory (Sweller, 2024), which is limited in capacity (maximum of 7 elements of novel information) and duration (maximum of about 20 s). The novel information is either then forgotten or committed to long-term memory through repetition. Novices will typically first acquire conceptual and situational knowledge before advancing to procedural tasks (de Jong & Ferguson-Hessler, 1996). Conceptual knowledge refers to singular facts, concepts, and principles within a domain (e.g. a common punctuation rule). Situational knowledge refers to understanding of how knowledge appears within a domain (e.g. awareness of the capitalization entry in the AP Stylebook, and where to find it). Procedural knowledge is the simultaneous processing and application of multiple elements of knowledge in practice (e.g. editing an article for correct AP Style application).

Chen et al. (2023) wrote that task difficulty for novices should consider both elemental interactivity and the learner’s prior knowledge. “A symbol, a concept, or a procedure that must be learned” qualifies as an element (Chen et al., 2017, p. 396). A task that asks the learner to assess a single AP Style entry as correct/incorrect would be described as having low elemental interactivity (see Figure 1). The more elements that need processing simultaneously, the higher the elemental interactivity (see Figure 2). This often induces a heavier load on working memory, especially for novices. Actions such as searching, organizing, classifying, or comparing information serve to increase element interactivity (Sweller, 2024). Two types of cognitive load impose on working memory: intrinsic load, or the inherent difficulty of the task itself; and extraneous load, a combination of how the information is presented and what the learner is prompted to do (Sweller et al., 2019). High element interactivity can impact both load types. Extraneous load has been found to negatively impact student motivation, an effect that Feldon et al. (2019) called a motivational cost. Load-reduction instructional approaches have correlated positively with student motivation (Nebel et al., 2017; Skulmowski et al., 2016), engagement, and performance (A. J. Martin & Evans, 2018).



Figure 1. This image displays a scanned photo of page six of The Associated Press Stylebook (2024) 57th Edition. Entries are sorted alphabetically, starting in Chapter A. The entry *adviser*, highlighted in this image, informs journalists how the word should be spelled in a story.

Instructional methods requiring learners to integrate information from physically or temporally separated sources can increase extraneous load. This is called the split-attention principle (Ayres & Sweller, 2006). Instructional designs that integrate rather than split disparate sources of information in learning tasks lead to better outcomes, particularly with non-expert learners (Castro-Alonso et al., 2021; Ginns, 2006; Schroeder & Cencki, 2018). Guzmán and Zambrano found that individuals learned better than dyads in tasks with higher elemental interactivity and integrated designs, whereas dyads benefitted in tasks with higher elemental interactivity and split attention designs. The expertise reversal effect (Sweller et al., 2003) holds that effective instructional methods for novice learners often become ineffective as learners gain experience. Both split-attention and expertise reversal effects derive from CLT research, with specific implications for teaching novice learners.

state names Follow these guidelines:

SPELL OUT: The names of the 50 U.S. states should be spelled out when used in the body of a story, whether standing alone or in conjunction with a city, town, village or military base. No state name is necessary if it is the same as the dateline. This also applies to newspapers cited in a story. For example, a story datelined Providence, R.I., would reference the *Providence Journal*, not the *Providence (Rhode Island) Journal*. See **datelines**.

IN THE BODY OF STORIES: Except for cities that stand alone in datelines, use the state name in textual material when the city or town is not in the same state as the dateline, or where necessary to avoid confusion: *Springfield, Massachusetts*, or *Springfield, Illinois*. Provide a state identification for the city if the story is not datelined, or if the city is not in the same state as the dateline. For cities that stand alone in stories, the state may be used alone in stories if there is no confusion.

EIGHT NOT ABBREVIATED: The names of eight states are never abbreviated in datelines or text: *Alaska, Hawaii, Idaho, Iowa, Maine, Ohio, Texas and Utah*.

▪ In short-form listings of party affiliation: *D-Ala., R-Mont*. See **party affiliation** entry for details.

Following are the state abbreviations, which also appear in the entries for each state (postal code abbreviations in parentheses):

Ala. (AL)	Md. (MD)	N.D. (ND)
Ariz. (AZ)	Mass. (MA)	Okla. (OK)
Ark. (AR)	Mich. (MI)	Ore. (OR)
Calif. (CA)	Minn. (MN)	Pa. (PA)
Colo. (CO)	Miss. (MS)	R.I. (RI)
Conn. (CT)	Mo. (MO)	S.C. (SC)
Del. (DE)	Mont. (MT)	S.D. (SD)
Fla. (FL)	Neb. (NE)	Tenn. (TN)
Ga. (GA)	Nev. (NV)	Vt. (VT)
Ill. (IL)	N.H. (NH)	Va. (VA)
Ind. (IN)	N.J. (NJ)	Wash. (WA)
Kan. (KS)	N.M. (NM)	W.Va. (WV)
Ky. (KY)	N.Y. (NY)	Wis. (WI)
La. (LA)	N.C. (NC)	Wyo. (WY)

Figure 2. Guidance for The AP Stylebook entry **state names** (p. 221) spans 572 words and seven subthemes. When a journalism student references a specific US state, the proper usage depends upon contexts such as datelines, political party affiliations, in-text mentions, or headlines.

3.3. Extant Research on AP Style Instruction

Thirty years ago, DiNicola (1994) wrote of convincing journalism students that AP Style was relevant and as important as reporting. He asked, “How, then, is the instructor to give style its due, while avoiding unrealistic expectations and disproportionate penalties that can wither young talent as surely as an unforgiving grade school grammarian?” (p. 64). While much has changed in the media and the AP Stylebook, journalism educators still lack access to research-supported guidance specific to the teaching and learning of AP Style.

Studies over the last several decades on teaching AP Style to students found that repetition, reinforcement, and feedback are effective practices (Hatfield, 1988; Littlefield, 2022; J. D. Martin et al., 2019). This finding aligns with cognitive psychology research

(Roediger & Butler, 2011; Sweller et al., 2019). DiNicola (1994) advocated for teaching AP Style “selectively and gradually” and without harsh penalties for mistakes (p. 64). Littlefield (2022) found little research on AP Style instruction. Littlefield’s assessment of introductory AP Style teaching found timed closed-book in-class quizzes, open-book in-class editing exercises and take-home editing exercises were equally effective in improving student grades. The methods were based on the college’s historical practice of teaching AP Style based on the alphabet letters in the stylebook—Letter A, then Letters B-C, D-F, G-I, J-M, N-Q, R-T, and U-Z, and both the closed-book and open-book groups were taught AP Style this way in the form of an introductory AP lecture, review of common errors, discussion of ethical issues, and instruction on how to look things up. While none of the experimental methods (closed-book, open-book and take-home) brought students to 80% competency, students did move from high Fs to Cs when pre- and post-tests were compared. The study found feedback and repetition were key to learning AP Style. Littlefield (2022) reflected post-experiment that there was no way to say which method worked best. Littlefield (2022) also provides what little is known about student perceptions of learning AP Style. Students reported in reflections that they retained information best when errors were discussed immediately after an exercise (Littlefield, 2022). Other student perceptions include learning AP Style as a “necessary evil” (DiNicola, 1994, p. 67) or “laborious and slow to stick” (J. D. Martin et al., 2019, p. 1506).

The traditional classroom editing environment may not be the fastest or most effective way to teach AP Style (J. D. Martin et al., 2019) found in a study employing a Perceptual Learning Module (PLM), a method suited to teaching specialized skills using adaptive response time. J. D. Martin et al. (2019) sought to judge PLM success in two ways: Was there knowledge transfer leading to AP Style accuracy and was the learning effect lasting? While PLM has been used in other teaching disciplines, this was the first experiment to test effects of perceptual-learning methods on language editing. J. D. Martin et al. (2019) tested digital PLMs in a class with communication majors against traditional 14-week classroom instruction of journalism majors and found both groups increased AP Style efficacy. However, students using the rapid-fire, multiple-choice PLM with immediate visual feedback performed better and retained more information in post-tests. This finding supports Hatfield’s (1988) work to a degree. Hatfield found that students using computer-assisted instruction methods with immediate feedback more accurately applied AP Style than students who completed a paper-and-pencil editing exercise. The paper-and-pencil format did not include instructor feedback but instead student self-evaluations.

4. Cognitive Apprenticeship Model for Developing Expertise

The Cognitive Apprenticeship Model (Collins et al., 1991; Collins & Kapur, 2022) is a pedagogical framework for facilitating the development of expertise within a domain. CAM is derived from traditional apprenticeship models, but with two distinct differences: first, CAM addresses conceptual knowledge and skills that can generalize to different environments and thus are not limited to a particular physical environment (e.g., woodshop) or physical tool (e.g., saw). Second, it emphasizes pedagogy that fosters expertise in face-to-face and computer-mediated environments. CAM emphasizes four dimensions of instruction: content, methods, sequencing, and sociology of learning. Content addresses foundational knowledge acquisition (e.g., facts, concepts, heuristics), which enables problem-solving solutions within the domain. Instructors use a cycle of six methods—modeling, coaching, scaffolding, articulation, reflection, and exploration—to facilitate expertise development. Student competency level dictates method selection and pace. Instructors sequence learning by increasing task complexity, while balancing environmental considerations like resources, collaborative processes, and learning space

design. [Johnson et al. \(2025\)](#) found that journalism professionals will use metacognitive strategies to better manage transparency and accountability in uncertain situations, which makes visible the role that processes of cognition play both in the learning and practice of journalism.

Research into cognitive apprenticeship learning environments typically focuses on the implementation of methods rather than the interaction of the four dimensions ([Matsuo & Tsukube, 2020](#)). Still, the framework has been studied across contexts, including healthcare ([Lim-Dunham et al., 2016](#)), education technology ([Dickey, 2008](#)), military education ([Swaim, 2017](#)), and grant writing ([Ding, 2008](#)). Findings mainly show positive learning outcomes and perceptions, like satisfaction and self-efficacy, within a domain. Limited journalism and media research has used CAM as a pedagogical framework. [Cookman \(1998\)](#) argued that journalism educators should adopt education psychology theories in their classroom, highlighting the applicability of cognitive apprenticeships to journalism education. [Bockino \(2018\)](#) used cognitive apprenticeship principles to analyze why college newspapers function as more of a reporting training ground than an authentic industry news operation. A Delphi panel co-constructed a framework of pedagogical and instructional design practices for teaching journalism in online learning spaces ([Delaney, 2023](#)). The framework aligned with cognitive apprenticeship principles. In an experimental study of adult learners on lateral reading for news literacy, [Fendt et al. \(2023\)](#) found cognitive apprenticeship an effective instructional approach. [Carpenter \(2009\)](#) applied Hatano's Theory of Expertise to an analysis of online media job posts, arguing that journalism education should prepare students to be well-rounded, lifelong learners with the ability to adapt. Considering both the literature and our professional experiences, we proposed the following research questions:

RQ1: How do faculty at postsecondary journalism education programs value The Associated Press Stylebook?

RQ2: How do postsecondary journalism instructors perceive their teaching methods to novice students on The Associated Press Stylebook?

RQ3: What pedagogical approaches do journalism educators utilize to foster novice students' foundational knowledge of The Associated Press Stylebook?

RQ4: What factors influence the perceived success among journalism educators of their teaching methods regarding The Associated Press Stylebook to novice students?

5. Methods

Research in both education and journalism has demonstrated the usefulness of mixed-methods research in exploring complex social and behavioral processes ([Loizzo et al., 2018](#); [Ponce & Pagán-Maldonado, 2015](#)). Mixed-methods methodologists have encouraged researchers to more clearly articulate their process(es) related to data collection and integration ([Bryman, 2006](#); [Fetters & Tajima, 2022](#)). We utilized an explanatory sequential mixed-methods design for the purpose of development—when findings from one method help inform the other method ([Ghosh, 2016](#); [Greene et al., 1989](#)). In this study, quantitative data was first collected and analyzed. Analysis and interpretation subsequently informed the qualitative phase, shaping our open-ended questions to better explore details of notable instructor experiences and perceptions. Following analysis of qualitative transcripts, we then integrated data again in formulation of our stated findings. In keeping with [Fetters and Tajima's \(2022\)](#) recommendation for presenting clear data integration processes in mixed methods research, see Table 1 for a joint display of integrated findings.

Table 1. Joint Display of Integrated Mixed Methods Findings.

	QUANT	Qual			Meta-Inferences from Theoretical Connections
		In-Vivo	Category	Theme	
RQ1 Value	78.8% of respondents said AP Style content is embedded throughout introclass	“This MATTERS” (P4).	Essential Tool	AP Stylebook curriculum fosters professionalism for novice learners	Connections with CAM: Content (domain knowledge—concepts, facts, procedures) Sociology (intrinsic motivation)
	90.3% of respondents said they always/often encourage students to use AP Stylebook in every class	“I think it should be incorporated throughout the curriculum from beginning to end” (P12).	Communicating AP Style’s value	The stylebook’s value is taught explicitly	
RQ2 Perception	Instructors generally agree that teaching AP Style is difficult. With a mean level of professional experience at nearly 20 years, these instructors were working before some of their students were born.	“What I know and how I learned it doesn’t apply to today’s students. They just learn it differently or they see its importance in a different way,” (P2).	Gaps	Instructor perceptions reflect knowledge and generational gaps	Connections: Modeling new tasks Disconnections: How to properly sequence learning after initial introduction Pivoting to minimal guidance approaches too quickly can limit progress
	Instructors generally disagreed that their teaching approach is not effective, although a standard deviation of 1.10 shows some variability in answers.	“If there is some magic pill that you discover in your research or some magic potion, please email me what it is, and I’ll be happy to adopt it” (P10).	Teaching Uncertainty	AP Style instructors cannot pinpoint the most effective way to teach AP Style	
RQ3 Pedagogy	Approximately half of survey participants indicated they rarely or never “instruct students to memorize individual AP Style entries.”	“All of my AP Style quizzes are open book. I’m not going to get them to memorize the book. I’m trying to get them to learn to use it.” (P5).	Perceptions on Memorization	AP Style instructors possess varied philosophies, pedagogies	Connections: Modeling how to identify elements, how to search for their entries, etc. Scaffolding learning through open-book approaches Disconnections: QUANT data showed instructors embrace coaching methods, but qual data raised questions of if such methods are abandoned too soon qual data shows partial embrace of coaching, articulation, reflection
	56% of instructors frequently embed descriptive feedback beyond correct-incorrect responses into LMS-based quiz questions.	“For AP Style errors, I take off three points for every mistake. I think it’s ridiculous that you can’t take the time to open up a book and look it up.” (P14).	Grading	AP Style instructors diverge on what constitutes effective feedback	

The research design received IRB approval from the researchers' respective institutions. An extensive literature review on AP Style teaching and learning practices confirmed the need for an original, exploratory survey instrument. Such instruments can be "particularly valuable for gaining an initial understanding of a phenomenon, a context, or a population, especially in areas where little prior research has been conducted" (Anderson & Lightfoot, 2022). The instrument's six sections addressed demographics and background, curricular emphasis of AP Style, the stylebook as a course material, AP Style pedagogy, assessment practices, and reflections on teaching practices. Item construction was informed by (a) the underpinnings of CAM's four dimensions of learning environments and those dimensions' knowledge types, instructional methods and sequencing considerations, and social characteristics, and (b) deep researcher experience with AP Style classroom instruction and industry application. We piloted the survey with four colleagues with AP Style experience at postsecondary communication programs. We then distributed an email invitation to 1500-plus educators from over 60 journalism programs across the U.S. We used purposive and snowball sampling techniques to recruit qualified participants. Because this was a non-random sample, we did not calculate a response rate and there was no stratification by institutional, geographic or demographic characteristics. We screened specifically for lead instructors with experience teaching postsecondary, introductory-level journalism courses. Participants at the end of the survey could then self-select into the interview phase, which occurred approximately 1–2 months after.

5.1. Analysis

5.1.1. Researcher Reflexivity

Mixed-methods researchers are encouraged to publish a reflexivity statement (Plano Clark & Ivankova, 2016a, 2016b). Three researchers were journalists before transitioning to academia. We learned AP Style as students, applied stylebook guidance as professionals, and now teach the stylebook to introductory-level journalism and public relations students. We have completed advanced training on pedagogy, instructional design, curriculum mapping, and program evaluation. A fourth researcher learned AP Style during their undergraduate program. These "personal contexts" (p. 191) shaped this study's conceptualization, informing our theoretical choices, research questions, analysis, and interpretations. However, we were diligent in our efforts to identify and minimize any potential biases during the development of the survey instrument, the qualitative protocol, and analysis. Our qualitative researchers maintained analytical memos and met frequently to discuss analysis techniques, findings, and interpretations.

5.1.2. Phase 1: Quantitative

Survey items broadly fit into six categories: demographics, curricular emphasis on AP Style, the use of the AP Stylebook as course material, pedagogical approaches to AP Style, assessment methods for AP Style, and instructor perception of their ability to teach AP Style to novice students. In total, 137 cases were analyzed from 173 survey responses. An initial review removed 36 responses because at least 10 items were unanswered. To explore the first three research questions, we looked at the means, frequencies, and distributions of responses. To explore RQ4, we utilized an exploratory factor analysis to see which "perception" variables could be combined into a scale that would explain overall self-perception for AP Style teaching success. Using a Principal Component Analysis with a Varimax rotation and Kaiser Normalization ($KMO = 0.740$, Bartlett's Test of Sphericity, $\chi^2(36) = 251.37, p < 0.001$), we discovered one factor we felt best related to this concept ($\lambda = 3.07$, 34.14% variance explained). The factor included five items, each with a loading Eigenvalue above 0.500. The analysis also found two additional factors that explained

significantly less variance and we felt did not conceptually relate to the perceived teaching success. Further analysis using Cronbach's alpha found that the 5-item scale had acceptable reliability ($\alpha = 0.77$). Once the scale was created, we conducted a hierarchical regression analysis to explore what other variables, including demographics, experience, and perceived institutional support, could explain variation in perceived teaching success.

5.1.3. Phase 2: Qualitative and Integration

Survey data analysis guided the creation of protocol for Phase 2 of the study. Participants who opted into the qualitative phase were vetted and confirmed to meet inclusion criteria. To qualify, participants needed experience teaching AP Style in an introductory-level journalism class at a postsecondary institution in the U.S. Participants who met the criteria were contacted and invited to complete a semi-structured interview with a researcher. Fifteen interviews were completed, ranging from 35 to 75 min each. Each interview was transcribed, then analyzed using First and Second Cycle Coding methods (Saldaña, 2016) to identify categories and then themes for each research question. Qualitative data was then integrated with quantitative data to provide rich description that supported, further explained, and sometimes contrasted the quantitative findings, consistent with an explanatory sequential mixed-methods design.

6. Findings

In alignment with literature that guides the organization of findings and interpretation in mixed-methods articles (Creswell & Plano Clark, 2018; Guetterman et al., 2021), this section presents quantitative findings first, then qualitative findings, then integrated analysis by research question. Integrated findings lead to what are called meta-inferences by mixed-methods researchers. The integrated analysis subsections thus detail connections between findings and this study's theoretical framework: the Cognitive Apprenticeship Model (CAM).

Of the 137 total responses analyzed, the sample was relatively balanced based on gender, with a slight majority identifying as male (51.1%, $n = 70$). A large majority of the sample identified as white ($n = 114$, 83.3%). The majority of participants worked as full-time instructors ($n = 108$, 78.8%) and worked at four-year public institutions ($n = 106$, 77.4%). Instructors from JMC programs across 35 states participated, with California ($n = 13$, 9.5%) the most commonly reported state. Additionally, the participants in our sample reported high levels of journalism teaching experience ($M = 15.56$ years), specific AP Style teaching experience ($M = 11.06$ years) and professional journalism experience ($M = 19.85$ years). Regarding their specific experience teaching Associated Press Style, most reported teaching it in the most recent academic year ($n = 83$, 60.6%). Most also have teaching loads in which at least half of their courses assessed AP Style competency ($n = 71$, 51.8%). A majority have also completed some form of professional development related to AP Style ($n = 87$, 63.5%). Not surprisingly given the events of the last few years, a large majority of participants have taught AP Style both in both face-to-face and online remote modalities ($n = 101$, 73.7%). For more detailed results, see Table 2. Taken collectively, these demographic and background statistics provide evidence of instructor expertise within the journalism subdomain of AP Style. Effective cognitive apprenticeships require such expertise from instructors.

Table 2. Participant demographics (N = 137).

	N	%
Gender		
Man	70	51.1
Woman	63	46.0
Non-binary/non-conforming	1	0.7
Transgender	1	0.7
Prefer Not to Respond	2	1.5
Ethnicity/Race		
Asian	3	2.2
Black/African American	13	9.5
Hispanic/Latinx/Spanish Origin (of any race)	3	2.2
Multiple	5	3.6
White	114	83.2
Other	1	0.7
Role at Institution		
Administrator	11	8.0
Full-time Instructor	108	78.8
Part-time Instructor	20	14.6
Other	6	4.4
Type of Institution		
2-year Public	1	0.7
4-year Public	106	77.4
4-year Private	28	20.4
Other	2	1.5
	M	SD
Years Teaching Journalism	15.56	9.71
Years Teaching AP Style	11.06	8.88
Years of Professional Experience	19.85	12.47

6.1. RQ1: The Value of AP Style

6.1.1. Quantitative

To answer the first research question, we examined items related to the curricular emphasis on AP Style at the participant's institution and how the AP Stylebook is used in their classrooms. We found that AP Style is typically introduced in either the first (100/1000) or second-year (200/2000) course level. Most of those classes are capped at 20 or fewer ($n = 100$, 72.9%) and include at least one specific AP Style-related learning objective ($n = 87$, 63.5%). The sample generally agreed with the statement that institutions provide them with adequate resources to teach AP Style, though the sentiment was not particularly strong compared to other items. ($M = 3.46$, $SD = 1.33$.) A strong majority of instructors reported that AP Style is embedded throughout their introductory journalism courses ($n = 108$, 78.8%). Most instructors said that the AP Stylebook is required for their introductory classes ($n = 111$, 81.0%) but that their institution does not pay for a license or otherwise provide the Stylebook to students ($n = 72$, 52.6%). Additionally, a large majority of the sample reported giving students the option of using either the online or print versions of the stylebook ($n = 105$, 77.8%). For more detailed results, see Tables 3 and 4.

Table 3. Curricular Emphasis on AP Style.

	N	%
Course Level Intro to AP Style		
100/1000	58	42.3
200/2000	67	48.9
300/3000	11	8.0
400/4000	1	0.7
Enrollment Cap for Intro Course		
20 or fewer	100	72.9
21–40	19	13.8
41 or greater	16	11.6
Don't Know	1	0.7
Recency of AP Style Teaching Experience		
Current Academic Year	83	60.6
Within last 2–3 Years	22	16.1
Within last 4–5 Years	13	9.5
More than 5 years ago	18	13.1
Amount of Teaching Load That Includes AP Style		
100%	37	27
75–99%	22	16.1
51–74%	12	8.8
26–50%	33	24.1
1–25%	21	15.3
0%	12	8.8
Completed Professional Development for AP Style		
Yes	87	63.5
No	50	36.5
AP Style Instructional Modality		
On-Campus Only	33	34.1
Online/Hybrid Only	3	2.2
Both	101	73.7
AP Style SLO in Intro Course		
Yes	115	83.9
No	10	7.3
Don't Know	11	8.0

Table 4. AP Stylebook Used as Course Material.

	N	%
AP Stylebook (Print or Online) Required for Intro Course		
Yes	111	81.0
No	13	9.5
Don't Know	11	8.0
Students Must Purchase Stylebook		
Yes	90	65.7
No	37	27.0
Don't Know	10	7.3
Institution Pays for Stylebook		
Yes	50	36.5
No	72	52.6
Don't Know	15	10.9
Prevalence of AP Stylebook in Intro class		
100% of Course Content	3	2.2
Embedded Throughout	108	78.8
Condensed Unit	11	8.0
Not emphasized	4	2.9
Other	9	6.6
Always/Often Encourage Students to Use Stylebook in Every Class	122	90.3
Always/Often/Sometimes Require the Online Version of the Stylebook	37	27.4
Always/Often/Sometimes Require the Print Version of the Stylebook	36	26.7
Always/Often Allow Students to Choose Print v. Online Version of the Stylebook	105	77.8

6.1.2. Qualitative

Interview data collected and analyzed from 15 participants uncovered two primary themes related to how instructors value the AP Stylebook within their classrooms. The first theme, “AP Style curriculum fosters professionalism for novice learners,” represents widely held instructor beliefs that journalism students benefit from learning shared standards that serve as “a common language” within journalism circles. “It’s a common language that people can understand whether you’re a journalist in Albania or a journalist in Kansas City” (Participant 10). Instructors explained that the stylebook’s prominent role within early journalism curriculum helps to foster verification skills while laying a foundation for understanding the importance of professionalism and consistency in journalism. “The importance of ‘Look it up’ in journalism cannot be overstated” (P12). However, because novice journalism students lack newsroom experience, instructors said they must first explain the purpose that style guides like the AP Stylebook serve. This sentiment comprised the second theme from our analysis: “The AP Stylebook’s value is taught explicitly.” Instructors said they frame their initial lectures like sales pitches, working to convince skeptical students to take AP Style seriously. They show students job descriptions with AP Style requirements, share anecdotes from their own newsroom experiences, and stress the consequences of exhibiting inconsistent application of AP Style in industry roles. “There are people who will not hire you if they see this error” in a clip (P1). Several instructors noted they emphasize the versatility of the AP Stylebook, citing the punctuation guide and sections on social media, media law, sports reporting, race, and gender.

6.1.3. Integration of Data

Both quantitative and qualitative data reinforce the axiology that AP Style instruction remains a foundational element of journalism education and professional training. Because the nature of novice learning environments is that novices lack prior knowledge within a domain, instructors affirmed a common approach that emphasized teaching their axiology directly to novices. They created time to address knowledge elements beyond individual stylebook entries, focusing on the book’s industry relevance, its history, and the instructor’s experiences in applying stylebook guidance to authentic news judgment scenarios. This approach aligns with CAM principles that emphasize the learning of facts, procedures, and concepts required for mastery (why the AP Stylebook is important to learn as a core concept) as well as the social consequences for underestimating or disregarding its value in the workplace (which serves to increase intrinsic motivation).

6.2. RQ2: Instructor Perceptions

6.2.1. Quantitative

The second research question addressed instructor perceptions of AP Style teaching methods to novice journalism students. Overall, our sample had a generally positive perception of their AP Style teaching abilities and methods. On average, they enjoyed teaching AP Style ($M = 3.53$, $SD = 1.15$), believed their methods were effective ($M = 3.89$, $SD = 0.69$) and believed students find value in learning AP Style ($M = 3.67$, $SD = 1.10$). They also generally disagreed with a “negative” item that questioned whether students should be explicitly taught AP Style ($M = 1.75$, $SD = 1.14$). Participants lacked consensus on two items: whether they doubted the effectiveness of their AP Style pedagogy to novice students ($M = 2.57$, $SD = 1.10$), and whether novice students should learn AP Style with minimal instructional guidance ($M = 2.54$, $SD = 1.20$). They did generally agree with the idea that teaching AP Style is difficult ($M = 3.66$, $SD = 1.15$). As noted earlier, we created a composite teaching perception scale using five survey items. This scale also indicated a

generally positive perception of AP Style teaching methods ($M = 3.76$, $SD = 0.75$). For more detailed results, including the specific items used for the scale, see Table 5.

Table 5. Instructor Perceptions of Teaching AP Style to Novice Learners.

	M	SD
Enjoy Teaching	3.53	1.15
Believe Students Find Value	3.67	1.10
Teaching Approach is Effective	3.89	0.69
Teaching Approach is Not Effective	2.57	1.10
Question Whether Students Should be Taught	1.75	1.14
Teaching Perception Scale	3.76	0.75
Institution Provides Resources	3.46	1.33
Teaching is Difficult	3.66	1.15
Students Can Self-Guide Learning	3.53	1.02
Students Should Learn with Minimal Guidance	2.54	1.20

6.2.2. Qualitative

There were two themes related to instructor perceptions of teaching AP Style. The first theme, “Instructor perceptions reflect knowledge and generational gaps” was developed because many of these instructors were taught AP Style one way as students but now must teach a different generation another way. Gaps were generational in terms of fortitude (“They (students) seem to be more and more upset by negative comments,” (P7)) as well as technological. P3 used to use shorthand editing marks but stopped because those notations were outdated. “Then I realized that the students actually had no idea what that meant or signified” (P3). Similarly, P10 described as a “big struggle” teaching a student population that—unlike previous generations—doesn’t appear to want to read. (P1) noted that it was hard to motivate students to learn AP Style—they sensed a reluctance or resistance. “I think my students think it’s onerous. I think they think it’s worthless. I think they don’t understand what kind of a power tool it is yet. . . . You get a lot of, you know, ‘Do we need to know this?’” (P1).

This generation of students befuddled some instructors. “I’ll be honest, I don’t understand what’s going on inside of college students’ head(s) nowadays” (P10). There were also gaps in terms of the importance of the AP Stylebook with teachers feeling it was important, but students not as much. “What I know and how I learned it doesn’t apply to today’s students. They just learn it differently or they see its importance in a different way,” (P2). In addition, these teachers are experts, having spent sometimes decades in the news business, but are now teaching novices. Instructors generally described students as having no experience (P4) or being “not familiar” with AP Style (P7).

Instructors were asked about methods they use to teach AP Style, with answers varying but including combinations of quizzes, lectures, line editing, small group work, and in a few cases, punitive grading. The second theme “AP Style instructors cannot pinpoint the most effective way to teach AP Style” was developed because instructors were indecisive when asked explicitly what teaching approaches were most effective. For example, P3 described using small groups and slides in tandem as working “pretty well,” but ultimately couldn’t pinpoint one thing that was working best. “I’m not sure I have found the most effective way,” (P3). To save grading time, P8 shifted some line editing exercises to multiple-choice, but then questioned that. “So I’m thinking about that now about whether that multiple-choice set-up was effective. I’m not quite sure that it was” (P8). P11 assigns several pages of editing homework due at the beginning of the week but noted, “I’m wondering if it’s working.” Perhaps because of the generational and knowledge gaps, these instructors felt out of touch or unable to crack the code for this student population

and that may have had them questioning their methods. These instructors described enjoying the teaching of AP Style, but didn't know what worked best. "If there is some magic pill that you discover in your research or some magic potion, please email me what it is, and I'll be happy to adopt it" (P10). Noted P6: "I'm not sure I've found an effective way." Participant 11 questioned, "I'm always wondering, always saying, 'Should I do it differently?'"

6.2.3. Integration of Data

The dimension called sequencing seeks to guide instructors on how best to arrange the order of learning in cognitive apprenticeships. Two quantitative findings suggested the existence of tension in relation to the sequencing of AP Style instruction. In one survey item, instructors rejected the notion that novices should not be explicitly taught AP Style. Data showed clear consensus in support of explicit instruction. However, this finding conflicts at least in some degree with a level of uncertainty over the perception that novices should learn AP Style with minimal instructional guidance. This tension was further supported by qualitative data that conveyed a wide range of beliefs about the appropriate time to pivot from explicit instruction of AP Style elements to student-led processes of identification and application of those elements in practice.

6.3. RQ3: Instructor Pedagogy

6.3.1. Quantitative

To address the third research question, we examined survey items related to pedagogical and assessment methods related for The AP Stylebook. Results showed an emphasis on the teaching of practical applications, such as navigating the stylebook ($M = 4.18$, $SD = 1.18$) and introducing entries through practice problems ($M = 4.07$, $SD = 0.96$). Memorization-based methods ($M = 2.66$, $SD = 1.36$) and reflective exercises ($M = 2.72$, $SD = 1.30$) were less common. Assessment methods frequently included scheduled quizzes ($M = 4.24$, $SD = 1.23$), open-book quizzes ($M = 4.07$, $SD = 1.28$), and open-book editing assignments ($M = 3.68$, $SD = 1.50$). Closed book midterms ($M = 1.63$, $SD = 1.20$), closed-book quizzes ($M = 1.72$, $SD = 1.21$), and closed-book editing exercises ($M = 1.68$, $SD = 1.17$) were rarely used. See Table 6 for complete findings to these items.

Table 6. Survey Results for Pedagogical and Assessment Approaches to AP Style ¹.

Pedagogical	M	SD	Assessment	M	SD
Read All Chapters	2.50	1.61	Midterm–Open Book	3.05	1.74
Read Specific Categories Online	3.33	1.43	Midterm–Closed Book	1.63	1.20
Read Special Chapters Online	3.15	1.38	Final Exam–Open Book	3.00	1.78
Teach how to Navigate	4.18	1.18	Final Exam–Closed Book	2.57	1.10
Memorize Entries	2.66	1.36	Graded Scheduled Quizzes	4.25	1.23
How to Edit	4.10	1.01	Graded Pop Quizzes	1.95	1.29
How to Access/Search Online Stylebook	3.16	1.58	Ungraded Scheduled Quizzes	2.11	1.39
Lecture on Importance	4.47	0.93	Ungraded Pop Quizzes	1.69	1.11
Assign Materials on Importance	3.78	1.31	Graded Quizzes–Open Book	4.07	1.28
Lecture on IDing Style Elements	3.72	1.27	Graded Quizzes–Closed Book	1.72	1.21
Assign Commonly Used Entries	3.99	1.19	Editing Open Book	3.68	1.50
Intro Through Practice Problems	4.07	0.96	Editing Closed Book	1.68	1.17
Gradually Increase Complexity	3.63	1.21	Reflection Activities	2.33	1.39
Gradually Increase Difficulty	3.52	1.24	Grading Quizzes in LMS	3.42	1.61

Table 6. *Cont.*

Pedagogical	M	SD	Assessment	M	SD
Facilitate Discussion	2.95	1.38	Provide Feedback in LMS	2.95	1.60
Encourage Reflection	2.72	1.30	Student Teaching	2.13	1.27
Employ Coaching Methods	3.35	1.36	Student Presentations	1.79	1.17
Encourage Flash Cards	1.63	1.08	Peer Editing	3.03	1.43

¹ Items were measured using a 5-point Likert-type item in which a higher number represents a more common pedagogical practice. All statements refer to teaching AP Style in the early stages of a journalism curriculum.

6.3.2. Qualitative

Interview analysis found that instructors face complex considerations when introducing AP Style to novice journalism students. First, they observed that many novice students lack prior knowledge of The Associated Press as an organization, style guides in general, and The AP Stylebook. Second, the AP Stylebook's size and complexity make it unrealistic for students to master in a single course. Third, instructors frequently encounter curricular constraints that limit their ability to modify course design. These factors contributed to a lack of consensus from interview data, leading to our fifth theme: "AP Style instructors possess varied philosophies, pedagogies." Instructors agreed on three points:

- Avoid or minimize memorization requirements.
- Use open-book assessments ("That's the way professional journalists work") (P12),
- Explicitly lecture on why The AP Stylebook matters

Instructors differed on how to build familiarity with the AP Stylebook's 5000+ entries. Most required the AP Stylebook as a resource, letting students choose between the print or online versions. Notably, most instructors said they modeled the print edition but not the online version during their introduction period. Introductory lectures commonly covered the mission of The Associated Press, the role of style guides, the history of AP Style, and its relevance to modern journalism. One instructor bypasses the Day 1 lecture in favor of a non-graded writing activity: students wrote brief autobiographies, which the instructor edited. "I mark them up for AP Style and indicate, 'If you wrote this paper this way you would get a zero on the assignment. But understand, this is diagnostic to introduce you to the idea of AP Style,'" (P7). After the introduction, most instructors said they assign specific readings, such as specialty chapters, categorical entries, or alphabetical sections — often followed by practice activities and quizzes. "I give them a letter and I require them to read every entry under that letter in the stylebook. And I give them a quiz on those issues because they won't use the style book unless I force it" (P5). One participant rejected the read-and-assess strategy. "Nobody will read this book even if you assign them to read the stylebook and you give them some deliverable that they should do. No one has ever read the stylebook. No student has ever read the stylebook" (P6). Instead, P6 focuses on common entries, embeds those entries into culturally relevant practice problems, and prioritizes immediate feedback. Participant 9 avoids giving non-graded AP practice activities to students because it would be akin "to giving them a cheat sheet."

Most instructors said they model how to search the stylebook early in the course, typically through brief overviews of its structure. Three instructors emphasized the importance of continually prompting students to articulate their thought processes for identifying and applying entries during class discussions, quizzes (P8), or writing and editing exercises (P12).

(Participant 12): "The thing that really worked best, which of course I figured out toward the end of my teaching career, was . . . to have them apply it and use it rather than just read about it and look up individual things. . . . Not just checking

it, but they had to process and articulate what they looked up and what they learned from that. That to me was the most effective”.

Course design played a critical role after the introductory period. Several instructors said they dedicated one to a few weeks to explicit AP Style instruction before embedding it into broader writing and editing assignments. They then expect students to identify AP Style elements independently. Others integrated explicit AP Style instruction and practice throughout their course. Participant 14’s students read the stylebook chapter by chapter, completing quizzes, editing tasks, or writing exercises. These tasks run concurrent with units of instruction covering other topics. The instructor uses a callback technique called interleaving (Sana & Yan, 2022) during lectures to keep students re-engaging with AP Style. “I incorporate it all the time. I stop on purpose and say, ‘OK, here’s an AP style issue. How do we write this?’” (P14). This strategy leverages formative feedback to affirm or correct understanding. The concept of feedback was another focal point of our analysis, leading to a sixth theme: “AP Style instructors diverge on what constitutes effective feedback.”

Grading AP Style assessments can be labor-intensive, as interviews made clear. Time constraints, course enrollment size, and course aims influence assessment design and feedback quality. Objective assessments like multiple-choice quizzes can provide immediate feedback but are less actionable. Instructors counter this potential shortcoming through a high-frequency, low-stakes quizzing approach to AP assessment. Participant 10’s approach combined frequent, low-stakes quizzes with statistical performance analyses to track student progress. Multiple instructors said they use their learning management system (LMS) to automate corrective feedback to students. Other instructors pivot quickly from AP Style to write or editing assignments, flagging style errors without explanations to encourage independent use of the stylebook (P11). “I don’t tell them what the issue is, so I’m trying to get them to open their stylebook” (P11). Participants 4, 9, and 12 allow students to submit revisions on writing assignments. “Then I average the two grades. I find that works out pretty well . . . if they make a bunch of style errors” (P4). Participant 13 gives just-in-time feedback as students complete an in-class, timed writing assignment. “I’ll walk around, and I’ll tell them, ‘This is an AP error. Fix it, and they’ll fix it. Then hopefully they will remember it for the next time” (P13).

6.3.3. Integration of Data

Both phases of data analysis showed that instructors consistently utilized variations in the CAM instructional method, modeling. This aligns with CAM recommendations for working with novice learners. Actions such as showing students how the stylebook is organized, how it can be searched and operationalized in practice, or how AP Style eligible elements are identified in news stories are examples of modeling that attempt to provide students with the full picture of a complex task (sequencing). When such modeling activities make use of materials with AP Style elements embedded in an authentic way, it plays to social aspects of situated learning, intrinsic motivation, and communities of practice (group discussion, group analysis, etc.). Instructors largely agreed in allowing students to use the stylebook as an open resource during assessments, an example of scaffolding instruction.

Coaching, the instructional method most associated with apprenticeship-style learning environments, was supported in quantitative data but less so in qualitative descriptions of instructional practice. A key disparity was the apparent decline of coaching strategies as instructors pivoted away from explicit instruction toward student-guided learning processes. As an example, when an instructor transitions to a weekly routine of assigning students the task of reviewing a particular AP Style chapter or commonly used category and then assessing comprehension of that assigned chapter with a quiz or editing exercise,

the emphasis on coaching methods appears significantly reduced. The coaching cycle of practice, instructor feedback, student reflection, and improved performance was in some cases quickly replaced by a feedback cycle limited to notification of correct and incorrect answers, final grades, but the absence of articulation, reflection, and exploration methods that foster deeper understanding of relevant facts, concepts, and procedures. This means a significant share of AP Style instructors in introductory courses were not designing opportunities for students to verbalize either the reasons underpinning their previous problem-solving processes or alternative methods that could improve their performance, or the ability to construct problems for themselves or classmates to then attempt to solve. In contrast, qualitative data from multiple instructors did show a commitment to coaching, articulation, and reflection methods through creative task designs. One example asked students to articulate how they applied AP Style elements correctly in a writing assignment. They were then given feedback on the assignment and were asked to revise their work and resubmit.

6.4. RQ4: Factors That Influence Perceived Teaching Success

Finally, the fourth research question asked which factors may influence an instructor's perceived success teaching AP Style to novice journalism students. As noted above, we completed a hierarchical regression analysis to explore this question. We used the composite teaching perception scale as the independent variable. Gender (1 = male), race/ethnicity (1 = white), journalism teaching experience, AP Style teaching experience, professional experience, and perceived institutional support were used as the dependent variables in the model. According to the test, our model accounted for a significant amount of variation in the perception variable (Adjusted $R^2 = 0.192$, $p < 0.001$). Of the six dependent variables, only two were found to be significant predictors of perceived teaching success: years of professional journalism experience ($b = 0.288$, $p < 0.001$) and perceived institutional support ($b = 0.283$, $p < 0.001$). For more data from the regression model, see Tables 7 and 8.

Table 7. Factor Analysis for “AP Style Perceived Teaching Success” scale ¹.

Items	Factor Loadings
I believe that my students find value in learning AP Style.	0.774
Teaching AP Style to novice journalism students is enjoyable.	0.731
My instructional approach for teaching AP Style to novice journalism students is effective.	0.715
I doubt the effectiveness of my instructional approach(es) when teaching AP Style to novice journalism students (R).	0.603
I question whether the AP Stylebook should be explicitly taught (R).	0.585

¹ Principal Component Analysis with Varimax Rotation and Kaiser Normalization, ($\lambda = 3.07$, 34.14% variance explained). Model Fit: Kaiser-Meyer-Olkin Measure of Sample Adequacy = 0.740, Bartlett's Test of Sphericity, $\chi^2(36) = 251.37$, $p < 0.001$.

Table 8. Hierarchical regression analysis of perceived teaching success.

	Standardized b
Gender	0.048
Race/Ethnicity	−0.077
Years of Journalism Teaching Experience	0.013
Years of AP Style Teaching Experience	0.184
Years of Professional Journalism Experience	0.288 *
Perceived Institutional Support	0.283 *
R^2 of Regression Model	0.246 **

* $p < 0.01$, ** $p < 0.001$.

7. Discussion

7.1. AP Style: A Classroom Priority, a Research Afterthought

Our findings contribute valuable information to the thin corpus that covers the teaching and learning of AP Style. We believe the questions and concerns raised by these findings can and should motivate journalism and education researchers, and program administrators, to reconsider their status quo and support new research efforts into this bedrock of journalism curriculum. U.S. journalism instructors affirmed the AP Stylebook's continued position as a cornerstone of introductory journalism education, which supports Wenger and Owens' (2012) findings. Much of the scholarship that has reported on the skills and competencies desired by industry leaders of journalism program graduates does not explicitly mention AP Style, perhaps because AP knowledge is micro-foundational to reporting, editing, writing, interviewing, framing, verification practices, capacity for quality news judgment, and other mastery-level skills. Despite the AP Stylebook's ubiquitous presence in journalism classrooms and newsrooms, our research team identified only a few peer-reviewed publications since 1988 that presented empirical data on the teaching and learning of AP Style. We could not find scholarship that documented student perspectives of their AP Style learning experiences. This oversight invokes myriad concerns on its face, but those concerns become amplified when considering factors like instructors who place "unrealistic expectations and disproportionate penalties" on students while learning AP Style (DiNicola, 1994, p. 64), or programs that use language skills tests as gatekeeping mechanisms (Bunton et al., 2000; Oukrop et al., 1998). Journalism researchers have been potentially overlooking sources of crucial feedback that can help us identify and rectify our own instructional shortcomings.

7.2. Sequencing Away from Explicit Instruction

Integrated data revealed instructor uncertainty about the effectiveness of their own AP Style instruction, agreement that teaching the stylebook to novices is difficult, and uneven awareness of risks associated with minimal-guidance instructional practices (Kirschner et al., 2006) to novice learners. Through a combination of methodological (surveys and interviews) and theoretical (CAM and CLT) triangulation, we have identified approaches that risk neglecting or undervaluing evidence-supported research on task scaffolds, sequencing of activities, and limitations of working memory. We explain how these uncertainties can inform near-term practice and long-term scholarship.

Our integrated data signaled an incertitude on how long instructors should explicitly teach AP Style. Most instructors in this study communicated that their explicit instruction phase lasted anywhere from a portion of one class meeting to two weeks of class meetings. During this time, they lectured on: why the stylebook is important, its organizational structure and how journalists search it, followed by worked examples. However, with thousands of entries across 502 pages, novices need time, feedback, and repetition to build familiarity with common entries and their corresponding rules. Some instructors address this by assigning students to read each individual entry by alphabetical chapter, then assessing comprehension through a quiz. Others synthesize the stylebook's most frequently used categories and entries into an executive summary-style study packet. Both approaches, however, risk underestimating the deleterious effects of higher elemental interactivity tasks for learners with limited prior knowledge (Sweller et al., 2019). This can increase both intrinsic and extraneous load (Chen et al., 2023) and is connected to negative learning outcomes. Chapter A in the stylebook contains 185 different entries. Many entries are simple facts or concepts, like how to punctuate April Fools' Day. Others are context-dependent and require simultaneous processing of multiple elements, like how

to differentiate among government acts, amendments, bills, laws, measures, ordinances, resolutions, rules, and statutes for accuracy in a news story.

The CAM dimension sequencing offers some guidance (Collins & Kapur, 2022). Instructors want to increase task complexity and task diversity as learners gain experience. Once beyond the explicit instruction phase, many instructors described pedagogical pivots toward self-guided learning experiences like assigning weekly practice problems, chapter or categorical readings followed by quizzes, or writing assignments that require style adherence. These approaches corresponded with a perceived reduction in formative feedback interactions with learners, and, in some cases summative feedback as well. Critically, timely and effective feedback has been identified as a key factor in previous AP Style research (Hatfield, 1988; Littlefield, 2022; J. D. Martin et al., 2019).

The mean level of professional experience of participants was nearly 20 years. Cognitive apprenticeship frameworks require the instructor to possess expertise in the relevant domain, and this study's participants declared advanced knowledge of, and experience using, AP Style. Other factors, then, are likely contributing to instructor self-doubts. Analysis hinted at a few possibilities: one, syllabuses are jammed with more and more themes, concepts, and technologies to introduce. This potentially reduces time allotment for explicit instruction and practice on any singular theme. This possibility syncs with scholarly observations by Royal (2017) and Royal et al. (2020), in which journalism educators feel squeezed by expanding curricular considerations. Two, visual and audio-driven content culture has de-emphasized textual journalism, which participants sensed may be de-motivating for students learning AP Style. That journalism organizations are reducing copy editor positions (Vento, 2023) is a likely contributor. Third, instructors and curriculum leaders may be underestimating the time and practice repetitions needed for novices to build competence with the AP Stylebook's layout, organization, common entries, and application, even when stylebook items are the singular focus. If AP Style requirements are bundled too quickly with other complex tasks (e.g. story framing, lead writing, content editing, writing on strict deadlines, etc.), instructors risk designing a learning experience that overloads working memory and potentially diminishes student performance and motivation (Sweller et al., 2019).

CAM principles offer several considerations to improve course design. First, journalism educators can re-evaluate the sequencing of explicit AP Style instruction in introductory courses, as discussed. If that option is unrealistic due to curricular constraints, then educators can consider recalibrating their assessment practices to reduce point deductions for AP Style errors in assignments that bundle two or more complex journalism tasks. A second CAM consideration would deploy the learning strategies principle to better align instructor philosophy and methods. Participants in this study overwhelmingly agreed that the stylebook is too large to master in one course—supporting a key Littlefield (2022) finding. Consequently, this theoretically prioritizes the learning of identify-search-confirm processes for AP Style-eligible entries. The learning strategies principle encourages instructors to teach novices how to learn new concepts, facts, and procedures. Procedures like how to identify-search-confirm entries in the print edition, or how to identify-search-confirm entries in the online database. However, data from this study suggests educators might be focusing too quickly on correct-incorrect application, unintentionally underestimating the instructional time needed for students to develop sufficient knowledge for effective identify-and-search procedures. Third, instructors can consider keeping certain scaffolds in their applied task designs longer than they may previously have considered. Two examples of this: in an editing exercise, instructors can highlight each AP Style-eligible element to reduce the cognitive processing time spent searching. Or, they can provide a clue on where to find the relevant guidance needed evaluate a correct or incorrect application.

7.3. A Pedagogical Hodgepodge

Integrated data indicated instructors utilized certain CAM teaching methods for developing expertise, though not all. Those six methods—modeling, coaching, scaffolding, articulation, reflection, and exploration—are supported by robust evidence. Instructors who over multiple weeks modeled AP Style processes and practice problems, coached students through practice activities, and leveraged group dynamics to increase successful application, were applying core CAM principles. Group practice is itself an instructional scaffold, a support that helps students learn a complex task provided that timely coaching is involved. It has also been effective at boosting learning in tasks that feature higher elemental interactivity and split-attention resources (Guzman & Zambrano, 2025). However, instructors also counted professional development, their own classroom or newsroom experiences, and conversations with peers among their teaching influences. Further analysis found a range of pedagogical approaches in conflict with CAM guidelines for teaching novices, particularly in the window after AP Style is first introduced.

Some instructors pivoted explicit instruction to the next course theme but reserved brief chunks of class time for AP Style discussion, practice, and feedback. Some dropped explicit AP Style instruction, assigned stand-alone practice problems, and pivoted to the next course theme. The functionality of LMS programs offer instructors the choice of moving AP Style learning to remote settings. They can assign readings by alphabetical chapter, special chapter, or common category, then assess knowledge through the digital quizzing function without any classroom interaction. Yet another approach swiftly embeds AP Style comprehension into writing and editing assessments. Students must write or edit a news story for both content and AP Style adherence. In a share of these situations, students must self-guide their AP Style learning progress before they are likely ready. This approach reduces coaching interactions and limits actionable feedback, both critically important to learning processes. Roughly 27% of survey participants said they rarely or never employ coaching methods for AP Style. A further 46% indicated they rarely or never created reflection opportunities for AP Style learning, and 41% said they rarely or never facilitate discussions in which students can articulate their AP Style decision-making processes. Articulation and reflection are evidence-supported methods for developing expertise, and class discussions that promote articulation or elaboration are strongly correlated with student achievement in higher education (Schneider & Preckel, 2017).

7.4. Predictors for Perceived Teaching Success

Our fourth finding from this study revealed two significant predictors for perceived teaching success of AP Style: years of professional journalism experience and perceived institutional support. This is a new contribution to the journalism education literature and requires further inquiry. Professional experience is a valued attribute for journalism instructor positions across ranks. Instructors who worked closely with the AP Stylebook in newsroom environments can best assume the role of expert in cognitive apprenticeships, while also replicating authentic learning scenarios for novice students. Most survey participants somewhat agreed that their program provided the necessary resources to teach AP Style effectively (see Table 4), but sources of satisfaction (and dissatisfaction) would need to be investigated further. Instructors acknowledged sources of professional development and support for teaching AP Style through examples like LMS training, receiving instructional copies of the print stylebook, and valued dialogue with colleagues who have taught AP Style.

7.5. Limitations, De-Limitations and Future Directions for Research

We must acknowledge three limitations and two de-limitations in this study. The first limitation was our deployment of purposive and snowball sampling techniques. These sampling techniques limit the generalizability of this study's findings, though findings remain what Lincoln and Guba (1985) called transferable to similar journalism education contexts. The second limitation was systematic. At the course level, instructor pedagogy is influenced by factors like the instructor's employment status, course enrollment, available technological support, and students' socioeconomic status. For instance, many journalism instructors lack the autonomy to revise or change a syllabus they inherited. Some syllabuses focus heavily on AP Style, while others may cover multiple style guides and non-journalistic writing topics. Consequently, the instructors may in such cases be unable to deploy what they believe would be more effective instructional methods. The third limitation was that while AP Style learning tasks were evaluated in part through the lens of Cognitive Load Theory knowledge, we have no direct measures of cognitive load variables in our data. We are strongly considering future research that collects such data. The first delimitation is that this study excluded non-journalism instructors, narrowing the focus to journalism programs, even though public relations programs also teach AP Style. Second, only U.S.-based instructors were recruited, as the AP Stylebook is primarily used in the U.S. while non-U.S. programs may follow different style guides. These decisions were made to ensure a narrow and precise scope for this study and our planned follow-up studies on the teaching and learning of AP Style in journalism education contexts.

This study, alongside work by Littlefield (2022) and J. D. Martin et al. (2019), aims to inspire further research on AP Style education. Future studies should consider student perspectives and explore variables such as satisfaction with AP Style learning, instructor self-efficacy, grading practices, student performance, retention rates, and satisfaction.

8. Conclusions

This study addressed how U.S. journalism educators teach AP Style to novice-level students in introductory courses. Two recent studies (Littlefield, 2022; J. D. Martin et al., 2019) provided deeper insights into effective teaching and learning practices of AP Style. Those studies measured the effectiveness of interventions for increasing AP Style competency, this study documents instructor axiology, pedagogy, and perceived teaching effectiveness in the U.S. at the novice stage. Findings add deeper understanding to the AP Style education literature, and through the lens of the Cognitive Apprenticeship Model provide insights and recommendations that can be used by journalism programs to inform curricular sequencing decisions, pedagogical and instructional design considerations, and professional development programming.

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Abbreviations

The following abbreviations are used in this manuscript:

AP	Associated Press
ACEJMC	Accrediting Council on Education in Journalism and Mass Communications
CLT	Cognitive Load Theory
CAM	Cognitive Apprenticeship Model

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