most historical accounts of the Writing-Across-the-Curriculum (WAC) movement assign its agency to scholars or teachers of writing. For McLeod, it can be traced to Central College in Pella, Iowa, where Barbara Walvoord held the first cross-curricular writing workshops in 1970 (see also Walvoord). Bazerman, et al., and Russell offer more complex historical trajectories that nonetheless point to writing researchers as likely progenitors, even amidst broader national educational trends. Both, for example, acknowledge the impact of *The Development of Writing Abilities 11–17*, a work in which authors James Britton and colleagues report on an extensive study of British secondary school literacy practices that paved the way for an interest in language across the curriculum in the UK. The new emphasis was subsequently imported, with a more dominant focus on writing, to small liberal arts colleges in the United States (see also Fulwiler). Both also credit the emergence of composition studies as a likely intellectual source of the closely aligned WAC movement in secondary and post-secondary education. No histories of WAC suggest that this cross-curricular movement was generated from within the various disciplines that are the principle targets of its advocacy and the sites of its consultation, faculty development, and research. The singular disciplinary origin of this multiple-disciplined, and now, highly recognized and practiced educational movement (Thaiss) allow us to ask how WAC was influenced by work in composition. Did the movement get a jump-start from a few innovators and then develop on its own, within and across various disciplines? Or did the field of composition studies, itself emerging from its own beginnings in the 1960s, “grow” the movement from its persistent attention to writing in various courses and curricula?

Although charting the growth of the beliefs and practices that characterize WAC will always be difficult (Ackerman 339), a number of methodologically diverse studies could begin answering these questions. For example, we could examine the curricula
of 10 colleges and universities in each Carnegie classification over a 30-year period to map changes in how writing has been incorporated, and then mine the historical documents within each department to locate the specific sources of curricular change in the area of writing. We could study the top two or three best-selling textbooks across a range of content areas over the past several decades to discern patterns in their treatment of writing—although it would be unlikely that many of them would disclose the sources of their authors’ own thinking about writing pedagogy or scholarship. We could administer a national survey to a random sample of longtime faculty in colleges and universities representing a cross-section of institutional types to collect data on how and from whom they learned about WAC. Or we could research publishing houses, examining their records of trends and influences on the development and marketing of books in a range of disciplines to try to locate the sources of influences that led them to urge more coverage of writing or expand the marketing of books to include supplements that offer advice on writing. Given the problems these studies would face and the great amount of work they would require, they present rather unattractive options for finding out what influence, if any, the field of composition has exerted on the development of WAC within the disciplines themselves, that is, as a function of their own activities and sharing of new knowledge in the area of instruction.

However, one interesting and relatively unobtrusive alternative exists, and it involves collecting data on what scholar-teachers have written among themselves about writing, over time, within various disciplinary areas. This information is perhaps best gathered from the most permanent source of a discipline’s own pedagogical history—its teaching journals. In virtually all fields, there is at least one journal that is devoted primarily to curricular matters, classroom methods, student learning, and other issues associated with teaching, or one that publishes pedagogical material alongside more scholarly work. If writing has played a role in the national discussions of teaching and learning within these fields, we should expect to find in their journals some treatment of writing as an activity of central importance to students’ learning, intellectual development, and career trajectories.

With this research perspective in mind, I studied articles published in 14 discipline-based teaching-oriented journals between January 1967 and December 1986. The 141 writing-focused articles published in these journals provide an interesting profile not only of the development of WAC as a movement in U.S. higher education, but also of the extent to which the field of composition studies—its activity in the areas of research and instruction— influenced the thinking of scholars and teachers, in a range of fields, who were interested in how their subject matter was taught in college courses.
Selecting the Corpus
To choose a suitable range of journals across the curriculum, I began by scanning ULIRICH’s periodical directory, making a list of eligible candidates, and then consulting them individually to see whether they would be appropriate to study in depth. I rejected from consideration all newsletters; all journals that had lapsed before the end of 1986; journals that, in spite of their titles, still focused on field-specific research rather than teaching or the scholarship thereof; and journals published less frequently than twice per year. I also rejected several journals in fields with affinities to composition studies, such as speech communication, education, reading, and business communication, because the overlapping nature of the scholarly communities in those fields could make it appear that composition had a more widespread influence than is really the case.

I began at 1967 for several reasons. First, it became clear that including earlier issues would yield little of interest because articles on writing published before then were very scarce. Second, receding further would have resulted in the elimination of some journals that had not yet been established. Third, historians of composition generally agree that the field of composition studies began in earnest following the publication of Braddock, Lloyd-Jones, and Schoer’s Written Composition in 1963 (the first major synthesis of research on writing; see Babin and Harrison 13). However, it took several years for a collective interest in writing, as a subfield of English studies, to begin to coalesce, especially around landmark studies such as Emig’s The Composing Processes of Twelfth-Graders (the first extensive study of what novice writers do when they write, published in 1971); the previously mentioned study by Britton et al.; and the work of scholar/practitioners writing in the late 1960s and early 1970s, such as McCrorie, Elbow, and Murray. In addition, a 1966 Anglo-American conference at Dartmouth is widely credited with starting a transatlantic dialogue about the teaching of writing that brought attention to the work of James Britton and colleagues and spurred considerable interest in WAC (see Bazerman and Russell). Finally, there is little documented evidence of collective activity in the subfield of WAC until the early 1970s. At that time, the WAC movement was a distant speck on the horizon of organized cross-curricular instructional activity concerning student writing, but the lack of such a movement does not preclude at least some discussion of writing and its role in discipline-based learning. Examining possible changes in the ways that each field engaged in those discussions provides some basis for charting the influence of composition studies, and its nascent WAC efforts, on other disciplines. Twenty years (from 1967 to 1986 inclusive) represented a reasonable period to study the early influences on the development of
Eventually, I settled on the following 14 teaching-focused journals in a variety of disciplines:

- *Teaching of Psychology*
- *Teaching Sociology*
- *Teaching Philosophy*
- *History Teacher*
- *Engineering Education*
- *Mathematics Teacher*
- *Journal of College Science Teaching*
- *Teaching Political Science*
- *Journal of Economic Education*
- *Journal of Architectural Education*
- *Physics Teacher*
- *Journal of Chemical Education*
- *Journal of Aesthetics Education*
- *Music Educator’s Journal*

These journals represent a wide spectrum of disciplines, including the arts and humanities, social sciences, and hard and applied sciences.

I obtained bound volumes or online archives of all the journals published between January 1967 and December 1986, and then made a copy of every article that focused on writing. To be considered for inclusion in the study, articles had to focus overtly and predominantly on writing, with attention to the instructional uses of writing within the field. Articles that mentioned writing only in passing were not included. A publication tip for scholars, for example, would not meet this pedagogical criterion. The study is based, therefore, on articles and essays dealing primarily with the incorporation of writing in classroom instruction and in the development of students’ writing abilities.

Over the 20-year period, 141 articles meeting these criteria appeared in the 14 selected journals. Hereafter I will refer to them collectively as the “corpus.” The corpus represents a small percentage of the thousands of pages published during the two decades of the journals’ issues, and range from brief, single-page descriptions of classroom activities or opinions about student writing to longer pieces that include substantive discussions of theory, research, or application in the field (many of these are listed and annotated in Anson, Schwiebert, and Williamson). Some, especially in earlier issues, appear
in “practical” sections following major, full-length scholarly articles. Others are given full billing, sometimes sandwiched between research articles with titles like “Selective Oxidation and Ammoxidation of Olefins by Heterogeneous Catalysis.”

For each article that met the criteria for inclusion, I listed all references to scholars and teachers contributing to the field of composition studies, based largely on my own knowledge of those populating the field. If I was unsure about the scholarly orientation of someone referenced in the article, I conducted searches for their work (using Comp-Pile and, as needed, Google Scholar, Lexis Nexis, and Academic Search Premier) and/or for the person’s academic affiliation or c.v. As explained below, I later conducted a content analysis of each article’s dominant instructional ideology of writing to study trends in the intra-disciplinary treatment of writing.

**Charting the General Results**

Between 1967 and 1972, seven articles focusing on writing appeared in the journals (see Fig. 1).\(^1\) In each of the next five-year periods, the number of articles more than doubled from the previous period, first to 19, then to 39, and finally to 75. The increase in attention to writing in the corpus closely parallels the development of composition studies as a field of scholarly and pedagogical inquiry as measured by the volume of its publications, the size of the program at its main national convention (the Conference on College Composition and Communication), the number of doctoral programs emerging at major universities, and other indices.

![Fig. 1](image_url)

**ALL ARTICLES FOCUSING ON WRITING**

\(^1\) Two journals began publication in 1970 and 1972, respectively, but based on the first few years of their issues it is highly unlikely that their absence from the corpus in the prior years would change the results in any significant way.
Two explanations suggest themselves for this parallel: either composition exerted a strong enough influence on other disciplines, partly through its work in WAC and the reach of its publications, to inspire readers, authors, and editors toward fuller treatment of the subject of writing in the pages of their discipline-based journals, or else certain social and educational factors (such as attention in the media to students’ declining skills) rippled their way through all of higher education, boosting attention to writing. Figure 1, that is, tells us nothing about whether the rise in attention to writing is the result of composition’s advocacy and the efforts and outreach of the WAC movement on behalf of compositionists. For signs of such influence, we need to examine the articles themselves, noting which authorities were cited to support various theories or methods.

As shown in Table 1, the several dozen compositionists referenced in the corpus represent a wide range of scholarly interests and present a cross-section of the field in terms of focus, methodology, and theory.

<table>
<thead>
<tr>
<th>Barnes, D.</th>
<th>Freedman</th>
<th>Maimon</th>
<th>Rosen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bean</td>
<td>Freisinger</td>
<td>Martin, N.</td>
<td>Scanlon</td>
</tr>
<tr>
<td>Braddock, et al.</td>
<td>Fulwiler</td>
<td>McNamara</td>
<td>Schwalm</td>
</tr>
<tr>
<td>Britton, et al.</td>
<td>Fulwiler/Young</td>
<td>Mellon</td>
<td>Seigel</td>
</tr>
<tr>
<td>Christenbury</td>
<td>George, D.</td>
<td>Mischel</td>
<td>Selfe, C.</td>
</tr>
<tr>
<td>Christensen</td>
<td>Goswami</td>
<td>Moffett</td>
<td>Shaughnessy</td>
</tr>
<tr>
<td>Coles</td>
<td>Graves</td>
<td>Myers</td>
<td>Sommers, N.</td>
</tr>
<tr>
<td>Cooper, C.</td>
<td>Gray, J.</td>
<td>Newell</td>
<td>Strong</td>
</tr>
<tr>
<td>Cooper/Odell</td>
<td>Griffin</td>
<td>Newkirk</td>
<td>Tate/Corbett</td>
</tr>
<tr>
<td>Cowan, G.</td>
<td>Gregg/Steinberg</td>
<td>Ney</td>
<td>Thaiss</td>
</tr>
<tr>
<td>Daiker</td>
<td>Gunning</td>
<td>Nodine</td>
<td>Tierney</td>
</tr>
<tr>
<td>Diedrich</td>
<td>Guth</td>
<td>Odell</td>
<td>Van Nostrand</td>
</tr>
<tr>
<td>Elbow</td>
<td>Haynes</td>
<td>O’Hare</td>
<td>Weiss/Peich</td>
</tr>
<tr>
<td>Emig</td>
<td>Herrington</td>
<td>Ohmann</td>
<td>Winterowd</td>
</tr>
<tr>
<td>Flower/Hayes</td>
<td>Irmscher</td>
<td>Peterson, B.</td>
<td>Young, A.</td>
</tr>
<tr>
<td>Faigley/Miller</td>
<td>Lamb, C.</td>
<td>Petrosky</td>
<td>Zoellner</td>
</tr>
</tbody>
</table>

Table 1
Compositionists Cited In The Corpus
Some, such as John Bean, James Britton, Toby Fulwiler, Elaine Maimon, Chris Thaiss, and Art Young, are pioneers of the WAC movement and clearly exerted their influence on authors in the corpus. However, various strands of composition studies also found their way into the corpus through references to other experts, including cognitively-oriented and writing-process scholars such as Flower and Hayes, Charles Cooper, Rob Tierney, and Janet Emig; practitioner-theorists such as Peter Elbow and Mina Shaughnessy; and broadly-based researchers such as Odell.\textsuperscript{2} Their presence in the corpus suggests that the articles authors consulted while formulating their views and WAC-oriented methods offer research on writing as well as specific pedagogical approaches. To the extent that teacher-authors in other fields were familiar with composition studies, their knowledge seems evenly spread out over the field during the period examined, with the principles of WAC exerting a somewhat stronger influence than other areas. This general result is further supported by rank-ordering the seven most often cited authorities across the corpus.

\begin{center}
\begin{tabular}{|l|}
\hline
1 & Janet Emig \\
2 & James Britton, et al. \\
3 & Peter Elbow \\
4 & Linda Flower (alone or with John Hayes) \\
5 & Toby Fulwiler \\
6 & Elaine Maimon \\
7 & Lee Odell \\
\hline
\end{tabular}
\end{center}

Table 2
Most Often Cited Compositionists, Rank Ordered

The frequency with which these scholars were cited in the journals during the 20-year period of the corpus is also of interest. Figure 2 shows the number of articles published in the corpus (by five-year intervals) that cite professionals in the field of composition who were conducting research on writing, administering writing programs, running WAC workshops, or publishing works in the major composition journals.

\textsuperscript{2} These characterizations are relevant to the published work of scholars during the period of the study, not necessarily to their current or career-spanning scholarly records and focus.
References to such scholars increased dramatically between 1977 and 1987. Articles between 1977 and 1982 that referenced composition scholars were about half as frequent as those that included no such references, but the ratio evens out in the years between 1982 and 1986.

Mapping Instructional Orientations
To this point, it has been possible to document some degree of influence from the field of composition studies on the scholarly sharing of writing pedagogy within the fields represented by the corpus. But the data alone tells us little about how discipline-based authors of the corpus conceived of writing and urged their colleagues to pay attention to it in their instruction. To explore these questions, we need to turn to the articles’ contents.

My preliminary reading of articles in the corpus revealed some noticeable differences in approach that are supported by foundational and well-regarded theories of instructional ideology in composition (e.g., Diamond; Gere, Schussler, and Abbott; Kroll; Mosenthal; King and Kitchener). These theories suggest that teachers act on sets of beliefs about what writing is and how it should be taught. When fully enacted in classroom instruction, instructional ideology translates into the sorts of things teachers do and ask students to do, the roles and behaviors they establish, and the methods they use to structure activities, assign, support, and grade work.
Initially, two broad orientations emerged from the corpus. In one orientation, the author focuses mainly on the improvement of students’ writing skills. Typically, articles in this category begin by bemoaning the sorry state of students’ writing abilities, often noting their decline over some period of time as reflected in the quality of students’ papers in disciplinary courses. They then describe a method for helping students to improve their skills of composition without placing undue burdens on teachers—for example, a checklist for students to evaluate their papers with before turning their papers in. The articles assume that students need to learn the various conventions of genres in their field, such as how to write a good lab report, or how to write like a proper historian or philosopher. For the most part, writing provides an outcome to be evaluated, either on the basis of its inherent quality or on the basis of the facts, interpretation, and other knowledge the student has gained. Some articles in this vein toward the end of the 20-year period include references to the processes of writing, and a few acknowledge work in composition.

The following excerpt from this group of articles (from *Teaching of Psychology*) represents writing from the perspective of skills, proficiency, final texts, and standards for evaluation:

The poor writing of present-day college students is a pervasive phenomenon, one that extends nationwide and to which many college and university instructors could indeed attest. Undergraduate courses in English composition usually lay the foundation for improvement and visible enhancement of student performance. But, all too often, inadequate writing crops up again when students write for other courses. We believe [in] the reinforcement of effective writing skills. (Camplese and Mayo, 122)

In the second orientation, the author sees writing as a way for students to learn and explore the subject matter of the course or discipline. Standards and criteria are secondary to problem-solving, the free expression of ideas, and the articulation of new knowledge. During the period covered by the corpus, much scholarship in composition studies paved the way for what would become formally known as the “writing-to-learn” branch of WAC. Herrington, for example, explicitly tied writing to learn in chemical engineering courses to Britton’s “expressive” function of language; the teacher doesn’t play the role of examiner, but the role of participant in a teacher-learner dialogue. The goal is not to improve students’ writing per se, but to enrich their thinking and learning through the sorts of inquiry that writing affords. Better skills may be an outcome, but they are not the main reason for incorporating writing experiences into
coursework. From this perspective, writing activities are often informal and dialogic. The following excerpt from *History Teacher* is typical.

We can use writing as a method for teaching and learning in history rather than simply as an evaluative device ... Writing is thinking. The effort employs such analytical skills as inference making, classifying, separating relevant from irrelevant data, and identifying part-whole relationships. It also involves skills of synthesis and evaluation ... When students engage in writing they are thinking. (Beyer 167-8)

Using a relatively informal mode of content analysis (Neuendorf; Krippendorff), I developed a set of global characteristics for categorizing each article into one or the other orientation. While this dichotomy admittedly oversimplifies the complexities of writing and the possibility that an author could argue from both orientations simultaneously—that is, that writing to learn and the development of skills are not mutually exclusive and reside along a continuum (see McLeod, “Writing”; see also McLeod and Maimon)—it also provided a way to judge the presence or absence of a major trend in the development of WAC: the emphasis on writing as a medium for learning, i.e., more thorough reading of course material, stronger analysis and synthesis, better problem solving, increased exploration and discovery, and more effective memory of information. That the two orientations (see Table 3) have long existed in WAC is also thoroughly acknowledged in the literature (Bamberg).

<table>
<thead>
<tr>
<th>Writing for Skills Development</th>
<th>Writing for Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Transactional</td>
<td>• Expressive</td>
</tr>
<tr>
<td>• Output-focused (assessment)</td>
<td>• Input-focused (learning)</td>
</tr>
<tr>
<td>• Writing to communicate</td>
<td>• Writing to discover</td>
</tr>
<tr>
<td>• Often formal and higher-stakes</td>
<td>• Often informal and lower-stakes</td>
</tr>
<tr>
<td>• Goals of improved ability</td>
<td>• Goals of improved learning</td>
</tr>
<tr>
<td>• Discipline-based genres</td>
<td>• Flexible genres</td>
</tr>
<tr>
<td>• Formally assessed</td>
<td>• Informally assessed</td>
</tr>
</tbody>
</table>

Table 3: Features Defining Two Orientations of Writing

Many of the articles in the corpus could be placed easily into one or the other of these orientations. In somewhat less distinct cases, I made a judgment based on a third
or fourth reading, considering the predominant focus of the piece. If the lines between the orientations were blurred, or if the article seemed unrelated to either focus, it was excluded from the tallies.

An example of an article with a blurred focus is Field, Wachner, and Catanese’s “Alternative Ways to Teach and Learn Economics: Writing, Quantitative Reasoning, and Oral Communication.” This essay describes attempts in DePauw University’s economics department to take responsibility for students’ oral and written communication abilities and quantitative reasoning skills. Yet in the discussion of writing, the authors appear to rely on DePauw’s first-year English composition course for the necessary skills development. There, students learn how to brainstorm ideas, which “can be put into practice in the context of economic analysis” (214). Nothing is said either about how brainstorming actually bolsters students’ learning of economics, nor how it “demonstrates a competence in writing” within the economics major (213). While the authors echo the WAC movement’s championing of cross-curricular support for writing, the essay lacks a clear focus on either the development of writing skills or the use of writing to learn (though it leans in the direction of the latter).

Figure 3 shows the trends in publication of those articles with a clear skills or learning orientation (excluded articles are not represented). The results show that the learning orientation begins to increase after 1977, with a strong development occurring after 1982, when it outpaces the skills orientation, with fewer than half as many articles focusing on the development of skills than the use of writing to encourage deeper learning.

![Figure 3: Discerned Orientation of Articles](image)

**Fig. 3**

DISCERNED ORIENTATION OF ARTICLES
To interpret the reversal of focus in the corpus, we can once again turn to data from the articles’ referencing of composition scholars. Figure 4 compares the number of articles in the learning-oriented group that made no reference to teachers or scholars of composition or WAC and the number that made at least one such reference (many made several).

![Fig. 4 REFERENCES TO COMPOSITION OR WAC SCHOLARS IN LEARNING-ORIENTED ARTICLES](chart)

Articles in the corpus that were published between 1982 and 1986 experienced a strong surge of references to composition or WAC scholars. The number of articles with no references increased as a percentage of the greater number of articles published on writing, but they are outnumbered two to one by articles that cited composition or WAC scholars. Not only did the number of articles expressing a learning orientation increase starting around 1982 but the authors of those articles were more often referencing important theories, research, and pedagogical strategies developed in the field of composition and WAC.

**Conclusion: Possible Causes, Desired Effects**

By scouring teaching-oriented journals in various academic disciplines, we can learn much about the sorts of pedagogical and curricular issues that members of those disciplines find important enough to include in their professional literature. This study
assumed that interest in or concern about writing would be reflected in an important forum for the exchange of knowledge in these disciplines—their journals. My tallies show an increase in the number of articles published in 14 teaching journals over a 20-year period, increasing significantly during each half-decade of the study. Furthermore, analyses of the articles’ references point to an almost certain influence of composition scholars and, eventually, WAC scholars and practitioners on both the theorizing and implementation of writing practices in these disciplines as reflected in their publications. An orientation toward writing as a medium for enhanced learning of subject matter gets a foothold in the 1980s and increases in popularity, while a skills-based orientation seems to decline in interest.

In addition to the influence of composition and WAC during this period, we might also speculate about broader shifts in educational philosophy and methodology that took place in parallel with the increase in attention to writing as a medium for learning. Although they have not taken hold even in contemporary higher education with nearly the force that their advocates hoped for, constructivist approaches to teaching and learning enjoyed considerable support starting in the early 1980s, and new work on active and problem-based learning, inquiry-guided instruction, and collaborative learning filled the pages of higher-education journals and were frequent topics at conferences of the American Association of Higher Education, The Professional and Organizational Development Network, the American Association of Colleges and Universities, and other cross-disciplinary organizations focusing on educational theory and methodology.

At the same time, the learning-based orientations toward writing that gradually emerged in the 1980s did not push out a focus on skills; rather, more sophisticated theories about students’ enculturation into disciplinary discourse communities and their need to learn the expectations and conventions of disciplinary genres in situ established themselves in what is now generally known as an emphasis on “writing in the disciplines,” while “writing to learn” continued to experience extensions and refinements in both scholarship and pedagogy.

A second installment of this essay will continue to trace the influence of WAC and composition studies starting in 1987, a time of increasing programmatic activity, a stronger interest in factors such as social context, student development, and diversity, and the influence of computer technology on writing and learning to write.
WORKS CITED


McLeod, Susan H., and Elaine Maimon. “Clearing the Air: WAC Myths and Realities.”


