Galvanizing Goals: What Early-Career Disciplinary Faculty Want to Learn about WAC Pedagogy

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Consulting with disciplinary faculty from across the curriculum about WAC pedagogy is, of course, absolutely central to what WAC specialists do. But what kinds of pedagogical knowledge do new and future WAC specialists need in order to work effectively with disciplinary colleagues? What do disciplinary faculty want to learn about WAC pedagogy? How does our field conceptualize disciplinary faculty as WAC learners? To answer those questions, this qualitative research study analyzes WAC learning goals written by 107 tenure-track assistant professors from a wide array of disciplines at the start of a WAC unit within a year-long professional development program focused on teaching and learning at a large public research university, from 2014-2020. Their close to 300 learning goals—and what's missing from those goals--offer powerful lessons for WAC specialists. The centers of gravity within their learning goals included general and discipline-specific questions about designing assignments, teaching writing, responding, learners and learning, and existential questions about WAC.

No one ever said that being or preparing to become a WAC specialist is easy. To succeed long term, WAC specialists eventually need to develop a wide range of skills, knowledge, traits, and experience—and around them, they need to develop a well-structured program and essential institutional support. Strong, enduring WAC programs require thinking in terms of complex systems, in the ways that Cox, Galin, Melzer and other authors highlight in *Sustainable WAC* (2018), and working strategically and being persistent, planning for "gradual rather than rapid reforms" (p. 159). When, as a consultant at other universities, I introduce WAC programs to colleagues who want to develop new programs or reinvigorate languishing ones, I always insist that WAC is maybe one of the ultimate long games within universities—and that WAC specialists have to be satisfied with incremental progress. To advocate for curricular reform within their universities, they need to know proven curricular models for WAC; be collaborative and creative, building

on local strengths and interests; be on the right committees, and cultivate strong, respectful relationships with faculty and administrators; and have real expertise in WAC assessment.

To consult effectively with disciplinary faculty about teaching and assignment design, WAC specialists need to be genuinely interested in and respect the substance and the pedagogy of a wide range of disciplines across a university and have some of the skill sets that Tarabochia (2017) and Jablonski (2006) identify through their research about consultations between cross-curricular literacy (CCL) experts and disciplinary faculty. Also essential is that WAC specialists be prepared to weather some of the clashes and power struggles with disciplinary faculty that Jablonski and Tarabochia illustrate in their case studies. Leading engaging faculty workshops requires managing expectations, having a repertoire of effective examples, designing good learning experiences that respect faculty knowledge, using active learning, in Fulwiler's (1981) terms, "showing, not telling," and featuring local examples and teachers.

That's a daunting list—and of course it's only the beginning. There are WAC theory, history, critical perspectives on WAC, and much more to add. But what should new and future WAC specialists prioritize in their learning? I would argue that because much of the interaction with disciplinary faculty in consultations and workshops focuses on pedagogy, *among* the first priorities, we should aim to build the knowledge that disciplinary faculty expect us to have in order to respond to their pedagogical questions and interests. We need a deep reservoir, actually a blend, of our own pedagogical experience together with models and stories from others, common sense about teaching, great consulting skills, and a collaborative mindset, as well as knowledge of relevant pedagogical research. If we cannot respond effectively to the largely pedagogical concerns that disciplinary colleagues bring to us, if we cannot draw flexibly from a breadth of pedagogical knowledge, we will not be able to earn the trust and respect of disciplinary colleagues across a college or university. Within their pedagogical interests, what do disciplinary faculty most want to learn about WAC?

Answering that question is the focus of this research study, drawing directly from what early-career disciplinary faculty say they want to learn about WAC. This data comes from faculty participating in one of the most successful of the many WAC programs that I led for decades at the University of Wisconsin-Madison, a large public research university in the upper midwestern part of the United States. Designed specifically for assistant professors who learn together in a cohort, this particular program—called *Madison Teaching and Learning Excellence* (MTLE), described in more detail below—is a year-long professional development program and faculty learning community focused on teaching. The WAC unit on writing and research

assignments as learning activities runs for four weeks of the two-semester seminar. At the start of each unit in the MTLE program, all of the participants in this program, who each semester hail from a WAC director's dream of disciplinary diversity, write out learning goals for the new unit. For this research study I have compiled and analyzed the WAC learning goals written by 107 assistant professors participating in twelve MTLE cohorts from 2014-2020.

The results that come from this qualitative research study and the portrait that emerges of early-career disciplinary faculty just beginning to learn about WAC should interest all current and future WAC specialists. The learning goals from these faculty can galvanize both new WAC specialists to set priorities for their own learning and all WAC specialists to make good choices about topics for workshops and seminars, settings in which time is always too short and we have to decide how to condense WAC. It is especially persuasive research, I believe, because the answers came not from faculty checking boxes on closed survey questions, valuable as that kind of data can be, but from the direct language of faculty responding to an open-ended question, identifying what they want to learn about WAC. Of course, each goal is like a hyperlink, which through conversation could lead to complex teaching contexts and histories and possibilities and constraints, all worth exploring. But for research purposes, they are compressed enough to analyze and generalize from a good-sized sample, giving us a good sense of the group and a window into disciplinary faculty interests. To a small degree at least, I hope these faculty learning goals can be seen as a form of the honest, critical reaction and sometimes faculty resistance that Pamela Flash (2016) says we can see in department-meeting discussions of student writing and writing instruction, resistance that the Minnesota WEC model sees as essential to embrace in order to achieve enduring success with WAC. From the MTLE learning goals about WAC in this study, most impressive is the emerging ethos of these assistant professors as teachers and as learners themselves—they come across as thoughtful, honest, appropriately critical, introspective, eager to learn, and open to change, and most are seriously committed to including writing in their teaching. Many of these tenure-track assistant professors pose sophisticated questions, in many cases derived from their experience with using writing assignments in their teaching. Their desire to learn about WAC provides a powerful counter-narrative to common negative perceptions of disciplinary faculty being unwilling to teach with writing in their disciplines.

Within their detailed and specific learning goals, these professors' interests had several centers of gravity—some predictable for any experienced writing instructor and WAC specialist, but others surprising and fascinating—that tell WAC specialists some of what they absolutely need to be prepared to discuss. By far, their top interest was in learning more about designing effective writing assignments; within

their learning goals about designing was a mix of general and discipline-specific interests. Their second greatest interest was in learning more about effective writing instruction—how to teach and to help students learn general and discipline-specific dimensions of academic writing. Their third most common interest—only about half as common as designing—was learning more about responding to and evaluating student writing. The fourth most common theme was what I call an interest in learning and in learners—in guiding their students' development as writers, helping students develop as critical thinkers and strengthening their scientific reasoning, and calibrating the level of complexity of writing assignments. Other fascinating learning goals fell outside of these major categories, including what I call "existential questions about WAC."

Taken as a whole, these learning goals, analyzed in detail below, reflected sophisticated thinking about teaching disciplines with writing, including critical perspectives, and demonstrated a healthy balance between enthusiasm and realism. In their desire to learn more about designing assignments, many of these faculty demonstrated an important awareness of disciplinary norms of discourse. Although many of the learning goals sound familiar to experienced writing instructors and to those who design training for new writing instructors, the particulars of their goals and questions, often grounded in their actual teaching experience, clearly come from situations largely unfamiliar to most writing teachers—large classes, the difficulty of balancing content with writing instruction and support, and discipline-specific genres and research methods within assignments. And within their goals are also examples of what I see as emergent WAC interests in twenty-first-century higher education—such as the challenges of differentiating instruction for heterogeneous literacy preparation among students, sustaining a commitment to teaching with writing as pressure grows to increase class sizes, making collaborative writing assignments work, balancing open-endedness and exploration and curiosity in assignments with students' increasing need and expectations for specificity in assignments, and growing faculty interest in helping students succeed. As important as these WAC pedagogical interests are, WAC specialists also can learn valuable lessons from thinking critically about the learning goals from these disciplinary faculty, noticing key WAC principles that are missing. In response to those gaps, WAC specialists need to be prepared to focus attention on writing to learn; on the rhetorical importance of specifying audiences in assignments and the pedagogical power of conferences with students; on social justice and WAC; and on some WAC theory and research. Although the faculty participants in this study do not represent all faculty at all kinds of colleges and universities, these findings are likely representative of this time in university teaching. And they will contribute, I hope, to our field's continuing push for data-driven research about WAC in general, and in this case about disciplinary faculty.

In what follows, I first explain the MTLE Program, whose culture and curriculum for assistant professors are crucial for this research study; then briefly review WAC literature relevant for this study, focusing on the WAC pedagogical interests of disciplinary faculty and WAC professional education for graduate students; and explain my research design. I then present, analyze, and illustrate the major findings, identifying clusters of WAC pedagogical learning goals from these faculty, thus illuminating key knowledge that WAC professionals need to develop. In the final major section, I explore what's missing from those goals and identify key other lessons for WAC professionals.

The Context for This Study: A Successful, Enduring WAC Partnership

The site for this research study comes from a strong, enduring partnership between the university's WAC program and the Madison Teaching and Learning Excellence program. This partnership is a wonderful model for embedding WAC in a sustained, comprehensive professional development program for faculty—WAC does not need to create its own audience to reach early-career tenure-track faculty, and such a widely respected campus-wide teaching-development program signals that WAC is an integral part of strengthening teaching and learning. It's an example both of the ongoing integration and interconnectivity with campus hubs and of WAC's reaching a constantly expanding circle of tenure-track faculty that Cox et al. (2018) argue is essential for WAC programs to be sustainable. MTLE, which began in 2012, recruits assistant professors from departments across the university to participate actively in a two-semester seminar about teaching and learning. Each semester a new cohort of c. 8–10 faculty begin the program; in more recent years, as the program has become better known and drawn more funding, two cohorts now begin each semester. The assistant professors within those cohorts meet weekly for ninety minutes to support each other in a faculty learning community, the kind of cohort model that leads to substantial development and change in teaching (Beach & Cox, 2009; Desrochers, 2010). The "faculty fellows," as they are called, come from an exhilarating array of disciplines, from music (a professor of clarinet) to chemistry to psychology to engineering physics and computer science. Even in the brief version of its mission, the collaborative ethos of the program and its commitment to empowering faculty as teachers shine through: MTLE "partner[s] with assistant professors to improve teaching and learning" (MTLE, 2020). As it recruits assistant professors at a research-intensive university, the program carefully reassures faculty and department chairs and tenure committees that it helps assistant professors become "fast, effective, and efficient starters in teaching" (MTLE)—so that they can successfully balance demands of research, teaching, and service. To date, 211 tenure-track assistant professors from seventy-three different departments across the university have participated, and multi-faceted

assessments demonstrate that this program has a deep and enduring impact on teaching practices and confidence.

The MTLE program describes itself as an inclusive community of practice, dedicated to being learner centered, evidence based, critically reflective, and grounded in application (C. Castro, personal communication, May 18, 2020). Before their first semester in the program, new faculty fellows participate in a two-day faculty institute on teaching, during which they begin discussing core concepts like backward design, learner-centered approaches to teaching and learning, and syllabus design. In the weekly seminars, faculty have regular opportunities to share and discuss their current teaching successes and challenges and to reflect critically and broadly on their development as teachers. In addition, within each of the two semesters, the curriculum is divided into three- or four-week modules; within each module fellows first set their own learning goals for that topic and discuss core readings and concepts from the scholarship of teaching and learning, then create an artifact "to move from example and theory to action and practice" (C. Castro, personal communication), and then critically reflect on what they have learned and plan next steps to implement their new approach. In the first semester, the modules focus on (a) learning environments, (b) assessment for learning, and (c) deepening learning based on the cognitive science of learning. In the second semester, the modules feature (a) designing effective writing and research assignments, (b) teaching and reaching all students (inclusive teaching practices), and (c) teaching and tenure (C. Castro, personal communication).

In the first of four weeks within the WAC and research-assignment unit, led by both the university's director of WAC and the university libraries' director of teaching and learning, faculty fellows share their experience teaching with writing and research assignments, read and discuss chapters on designing formal writing and research assignments from Bean's (2011) *Engaging Ideas*, and in small groups analyze a sample writing assignment drawn from a course at the university to begin to identify elements of successful assignments. The faculty fellows also receive a copy of *Locally Sourced*, the UW-Madison WAC program's sourcebook for faculty, featuring c. 300 pages of advice and sample assignments developed by faculty and teaching assistants across the disciplines. As homework for the second week, faculty fellows each create a draft of a new or re-designed writing activity for a course they are teaching, and then during the seminar, share and workshop that draft assignment in small groups. For the third week, they discuss and debate principles in the chapter on designing assessment rubrics in Bean, which they read in advance, and plan revisions for their own writing assignment. In the final week, faculty fellows share their revised assignment or sequence of assignments, emphasizing the major changes they have made based on the feedback they received and the readings and discussion. After this four-week unit, each faculty fellow has an hour-long individual consultation—in their office or

lab or a coffee shop on campus—with either the director of the WAC program or the director of teaching and learning from the libraries, to talk in more depth about their plans for writing assignments in their courses and about any other individual pedagogical questions they have about teaching with writing and with research assignments. Having taught these sessions for eight years, I can vouch that the discussions about WAC were consistently smart, sophisticated, honest, and appropriately critical—reflecting the strong learning community developed over many months of weekly MTLE meetings—and the writing assignments that faculty fellows create are usually impressive, often innovative, well aligned with learning goals, and pedagogically enlightened. The MTLE program sends a powerful message about WAC with this four-week unit in its curriculum, and the WAC unit has consistently been rated one of the highest by faculty fellows.

Disciplinary Faculty Learning WAC Pedagogy:
A Brief Review of Related Literature

What do disciplinary faculty want to learn about WAC? Although answering that broad question has not been the specific focus of previous WAC research, we can triangulate toward some answers. Examining what disciplinary faculty are thinking as they design their writing assignments is a welcome emerging focus, resembling some of the early process research in writing studies, now enlightened by insights from activity theory and a fuller appreciation for context. Another way to see some of what disciplinary faculty want to learn is through analysis of consultations between WAC specialists and disciplinary faculty (e.g., Jablonski, 2006; Tarabochia, 2017), through interviews with faculty (e.g., Eodice et al., 2016; Polk, 2019), and through analysis of disciplinary instructors workshopping draft WAC assignments (Hughes & Miller, 2018).

In *Engaged Writers and Dynamic Disciplines*, Thaiss and Zawacki (2006), for example, studied how faculty members' own writing practices influenced their decisions about writing assignments they gave their students. Within the interviews at the heart of that study, disciplinary faculty revealed that they were thinking about a wide range of pedagogical topics as they designed and taught assignments, including complexities of disciplinary expectations and universal expectations for writing, academic writing and alternative discourses, the personal in academic writing, risk-taking, passion, readers, reasoned and evidence-based argument, scientific thinking, motivation, differences in learning goals for general education courses vs. ones for majors, responding to student papers, and rubrics—often using terms to describe expectations for student papers that sounded similar across instructors but had different meanings for each professor. In their study of what makes writing assignments meaningful to students, Eodice, Geller, and Lerner (2016) focused chapter five on

faculty perspectives about assignment design. In their survey responses and interviews, disciplinary faculty signaled interest in, for example, audience, process, student engagement, choice, discovery, student learning, especially content learning, students' personal connection, transfer, depth of thought or reflection, and increasing efficiency in mentoring student-researchers with their writing. Through interviews with faculty teaching writing-intensive courses at George Mason University, Polk (2019) focused attention on elements of designing assignments that have, with a few notable exceptions, received little attention in WAC research—that is, the material and institutional contexts that lie behind assignments. Polk demonstrated just "how complicated designing (and teaching) an assignment can be" (p. 105) in a disciplinary course.

Research on WAC consultations with disciplinary faculty also provides glimpses into what faculty want to learn about WAC. Although most of the case studies in Jablonski's (2006) *Academic Writing Consulting and WAC* focused on defining and theorizing how collaborative relationships between CCLs and disciplinary faculty work, occasionally the pedagogical *topics* of consultations—what seem to be the learning goals of disciplinary faculty—appeared. Those included course design, disciplinary ways of seeing, designing assignments, writing instruction within disciplinary courses, critical pedagogy, faculty resistance, evaluating papers, and improving grammar in student papers. Using sociolinguistic methods, Tarabochia (2017) analyzed case studies of consultations between disciplinary faculty and CCLs from multiple institutions with the goal of developing "a guiding ethic, a spirit, a habit of mind or set of philosophical principles . . . coherent . . . and malleable enough to address the complexity of [WAC] daily work" with disciplinary colleagues (p. 9). Among the WAC pedagogical topics that came up in those consultations were instructors' expertise and authority, audiences, developing detailed assignments, sequencing assignments, process, identifying what faculty value in student writing, connections between disciplinary values and writing activities, style, grading writing, error in student writing, and workload.

In *The WAC Casebook*, a professional development book for current and future WAC specialists, Anson et al. (2002) provide another way to identify what disciplinary faculty want—or need—to learn about WAC pedagogy. The case studies—told by WAC specialists, grounded in authentic experience, many narrated with a deft touch of humor—covered a wide range of the challenges in WAC work, from program development to cross-departmental politics to consulting with disciplinary faculty about designing assignments and doing post-mortems on assignments. Some of the scenarios about consultations between WAC specialists and disciplinary faculty raised some of the same questions and dilemmas that my research study identifies

as faculty learning goals—for example, designing assignments effectively, the disappointing quality of student papers, workload, and student resistance.

Since I suggest that the results of this study give us a data-grounded basis for identifying some of the WAC pedagogical knowledge that new and future WAC directors need to develop, some recent research about WAC professional development for graduate students is relevant for this study. LaFrance and Russell (2018), for example, studied what graduate students learned in a research methods course in writing studies at George Mason University, whose centerpiece was a fascinating crossover WAC research project with a WAC program review, a project grounded in an authentic WAC context. Of course, many WAC programs have long created opportunities for graduate students to be in WAC assistant director and consultant roles so that they can see first-hand some of the pedagogical questions disciplinary faculty bring to WAC conversations. Cripps et al. (2016), for example, offered a persuasive argument for how much graduate-student WAC fellows in the CUNY model learn from their experience, including WAC-specific pedagogies.

Research Design and Methods

This research study aims to give our field a more comprehensive and systematic understanding of what disciplinary faculty want to learn about WAC. As a form of basic research, this study can offer a fuller portrait of disciplinary faculty as WAC learners, illuminating their pedagogical concerns, and at an applied level, it can help our field better prepare current and future WAC specialists to respond to those interests and concerns. Analyzing the learning goals identified by faculty fellows in MTLE, I sought to answer the following interrelated questions:

1. Within their own learning goals, what do early-career tenure-track disciplinary faculty (assistant professors) indicate that they most want to learn about WAC?
2. How general are those learning goals? How discipline-specific?
3. Which central WAC concepts are missing from those goals?
4. What do these learning goals say about how our field conceptualizes disciplinary faculty as WAC learners and their motivations to learn more about WAC?
5. What do WAC specialists need to know in order to help disciplinary faculty learn what they are motivated to learn and what kind of "curriculum" do these learning goals suggest for preparing new and future WAC specialists?

Participants

The participants in this study consisted of 107 tenure-track assistant professors who were from 2014-2020 in 12 different cohorts of the two-semester-long MTLE program at the University of Wisconsin-Madison. Of the 117 total faculty in those MTLE cohorts, 107 completed the learning-goals writing activity (described below), for a response rate of 91.5%. The University of Wisconsin-Madison is a large public research university, currently enrolling about 31,000 undergraduate and about twelve thousand graduate and professional students. To give you some sense of the university's varied priorities—the university is classified as an R1 institution, with very high research activity, and has been in the top ten of all US universities in research spending every year since 1972 (Kassulke, 2019). The university also takes pride in ranking in the top ten nationally in alumni who become corporate CEOs (Knutson, 2016) *and* first nationally in alumni who volunteer for the Peace Corps (Barcus, 2020). The faculty participating in the MTLE program are a consistently diverse group along many dimensions, including a significant number of international faculty. As Table 1 illustrates, the faculty participating in the MTLE cohorts in this study came from an extraordinarily wide array of academic divisions and disciplines, just the kind of disciplinary variety with which WAC programs aspire to connect. These assistant professors represented fifty-five different departments, with 37.4% from the social sciences, 29% from the physical sciences, 19.6% from the arts and humanities, and 14% from the biological sciences. Compared to faculty in the university as a whole, this sample overrepresents the social sciences and physical sciences (by quite a bit) and the arts and humanities (slightly), and significantly underrepresents the biological sciences. In the 2019-20 university-wide headcount of faculty by division at all ranks, 33% were in the biological sciences, 28% in the social sciences, 23% in the physical sciences, and 17% in the arts and humanities (Academic Planning and Institutional Research, 2020, p. 43).

Table 1

Faculty research participants by division and department

Academic Divisions/Departments	# of Faculty in Division/ by Department	# of Departments in Division
Social Sciences	40	19
Agricultural and Applied Economics	1	
Anthropology	1	
Civil Society and Community Studies	1	
Community and Environmental Sociology	1	
Consumer Science	1	
Curriculum and Instruction	4	
Educational Leadership and Policy Analysis	1	
Forest and Wildlife Ecology	1	
Journalism and Mass Communication	1	
Kinesiology	1	
Life Sciences Communication	3	
Nursing	10	
Occupational Therapy	1	
Planning and Landscape Architecture	1	
Political Science	3	
Psychology	3	
Public Affairs	3	
Social Work	2	
Statistics	1	
Physical Sciences	31	15
Astronomy	1	
Biomedical Engineering	1	
Chemistry	3	
Civil and Environmental Engineering	2	
Computer Science	1	
Electrical and Computer Engineering	3	
Engineering Physics	5	
Geography	1	
Geoscience	4	
Industrial and Systems Engineering	1	
Materials Science and Engineering	1	
Mechanical Engineering	2	
Physics	3	
Soil Science	2	
Statistics	1	

Arts and Humanities	21	14
Anthropology	1	
Asian Languages and Cultures	1	
Communication Arts	1	
Comparative Literature	1	
Consumer Science	1	
Design Studies	1	
Educational Psychology	2	
English	2	
French and Italian	1	
German, Nordic, and Slavic	5	
History	1	
Journalism and Mass Communication	2	
Music	1	
Theatre and Drama	1	
Biological Sciences	15	13
Agronomy	1	
Botany	1	
Dairy Science	1	
Dermatology	1	
Food Science	1	
Genetics	1	
Horticulture	2	
Integrative Biology	2	
Kinesiology	1	
Occupational Therapy	1	
Pediatrics	1	
Plant Pathology	1	
Radiology and Medical Physics	1	
Totals	107 faculty	55 different departments

Note. In this table, six departments appear in two different academic divisions (anthropology, journalism and mass communication, and kinesiology, for example), because faculty in some departments can choose the division in which their research best fits for tenure review. In this table, the total number of different departments represented in the study is non-duplicative.

Data Collection

The data for this study came from systematized learning activities embedded within the MTLE program, rather than from instruments or interviews external to the MTLE seminar. Specifically, the learning artifacts analyzed for this study were a regular part of the reflective learning for MTLE faculty fellows, and the artifacts were routinely gathered every semester for IRB-approved assessment and research within MTLE. As part of the MTLE program's commitment to critical reflection, at the start of each module faculty fellows wrote out learning goals for that unit. For the WAC module, the faculty in the cohorts included in this study wrote out responses to this intentionally broad prompt: "In this module, we will be exploring how writing and research can support your learning goals [i.e., the learning goals you establish in your course(s)]. When you think about using writing and research-based learning activities in your course(s), what do you want to know more about?" Almost all faculty fellows hand-wrote their responses for about five minutes at the start of the first seminar meeting in this module; a few who were unable to come to that first meeting sent their responses to the MTLE coordinator in a follow-up email, and a small number (ten) did not submit learning goals for this unit.

Data Analysis

In order to answer my research questions and to characterize the general WAC interests of these faculty, I needed to be able to group their close to three hundred discrete learning goals into categories or clusters of WAC interests (I explain later how I divided clustered goals from faculty into discrete goals for analysis). Developing and selecting themes or codes were complicated, in good ways, because their learning goals were so rich and fascinating and because they represented a wide array of interests—ranging from general interests (from a professor in electrical and computer engineering, "I'm open to learning"), to a specific need to solve a pedagogical problem in a particular course (from a professor in political science, "Redesign the big research project for International Studies 101"), to what I would characterize as wonderful teaching aspirations (from a professor in horticulture, how to "use writing as a [*sic*] feedback from the students about how much they have learned from my classes").

In my first stage of developing codes or themes to analyze the learning goals, I followed Charmaz (2014) and Saldaña (2016) to develop a kind of open coding system, identifying large categories from within the data. Those categories were informed by the major pedagogical elements of WAC—what you could find in a sampling of WAC research and theory, in, for example, Bazerman et al. (2005) and Anson (2015), and in practical WAC guides from across the decades, such as Walvoord (1986),

Howard and Jamieson (1995), Hedengren (2004), and Bean (2011). Through this initial coding, I identified major themes present in the goals and subsequently refined and consolidated those. I then did a second complete coding using these revised themes that emerged from both the data and core concepts in WAC pedagogy: (a) *designing* writing assignments, divided into (a1) general and (a2) discipline-specific concerns; (b) *writing instruction*, (b1) general and (b2) discipline-specific; (c) *responding* to and evaluating student writing; (d) *learning and learners*; and (e) *other* (important) learning goals. Obviously, as useful as they can be for identifying clusters of interests, these categories are flawed: simple labels are reductive and, as in all such research, themes or codes overlap—designing assignments, for example, is a dimension of teaching writing, and so are responding and evaluating. These themes would, honestly, be better represented as a Venn diagram than as a linear list. Nevertheless, these themes clearly emerge as major and distinct centers of gravity within the WAC learning goals of these faculty, and these categories give us invaluable insights into what disciplinary faculty want to learn about WAC.

In order to do some quantitative analyses, after having established the major themes but before actually coding individual goals, I had to decide what to count as a single goal within the free-form text written by the faculty. In some cases, that was easy—I simply followed the natural divisions that the research participants had created when they wrote their goals. Often, they numbered their goals or separated them with bullet points in a list. Even if they did not number or mark them visually as separate, there usually were logical breaks by sentences or within a paragraph, demarcating clearly different goals. Dividing the goals in this way created a total of 281 of what I call *disaggregated WAC learning goals* from the 107 research participants.

In most cases, I was able to assign one code for each goal. Because of the breadth of their content, however, quite a few goals clearly required assigning two (and in some rare cases three) codes. Doing so more accurately reflected their content and allowed for a fair representation in the quantitative findings. Of the 281 separate WAC learning goals, 191 were assigned a single code, and ninety had two or more codes. In total, 389 codes were assigned to the 281 separate learning goals. Here are two examples of goals that each ended up with two codes: first, from a faculty member in public affairs, "How to design them [writing assignments] to encourage good research without killing myself grading." I assigned two codes to that goal—designing assignments and responding and evaluating (the latter also includes a subcategory about workload). Second, from a faculty member in biomedical engineering, "How can I use writing and research to bridge the basic concepts students learn in my class to what they will 'actually do' as biomedical engineers?" I coded this in two different categories—designing assignments (in both the general and the discipline-specific

designing subcategories) and in learning and learners, the latter because of the specific focus on student learning.

In a very few situations, the research participants' specific language made it clear that my usual code for that pedagogical topic was *not* the right choice. For example, quite a few faculty expressed interest in learning more about group papers and collaborative writing, topics I coded in the instruction category. But in a few cases the faculty member's language for that particular goal (e.g., some form of "Should I assign a group paper or always individual?") warranted its coding in the designing category. Ultimately, what matters most is not the results of sorting a few difficult learning goals but rather representing the clusters of interests, which I try to do as comprehensively as possible in the findings that follow.

Findings: The Key WAC Learning Goals from Disciplinary Faculty

Enthusiastic Learners and Dedicated Teachers

Within all of these learning goals from 107 different faculty, what is most striking is not any particular theme in their goals. It is how engaged the vast majority of faculty fellows seemed to be with this unit in MTLE, judging from how fully they responded to the prompt, from how many learning goals they identified, and from the length and specificity of their goals. Table 2 gives a quantitative sense of the heft of these goals—the average length of each faculty member's goals was almost seventy-three words.

Table 2

Count of WAC learning goals and word averages per goal and per faculty participant

Number of Faculty Submitting WAC Learning Goals	107
Number of Disaggregated Goals	281
Mean Number of Goals Per Faculty Participant	2.63
Total Number of Words in All of the Written Learning Goals	7786
Mean Number of Words in Goals for Each Faculty Participant	72.8
Mean Number of Words Per Disaggregated Goal	27.7

From their responses, I could offer so many impressive examples of learning goals and questions about teaching with writing in disciplines across the university that, although they would warm the hearts of every WAC professional, they would become tiresome to read. Here are a few just to give a flavor of their thoughtfulness and engagement. From a professor in geography:

My courses are mostly technique oriented . . . [on] . . . geospatial technology . . . [and the] spatial web and mobile programming. Most of class assignments . . . are related to design and implement a tool, software and database. The final project proposal and project report are the only two writing assignments. I would like to learn how to leverage these two assignments to motivate students [to] think critically, frame scientific questions, check what have [*sic*] been done (find the sources) and then learn how to design and implement things to answer the questions.

From a professor in plant pathology:

A major learning goal of my course is for students to be able to use evidence in order to make or evaluate claims (evidence-based thinking) . . . My course . . . is more narrowly centered on quantitative data/experimental designs, but I hope the skills are generalizable. I would like to learn more about how I can use writing (or other assignments) to help students develop these skills, and also help me assess their progress. My course involves a semester[-]long research project that has both shared data[-]collection aspects and individualized hypothesis[-]generating and data[-]interpretation aspects. We also do shorter writing assignments around published literature throughout the semester. I'd like to think more about using the course sequence more effectively to build up and practice these skills before their final reports.

In this goal from a professor in materials science and engineering, even when he wondered about writing's place in undergraduate teaching within his discipline, historically based on problem sets, note how the way he framed the question indicated interest and openness: "What are effective/reasonable strategies for designing writing assignments in courses that are historically problem-set based?" Of course, to some degree, these enlightened, sophisticated learning goals for WAC reflect the self-selected group of faculty who chose to participate in MTLE, but they also offered a very encouraging portrait of early-career disciplinary faculty who will become the future of WAC.

Table 3 summarizes the central findings from this study—the most common WAC learning goals from these disciplinary faculty, in order of their frequency. To give an accurate sense of the power of discipline-specific interests within the first two themes—designing and teaching—I have provided overall quantitative totals along with breakout totals for general and for discipline-specific goals within those overall categories. (Some goals in the designing category had both general and discipline-specific elements.) Within the responding and evaluating theme, I have provided

a subtotal for goals related to an important concern among faculty—managing the workload involved in responding to student writing in pedagogically effective ways.

Table 3

Major themes in 281 disaggregated WAC learning goals from assistant professors, 2014-2020

Theme/Code	Subthemes and Examples	#
Designing assignments	**Total for <u>All</u> Kinds of Goals Related to Designing Assignments**	130
	General Goals Related to Designing (in 78 goals): choosing kind of assignment; expanding repertoire; creating innovative assignments; aligning with learning goals; sequencing; scope; manageable assignments for large(r) classes; formative, writing to learn (WTL), low-stakes, in-class assignments; short online assignments; clarifying expectations; specificity and choice within assignments; presentation assignments; written discussions in online and hybrid courses.	
	Discipline-Specific Goals Related to Designing Assignments (in 56 goals): choosing specific kinds of assignments to teach disciplinary ways of thinking; designing business-plan assignments, NSF proposal assignments; breaking free from limited disciplinary forms of writing; sacrificing student interest in order to scaffold disciplinary learning; choosing the focus for writing assignments in graduate courses in the sciences.	
Writing pedagogy within disciplinary courses	**Total for <u>All</u> Kinds of Goals Related to Writing Pedagogy**	99
	General Writing Instruction (in 69 goals): embedding instruction to help students succeed with writing assignments; scaffolding, process; teaching and motivating revision; guiding topic selection; strengthening peer review; improving group papers and collaborative writing; using models/examples; teaching students to give presentations, use sources effectively, improve organization, cite sources responsibly; integrating writing into class activities.	
	Discipline-Specific Writing Instruction (in 30 goals): teaching students the difference between description and analysis in literary analysis papers; the difference between academic and clinical writing in occupational therapy; how to make arguments in nursing papers rather than listing facts.	

Responding and evaluating	Total for <u>All</u> Kinds of Goals Related to Responding and Evaluating	76
	Responding to and Evaluating Student Writing: assessing student writing; providing effective feedback; developing rubrics, including critical perspectives on rubrics; choosing what to prioritize in feedback; not overwhelming students; respecting differences in students' preparation for writing activities; being fair; teaching TAs to evaluate student writing; giving feedback on group papers.	
	Managing Workload (in 23 goals): increasing efficiency; setting limits on feedback; not overburdening TAs and professors as enrollments increase.	
Learners and learning (through writing)	**Student-Writers as Learners and Learning Goals of Assignments**: aligning assignments with learners; improving critical thinking, evidence-based thinking, scientific reasoning; thinking about students developmentally; calibrating level of complexity in assignments; teaching heterogeneous groups of learners; engaging, interesting, and motivating students about writing and learning; considering workload for students; considering fairness to students from a social-justice perspective; fostering student learning from each other; helping graduate students develop and recognizing tensions between course writing and dissertation writing; motivating students about writing and learning; activating previous knowledge and building confidence.	64
Other important learning goals	**WAC Faculty as Learners**: WAC resources for faculty; seeing samples of how other faculty use writing; campus resources for faculty writers; the writing center; teaching library research skills; faculty learning from student papers.	12
Existential WAC	**Some Big Questions**: whether to teach with writing; role of writing assignments in my discipline.	8

Designing Assignments

Of the 281 disaggregated goals, 130 had designing assignments among their codes; thus, 46.3% of all of the goals included a concern with designing. So designing was by far the most common concern compared to the other categories of learning goals. The next closest was writing pedagogy or instruction, present in ninety-nine of the disaggregated goals. Based on my experience with WAC faculty workshops, seeing designing as the top interest was a somewhat surprising and a very encouraging finding. Over decades, in many different settings, my WAC colleagues and I consistently found that when we offered a series of à la carte workshops, many more instructors at all stages of their careers would choose to go to a WAC workshop on responding and evaluating than to one on designing. We found this preference disappointing because we believed that designing effective assignments is the heart of WAC, the key to influence the quality of student papers. Reading these learning goals about designing writing activities as a group of goals by themselves, as I have done many times, is absolutely fascinating. As we will see, these designing goals demonstrate faculty deeply engaged with creating assignments that help students succeed in learning complex subject matter. These goals also present a daunting challenge to WAC

specialists—we need to know a broad repertoire of assignments and consider all kinds of axes—including disciplines, curriculum, learning setting, genre, the students' preparation for doing this kind of thinking and writing, sequence, and multi-modal assignments.

General. The designing goals ranged from a general quest for universal principles (from a professor in computer science who simply wanted to learn "how to structure the writing assignment"; sometimes with a touch of humor, as in this goal from a professor in geoscience: "How to write an assignment that inevitably results in students learning to write better") to very specific questions anchored in a specific course with a specific curriculum, particular size enrollment, and a sometimes vexed history with specific writing assignments. Among the seventy-eight WAC learning goals coded for *general* designing goals, several subthemes emerged. One of the most conspicuous, which is intertwined with the theme discussed below on learners and learning, emphasized the connection between assignment design and learning goals. This keen interest in connecting writing activities with learning goals reflects the MTLE program's focus on articulating specific learning goals for courses and for all learning activities. A dermatology professor, for example, wanted to "learn how to improve my designing so that the assignments can better align with my learning outcomes." A professor in industrial and systems engineering wanted to learn "how to match the scope/complexity of the writing assignment to the targeted learning outcome." Having disciplinary faculty lead with an interest in tying writing activities with learning goals is obviously a dream for WAC specialists. Quite a few faculty expressed interest in designing more effective semester-long research projects or assignments for capstone courses in the major: from a professor in English, "I've scaffolded research papers before and created a set of assignments (low stakes) but I don't know how to get students to *develop* [emphasis in original] their topic over the course of assignments."

A number of faculty were especially interested in learning how to clarify their assignments for students (of the 130 designing codes, thirteen specifically mentioned clarifying assignments). In a sophisticated framing of this goal, some faculty specifically wanted to explore tensions or trade-offs between specificity and open-endedness in assignment design. A professor in social work set this as a learning goal: "I teach a research-level class every year that has a writing assignment. Want to determine how to best balance open-endedness and clear guidelines." A professor in anthropology asked simply, "How much guidance is enough? How much is too much?" And a professor in psychology wanted to explore the "balance between being very specific in your writing assignment versus more general so students can provide more unique insights, even if it is unstructured." Polk's (2019) interviews with disciplinary faculty about the decisions behind their assignment designs reveal similar kinds of concerns.

In another of the most common general designing goals, a number of faculty wanted to think expansively and critically about the choice of genre for an assignment, moving beyond constraints of defaults in their disciplines. Some expressed interest in new-media assignments and in experimenting with genres. For example, a professor in the German, Nordic, and Slavic department wrote, "I also would like to know more about how to better utilize the online discussion forum that I already use." A professor in nursing wanted to explore "unique writing assignments—i.e., what kinds of assignments outside of literature reviews and research proposals." And a professor in consumer sciences wanted to learn about "writing assignments beyond the research paper such as book reviews, article reviews, etc."

Inspired by their own teaching experience and, in some cases, by examples they encountered reading from Bean (2011) for the MTLE seminar, a few faculty set designing goals specifically about low-stakes, informal, WTL writing assignments (this relative lack of interest in WTL is discussed below). A professor in physics explained,

> I'm currently giving a weekly writing assignment to my Physics 115 class of non-science majors. It is a simple one-paragraph response to an article of their choosing in current events concerning energy, providing a critical reaction and/or connecting to what we learn in class. I'm using the discussion forum component of Canvas for this, which provides integrated quick grading for the TA and I'm using a 3[-]point scale (1 for poor, 2 for good, 3 for outstanding). The question is how to structure the writing assignment. . . .

A professor in political science wanted to learn about the relationship between shorter informal assignments (in some cases new media assignments) and a longer more formal paper: "tying reading, short, less formal assignments (blogs), and long form together."

Finally, in this category of general goals about designing assignments, a number of faculty understandably raised tensions around workload (these appear in designing goals as well as in learning goals about responding and evaluating). Increasing enrollments in courses—and pressures to continue to increase enrollments in courses—are part of what I see as emergent or intensifying WAC challenges and learning goals in the twenty-first century. A professor in psychology explained,

> I tend to give writing assignments in which students choose their own topic (e.g., research question) and I try to help guide them through that individualized research. It would be helpful to develop skills to do that more effectively, especially by providing guidelines to the class as a *whole*, rather than relying on 1-on-1 meetings (that can take an hour . . .) with each

student. I love giving them that individual attention, but I have only done it in small classes, and I don't see how it could scale to a class of 90 students, as I have now. I avoided the issue by not assigning a paper to my 90[-]person lecture class this semester, but I would like to consider assigning a paper in the future for this class.

And another physics professor asked the extreme version of this question, "Are there any feasible writing activities for a class of 500+ people, assuming that there is minimal time for grading?"

Discipline-Specific. Within the designing goals, fifty-six focused on more discipline-specific designing interests, part of a powerful strand reflecting the WID awareness and interests of these assistant professors. Some are exploratory about possible kinds of assignments to help students learn disciplinary content, often in the sciences:

- From a professor in physics: "Writing as a way to learn basic physics equations?"
- From a professor in chemistry: I want to "incorporate scientific writing into my 2nd[-]semester, sophomore organic chemistry class. I think it could be very valuable, and am willing to take some risks, but right now I'm pretty lost for where to start. News/commentary article on a reaction? Research how a particular transformation is used? Write an explanation for why a particular transformation works in their own words?"
- From a professor in engineering physics: In my field "writing assignments are more or less always structured as: -statement of problem; -derivation of the solution using math and physics; -finding the solution; -then go to the next problem. I'd like to know more about ways to avoid this type of structures [sic] to foster student's critical thinking, innovative thoughts, etc. . . . I've tried a few things such as case studies/ structured homeworks with one goal overall and not a series of questions . . . but it is still a work in progress. . . ."
- From a professor in materials science and engineering: "I'd like to design an assignment for my senior undergrad/first-year grad course where they review a controversial topic in the current literature and design a set of experiments to test the controversial idea. What are some good strategies for scaffolding such an assignment over the course of half a semester?"

Some interests are tied to a particular genre, as in this example from a professor in communication arts: "I primarily teach media production classes in which students create video and web-based projects (podcasts, too). . . . So advice on conducting research on an industry and creating a business plan, rather than an essay, would be

helpful." And this impressive learning goal from a professor in French gets to the heart of disciplinary thinking and analysis of literary texts at the undergraduate level:

> I have been teaching the intro to literary analysis course . . . and this has been challenging, because it is the course where our students actually begin writing analytically. I quickly discovered that students don't automatically know how to do close readings of literary texts. It is more natural for them to [do] surface readings, to talk about what happens or to extrapolate some kind of message based on what happened. What I want them to do is show how texts make meaning and produce effects on readers. So, each of the semesters I've taught the course I've been making modifications and trying to find the best ways to get them doing this kind of analysis. My question is this: 1. My students write three compositions and I always leave it up to them to choose their subject. However, I wonder if it would not be better, at their level, to give them a more specific composition prompt, such as questions to choose from that they would have to answer, etc. My worry is that this will prevent them from writing about the aspects of the text that really interest them and impose a direction on their compositions (but perhaps, for many, this is needed?).

Finally, not surprisingly given the graduate-level teaching that many of these faculty do, quite a few were interested in learning better how to design assignments for their graduate courses, including ways to address this common tension in PhD coursework vs. lab research in the sciences:

- From a professor in soil science: "How to balance—for grad students—relevant writing activities with not 'wasting time' on research outside their actual thesis/dissertation project. Considering introducing independent research project, but not sure of value."
- From a professor in botany: "my new grad students (and future ones) have to submit an NSF proposal that's due in November (after starting in September). How can I jump start them more effectively?"

Writing Pedagogy

After designing, the second most common theme within all the goals involved learning more about pedagogy, about teaching writing more successfully—of the 281 total goals, ninety-nine (35%) had instruction among their codes. In this category, interests in general writing pedagogy (sixty-nine) far outweighed discipline-specific interests (thirty). It was heartening to see among these faculty a widespread recognition that in order to succeed with WAC, faculty need to do much more than simply

assign writing; they need to integrate targeted writing instruction into their courses and develop effective and manageable writing processes for assignments.

General. This category included such common pedagogical interests as how to help students succeed with writing assignments, coaching students through the writing process, scaffolding learning about writing, helping students make good choices about topics, using model papers, teaching and motivating revision, and improving outcomes of peer review. Some faculty expressed interest in learning how to teach foundational and transferable writing skills: for example, teaching organization, teaching students to make effective presentations, and teaching students to acknowledge and use sources effectively. And in what I see as an emerging pedagogical interest among disciplinary faculty, there was quite a bit of interest in helping students write effective group papers and improve the process of collaborative writing.

In what could be an epigraph for this category of goals, this honest, self-critical perspective from a history professor signals how clearly many of these faculty saw instruction as their responsibility:

> I want to better incorporate and set up writing assignments in class. They always feel like they are not as connected to course interest as they could be. And I also have a hard time setting them up and making goals and assessment clear. I know that this causes students some amount of anxiety.

Demonstrating an impressive understanding of process-writing instruction, a statistics professor wanted to learn more about

> Pre-writing activity. How to efficiently engage students into [*sic*] the topics before drafting. For example, design brainstorming sessions to prepare students for the background knowledge/supporting vocabulary. Post-writing activity. Discuss writing quality with students and identify their areas for improvement. Give feedback individually or as a collaborative process.

A horticulture professor had the pragmatic and important goal of learning to teach students "how to properly cite and not plagiarize," while a geoscience professor had the wonderfully ambitious goal of learning "how to get students to take risks and/ or step up their creativity." Quite a few faculty shared this psychology professor's concern and wanted to learn more about "peer review, focusing on student learning—should I continue doing this? Not every student appears to benefit from this." And in what I see as an emerging pedagogical interest among disciplinary faculty, often borne out of disappointing experience, many of these faculty wanted to learn how to help students write effective group papers and improve the process of collaborative writing. The challenges center on group dynamics, the distribution of labor,

and the approaches to collaborative writing. A consumer science professor was not alone in wanting to learn how to "organize collaborative groups." A professor from geography wanted to learn, "for a team project, how to motivate all team members [to] engage the thinking and writing process." And a nursing professor described a familiar challenge across the curriculum: "How to develop group/team writing products that require some integration (vs. divide and conquer where students write different sections of report) of writing (team writing, shared accountability for clarity, writing quality)."

Discipline-Specific. Within their WAC learning goals, many faculty demonstrated a substantial awareness of disciplinary differences in discourse and in the writing instruction essential within disciplinary courses to help students develop their thinking and writing within disciplines. A professor in the German, Nordic, and Slavic department, for example, wanted to learn

> how to convey to students the differences between description and analytic writing. . . . *What's a thesis statement [within a literary analysis paper]?* I directly address this with students and feel like I always fail. . . . Finding a way to also inspire creativity in analysis but grounding these ideas empirically when appropriate.

A professor in Asian languages and cultures echoed that goal: "I'd like to know more about how to help students, coming from different backgrounds, understand the difference between an 'argument' and a 'description.'" A professor in planning and landscape architecture conveyed some of the complex choices instructors have when they try to help students develop better analytical skills: "How to improve critical analysis . . . I tend to be disappointed with most (not all) students' analytical ability and would like to continually strengthen that. I see theory as one of the most important means to improve analysis, but teaching theory is hard without significant time."

Faculty in a wide range of social and natural sciences expressed similar goals within their disciplines. A professor in nursing, for example, wanted to learn "how to encourage scholarly/scientific writing, development of persuasive arguments, rather than present a litany of facts." A professor in dairy science knew that students needed help "learning to summarize scientific literature and focus on what is important." With this goal, a professor in occupational therapy seemed to be speaking on behalf of the discipline, with its clear pre-professional focus: "Teaching our students the difference[s] and similarities between academic and clinical writing. . . . Transitioning students from 'evaluation' to 'treatment' writing assignments in clinical courses." And, finally, a professor from electrical and computer engineering captured some

of the familiar challenges and tensions within WAC consultations around students' lack of preparation for discipline-specific kinds of writing, perhaps raising questions about whose responsibility this instruction is: "Teaching students scientific, logically structured writing before they start (many students choose technical education because they don't want to/like to write." This is a pedagogical question, for sure, but also a question about motivating learning—a subtheme that surfaces regularly throughout these WAC learning goals for faculty. Faculty want students to view writing as central to their disciplines but need some help as teachers trying to inspire that interest and encouraging students to do the hard work necessary to develop as disciplinary writers.

Responding and Evaluating

The third most common category of WAC learning goals involved what in many WAC workshops and consultations seems always to be the primary (even the sole) interest of disciplinary faculty—learning to respond to, give feedback on, and evaluate or assess student writing effectively. Of the 281 disaggregated goals, seventy-six had responding and evaluating among their codes, so 27% of all of the goals included this concern. The variety of faculty interests demonstrated, once again, how much knowledge and pedagogical dexterity WAC specialists need in order to respond. Some of the learning goals were as general as this from a professor in the German, Nordic, and Slavic department who wanted to learn "best practices for grading and providing feedback on writing assignments." A nursing professor was focused on the students' perspective receiving feedback: "[I want to learn] how to provide feedback to students that are [*sic*] not overwhelming (e.g., with lots of track changes or comments)." A professor in journalism and mass communication wanted to learn about "grading along multiple axes (content, style, etc.)."

That kind of interest in the "multiple axes" of evaluation inevitably led to faculty wanting to learn to develop rubrics, in which there was a lot of interest—the word "rubric" appears in twenty-six goals. To respond to these kinds of learning goals, in which faculty signal an understanding of the multiple, often overly ambitious goals for rubrics—"develop quality rubrics for evaluating the assignments" (dermatology); "developing rubrics that can effectively assess the quality of work" (social work); "how to formulate rubrics that are helpful to students" (geoscience)—WAC specialists need to have clear concepts about what makes for effective rubrics and be skilled at guiding, in conversation, a disciplinary colleague through the process of developing a draft rubric. Within their goals, numerous faculty also demonstrated critical perspectives, some impressive insights into the problems with rubrics. As one nursing professor exclaimed, "RUBRICS! I struggle putting words to paper of what I am looking for in the writing assignments at times beyond the actual elements of

what to include [in the paper]." Another nursing professor asked, "evaluating the success and/or learning of the student using the assignment—are rubrics the only way? What if students demonstrate growth but still do not hit rubric benchmarks?" A food science professor described a common disappointment that rubrics are not saviors:

> I did some writing assignments in the past and gave students rubrics with the assignment. Many students just didn't get it. Other students did get it. But I was afraid that they did not learn how to structure [their] writing because the rubrics gave them an idea on how to structure their writings.

And within one of his learning goals, a psychology professor signaled such an awareness of the limits of generic evaluation rubrics that it seems like a perfect lead into Anson et al.'s (2012) "Weird Genres and Big Rubrics": "[My] writing/research assignment can be fulfilled in multiple media (e.g., a traditional paper, a video, a brochure/booklet). I wrote one rubric for all, but that led to it being somewhat more abstract than I would have hoped."

It was no surprise that some of these faculty were concerned about how much time it takes to give good feedback on student writing, at both formative and summative stages: twenty-three of the seventy-six responding and evaluating goals had some focus on efficiency, time, or workload. A professor in kinesiology wanted to learn "better ways to grade quickly and fairly. I use rubrics but still feel like it is burdensome and not all that objective. I don't have TA support, so get bogged down with the grading." Giving high-quality feedback to large numbers of students admittedly imperils research time, a trade-off just beneath the surface of this goal from a chemistry professor who clearly had a strong commitment to teaching:

> Writing skills are vital for scientists, but we don't traditionally teach scientific writing. I make it a central part of my graduate course that 1st years take. I know I have a *long* way to go to improve, but right now I'm losing a lot of time giving feedback for each student's writing. How can I make this more efficient?

In a familiar twenty-first-century WAC concern, a professor in curriculum and instruction echoed this challenge about high enrollments in masters-level courses: "One thing I'm finding particularly challenging is providing substantive feedback on student writing when I teach large sections of Master's courses (n=60)." And many of these faculty were concerned not only with their workload but also with the labor situation of their graduate TAs, an important matter in a research university, concerns demonstrated by a physics professor who wanted to learn to balance "feedback best for students and still keep it manageable for the TA who is now grading 120 (previously eighty) weekly submissions."

To respond to these legitimate concerns, WAC specialists have to strike a delicate balance. As we collaborate with disciplinary colleagues, we need to share a range of options for responding to and evaluating student writing and we need to acknowledge that workload concerns are real—at every kind of college or university or school. Teaching with writing takes time, and every instructor has too many demands competing for that time, and too many classes enroll too many students. With the exception of a few low-stakes assignments and a few stages of a longer writing process, students need and deserve guidance and feedback on their ideas and analyses and arguments to help them deepen their thinking and learning and strengthen their communication. So the goal is to share methods that are effective pedagogically and to suggest possible efficiencies within those methods.

Finally, some of the questions about time posed by disciplinary faculty ventured into fascinating territory far beyond that concern. For example, an agronomy professor opened up important (and familiar) questions about pedagogical priorities and responsibilities and WAC philosophy:

> [I assign] individual reflections and team group final reports. I always wonder how much correction I should/can/must do in those assignments (e.g., grammar, typos, vocabulary, style, syntax . . . or only focus on the idea I think they want to convey—which may differ from what is actually written). Should my goals be to improve their writing skills? Or should I have the goal of them reflecting and thinking, and let someone else take care of helping them with writing? Giving [*sic*] my resources and my time, how can I help them without being [*sic*] all day reading and correcting assignments?

A few of their learning goals about responding and evaluating revealed important social-justice concerns about fairness for student-writers and about differences in literacy preparation for disciplinary discourse. A professor in horticulture set as a goal, "how can I make [assignments and assessment] fair for all students regardless of their background and writing skills." A professor in nursing asked, "how do we assess for different writing levels and abilities?" A faculty member in electrical and computer engineering recognized the ways that standards for evaluating writing can interfere with some of the best goals of education; this professor wanted to learn "how to evaluate writing while leaving space for student discovery and growth." These are wonderful concerns for a few faculty to have raised, but, as I will discuss below, WAC specialists have an opportunity to make social justice and diversity much more central to the WAC pedagogical interests of disciplinary faculty.

Learners and Learning

One of the most exciting findings in this study, beyond the striking interest in designing, was how much emphasis these faculty placed on thinking about their students as learners and how much awareness faculty displayed about learning goals for writing activities. Of the 281 disaggregated goals, sixty-four had learners and learning among their codes, so 24% of all of the goals included these concerns. What stands out within these goals are two things: first, these faculty see writing and thinking and learning the subject matter and methods of a discipline as inextricably linked; and second, these faculty have a refreshing focus on students as complex learners, adopting a kind of constructivist view (Baviskar, Hartle, & Whitney, 2009) of students, recognizing that they have differing home discourse communities, differing degrees of motivation, differing levels of experience and skill with writing, and different material circumstances for learning. To some extent, these interests in learners and learning are just what we would expect in the self-selected group of faculty who chose to participate in a year-long faculty learning community on teaching and learning. These interests also obviously reflected the emphasis within MTLE on learning principles and on students as learners, and it was encouraging to see the core curriculum in a carefully conceived professional-development program transfer into specific faculty interests in WAC. But I also believe that the widespread evidence from this study reflects a growing trend for many twenty-first-century faculty to begin their faculty careers with a student-centered orientation and a desire to teach in ways that align with what we know about how students learn.

A number of faculty, especially from the sciences, raised what I see from WAC consulting experience as a frequent concern in the past twenty years or so—how to motivate students to do the hard work of writing and to see writing as integral to learning the subject matter of a course:

- "How to engage the students and not make it a boring tedious homework." (horticulture)
- "What I need to think about when integrating a writing assignment into the course to make it seem like a perfect fit to students. How do I show them this is what is the best approach for learning?" (statistics)
- "I want to know how to make student[s] understand that this writing assignment is [not] only for the writing purpose but serves the course learning objectives." (life sciences communication)
- "How much help/guidance to give students to trigger/motivate self-learning." (engineering physics)

Beyond motivating students, some faculty raised learning- and learner-focused questions about calibrating the level of difficulty for assignments (for a similar finding, see Polk, 2019, p. 97), about differentiating instruction, and about workload and fairness for students. An English professor, for example, wanted to learn "how to differentiate (scaffolding) assignments for advanced students (grads) undergrads." A professor in life sciences communication linked the level of difficulty with the open-endedness of an assignment:

> How to calibrate the level of difficulty—allowing more freedom and risking making it too hard vs. making more restrictions and making it easier. More freedom is better for students that can learn more, but too much freedom leads to paralysis. What are good ways of figuring out where to set the bar?

A professor in journalism and mass communication wondered what assumptions to make about prior knowledge for a long research paper in a history course:

> They have to be juniors and seniors, but I worry I'm assuming too much prior knowledge. Also want to figure out if the two prep assignments (critiques of old student papers and a proposal including research questions and primary/secondary sources) are sufficient prep or are too difficult in themselves.

Many faculty identified what I see as a twenty-first-century WAC concern—the teaching challenges that come with the increasing heterogeneity of students' preparation for course content. A professor in public affairs asked, "How [should I] design a writing assignment if students' background varies a lot?" Some faculty focused on another twenty-first-century WAC concern, new kinds of courses and learners. A professor in nursing explained,

> As I consider the inclusion of writing and research-based learning activities in my course (N318 Pathophysiology Essentials for Nursing Practice), I am challenged to ensure the assignments are a good fit for a heterogeneous learning group. This course, first in our new Accelerated BSN program, is comprised of students that are diverse in many ways, including time and setting of post degree/pre-requisites.

As they thought about students as learners, numerous faculty took an empathetic view, expressing concern about students' workloads. A professor in occupational therapy recognized the difficult professional situation many advanced students were in: "[For my evaluations of students' writing, I want to learn more about] balancing [considering both] effort and end product. (My learners are professionals working

online toward a post-professional doctorate. They are working 40+ hours a week and have real lives to manage.)" A professor in educational leadership and policy analysis posed a universal question about designing writing assignments: "How much is too much? How do I gauge the amount and difficulty of work I assign students before I get my end of the semester evaluations?"

Many, many faculty wanted help with achieving their big-picture learning goals for their students—helping students develop their critical thinking, scientific reasoning, ability to support arguments with disciplinary evidence, creativity, intellectual risk-taking, activation of prior knowledge, and confidence. Critical thinking was often the starting point, then intellectual risk-taking and creativity:

- "[I would like to learn] components that I should include to enhance students' critical thinking" (social work).
- "I'd like . . . to foster students' critical thinking, innovative thoughts." (engineering physics)
- "How to get students to take risks and/or step up their creativity." (geoscience)

A professor in theatre and drama wanted to learn how to help students to push beyond binaries:

> As the outcomes/goals from [my] classes are very personal based—it would be how to teach/encourage self-reflection. Many students want to be told right/wrong and that's not how the work is in my discipline. To help them think past good/bad responses and dig deeper.

A professor in horticulture used disciplinary examples, explaining, "I would like [my students] to be able to express their own opinion about certain controversial topics in my field (e.g. organic vs. conv[entional] GMO [genetically modified organisms] vs. Non-GMO; 3rd world countries['] fruit production; environmental concerns)." From a professor in integrative biology: "[I want my students to learn through writing assignments to] identify and examine the reasoning of scientific works; interrogate scientific writing for weaknesses and logical gaps." A professor in agricultural and applied economics shared this goal and raised challenging questions:

> For my undergraduate course, I'd like to better understand how to encourage critical thinking through engaging with the academic literature to help support an original argument. Or I wonder whether if this is too much to expect. There are always a few students that do this, but many do not.

And an English professor had this inspiring goal for learners and learning: "I'd also like to learn how to activate previous knowledge (confidence helps with the writing process—how do I help students understand that they already have the tools)."

Other Great Learning Goals and Existential WAC

Although relatively few goals fell outside the core themes (n=12), these are worth mentioning in order to fill out the picture of faculty WAC interests. Several faculty wanted to learn how to help students develop their library research skills and how to collaborate with the university's instructional librarians. Some had questions about working effectively with the university's writing center, and others had WAC-program questions about criteria for writing-intensive courses and wanted to see more samples of successful assignments from various disciplines. One professor wanted to learn about campus resources to help faculty with their own scholarly writing. And an engineering physics professor had a fabulous question, a different take on learning and WAC: "[I want to learn] how to use writing assignments as an assessment tool to know if my teaching methods are effective."

There is one more finding worth reporting here, one more kind of question that WAC specialists need to be prepared to address regularly. In their learning goals, a few (n=8) faculty asked very big questions, what I like to call "existential questions" about WAC—essentially how to sell WAC to students, whether WAC is worth doing for faculty and students, and what works in WAC. A computer science professor, for example, asked "how to convince computer science students that writing is important." A chemistry professor explained, "I think my question is: For science majors, in what circumstance should I use writing-based activities? And what is the benefit of using that?" And a geoscience professor conveyed a lot in very few words: "[I want to learn] what works! And what doesn't. Empirically." These are serious, important, appropriately skeptical and challenging questions, ones shared, no doubt, by almost all of the faculty in these learning communities—and they provide just the kind of opening for a conversation that WAC specialists relish.

Beyond the Particular Goals: Other Lessons for WAC Specialists

As I have argued, these particular pedagogical topics can serve as a sort of curriculum for new and future WAC specialists, with the quantitative findings guiding priorities. Beyond that, these learning goals from disciplinary faculty—including what is *missing* from their goals—offer other important lessons for WAC specialists. The first lesson comes from the heartening trends within these learning goals, ones every WAC professional should be delighted to see, especially as disciplinary faculty face more pressures than ever as teachers and researchers. As we have seen, these early-career faculty were almost universally open to learning more about teaching with writing,

and they were eager to use writing activities to foster student learning in their courses; they were more interested in assignment design than in managing the grading load; many were already using formal writing assignments in smart, effective ways; and, at least in their initial concerns, they put relatively little emphasis on grammar and mechanics. These faculty demonstrated, for the most part, a refreshingly positive attitude toward students and writing. Although there was a justifiable wariness about the potentially overwhelming workload associated with WAC pedagogy, there was very little of the negativity or complaint culture about student writing so familiar to experienced WAC workshop leaders. One professor, from educational psychology, said "ugh" when talking about reading student papers. And a professor from kinesiology said, "I struggle with lowering my expectations to fit the students' work." These were about the only exceptions among 107 faculty. For WAC professionals, these trends might mean as we work with newer faculty we need to spend less time confronting misconceptions than we have done in the past. These trends also powerfully remind us how we should conceptualize WAC work—not about converting uninitiated colleagues, but much more frequently about collaborating with disciplinary faculty as they teach with writing in exciting ways, ways we can learn from and then share with others.

The Need for Discipline-Specific Rhetorical Knowledge

From the strong disciplinary emphasis within the goals, another lesson emerges. The discipline-specific learning goals spotlight what experienced WAC specialists know well—that those new to the field need to develop far more than generic writing-course and humanities-centric knowledge of assignment design and writing pedagogy. To respond to the kinds of WAC learning goals we have seen above, WAC specialists need to become comfortable imagining, thinking critically about, and sharing resources for writing assignments in such varied fields as computer science, music, plant pathology, political science, literary studies, and chemistry, and in understanding learning settings as varied as clinical, lecture, seminar, and graduate courses. They also need to develop skill and comfort at establishing and sharing expertise with disciplinary faculty experts (Jablonski, 2006; Tarabochia, 2017), much as writing center tutors do as they cross disciplines in their consulting with student-writers (Nowacek, 2011, pp. 136-140). If, for example, a faculty member in an engineering discipline asked for advice about designing writing assignments in a capstone course, a WAC professional would of course want to have a sustained conversation with that colleague about what the learning goals are for the course, how large the enrollment is, what kinds of writing are assigned currently, what's worked well and what hasn't, what kind of writing instruction and support the course includes, and what prior experience students have with those kinds of writing. To bring to that conversation,

newer WAC specialists also need to develop an archive of successful assignment sequences from capstone courses in other disciplines on their campus, be conversant with relevant literature in journals such as *IEEE Transactions on Professional Communication*, *The Journal of Business and Technical Communication*, and *Technical Communication Quarterly*, know some WAC research about how students experience senior capstone design courses in engineering (e.g., Paretti, 2013), know some textbooks about research and writing in engineering (e.g., Crone, 2020), have some familiarity with design projects within various engineering majors and be efficient at learning a little about the curriculum in that particular engineering discipline, and appreciate the power of a local needs analysis done collaboratively by writing studies specialists and STEM faculty (Gallagher et al., 2020). Bringing some of this knowledge into consultations, WAC specialists will be able to ask better questions and earn the trust of and build relationships with colleagues faster.

Although many of the discipline-specific learning goals were familiar to experienced WAC specialists and we can turn to numerous publications for ideas to help with our responses, some of the other discipline-specific goals suggest important new areas for future WAC research, especially in STEM fields. One of those involves writing assignments in physics courses. A few WAC publications suggest ways to incorporate writing activities into quantitative disciplines (e.g., Bahls, 2012; King, 1982; Parker & Mattison, 2010), but we need more specific examples to respond to the learning goals from a physics professor mentioned above (are there ways to use "writing as a way [for students] to learn basic physics equations?") and from an engineering physics professor quoted above ("I'd like to know more about ways to avoid [typical structures of writing assignments in my field in order] to foster student's [*sic*] critical thinking, innovative thoughts, etc. . . ."). We also need more WAC research about writing assignments within graduate science courses, especially assignments that might resolve tensions, discussed above, between a graduate-course curriculum and the individual research interests of each graduate student; those interests are usually tied to the research within a particular lab group and unrelated to the graduate course. A soil science professor, for example, who was deeply committed to teaching with writing, puzzled over "How to balance—for grad students—relevant writing activities with not 'wasting time' on research outside their actual thesis/dissertation project." With more WAC research and case studies from these and other less-frequently discussed disciplinary areas, these kinds of questions are less likely to stump us as WAC specialists.

The key to discovering the remaining lessons is to think critically about the goals, comparing what's spoken to a comprehensive knowledge of the field and noticing what is *missing*. These lacunae tell us what WAC specialists need to be prepared to focus attention on—to introduce within workshops and consultations—even if no

one asks. By choosing sometimes to share new ideas that push beyond what disciplinary faculty initially ask about, WAC specialists can embrace the complexity of WAC questions. Obviously, identifying all of the WAC topics that these disciplinary faculty did *not* include would be endless, so the following sections focus on what I consider to be the most important topics largely unspoken in the faculty goals.

Writing to Learn

First, the assignment-design goals largely ignore writing to learn, obviously a bedrock principle within WAC. Despite the impressive interest in learning and learners and in aligning writing activities with learning goals for courses, the vast majority of that interest orbited around formal writing assignments. As I described above, a few of the designing-assignment goals did specifically mention what we would identify as WTL interests—a chemistry professor, for example, brainstorming ideas for low-stakes assignments in an organic chemistry course, wondered whether asking students to write a "news/commentary on a reaction" or "an explanation for how a particular reaction occurs in their own words" would be effective; a nursing professor wanted to develop "ideas for smaller 'micro' assignments that can be used in class"; a genetics professor wanted to improve the ways he uses "short responses to assigned reading (ungraded) and graded homework questions to assess conceptual understanding of readings and computational exercises." But these are the exceptions, found in only 10% of the designing goals. I can imagine various reasons for the lack of initial interest in WTL assignments—these faculty could have had little experience, when they were students themselves, with WTL assignments, or they could have less experience thinking about writing as form of learning rather than as summative assessment. They may have been understandably concerned first with improving major assignments already in their courses. Their emphasis on formal writing assignments might also reflect my choice of initial readings from Bean (2011)—chapters about designing formal and research assignments—which they had read before writing out their WAC learning goals. In their goals, a couple of faculty referred to specific examples of WTL assignments that Bean mentions briefly in the chapters I did assign. When I assign only a chapter or two from a book for reading, I always share the table of contents for the entire book to give a fuller context and to spark other interests, which led one of the faculty in this study to mention wanting to read Bean's chapter on informal writing assignments.

No matter the reasons, the fact that faculty largely overlooked WTL in their initial WAC learning goals reinforces how important it is for WAC specialists to be sure to introduce WTL into discussions with disciplinary faculty. One of my individual consultations with an MTLE faculty fellow illustrated this opportunity and served as an important reminder not to view WAC learning goals from disciplinary faculty

as fixed. Since they were written by assistant professors at the start of a WAC unit in MTLE, we should consider these goals as only *initial* learning goals, which inevitably evolve as disciplinary faculty gain more teaching experience and as these faculty consult with disciplinary colleagues and WAC specialists. In this case, an assistant professor in biomedical engineering switched—as a result of our conversation—completely away from plans to introduce a library-based research paper in an advanced undergraduate course, instead wanting to brainstorm ideas for low-stakes WTL activities to help students understand key concepts that they found difficult in her course. She had so much success with these new WTL activities that she subsequently expanded those into other courses and those assignments now form part of the educational component of her own NSF grant proposals.

Consideration of Audience and the Pedagogy of Student Conferences

Another cornerstone of WAC was conspicuously absent from almost all goals for assignments and writing pedagogy—the rhetorical importance of specifying audiences in assignments and of teaching students to adapt their writing for particular audiences. Given these professors' emphasis on discipline-specific assignments and genres and their desire to teach students to develop arguments in discipline-specific ways, and given some of my subsequent conversations with them, this seeming lack of interest stemmed, I believe, from limited experience thinking deeply about rhetorical situations, not from any resistance to the concept. So knowing that early-career disciplinary faculty are unlikely to focus on audience as they design assignments and coach students in the process of writing, WAC specialists need to be sure to foreground the importance of audience, illustrate that in analyses of successful sample WID assignments, and build audience into planning worksheets faculty use as they design new assignments.

Within the instructional learning goals, almost no faculty said that they wanted to learn more about the pedagogy of individual conferences with student-writers as part of building in writing process, which was in stark contrast to their high interest in student peer review. Obviously, workload explains some of this difference, but it's a striking gap. One of the few goals that did mention conferences explicitly raised concerns about the time commitment—this psychology professor (whose goals are mentioned above) was deeply committed in past teaching to individual conferences, but wanted advice for how to possibly continue to hold conferences when her enrollment had ballooned to ninety students. Even with more reasonably sized classes, faculty understandably would avoid a pedagogical method so labor intensive. Beyond time concerns, in many cases, I am sure, faculty simply did not conceptualize talk as an essential part of the writing process and did not realize how pedagogically effective conferences can be for student-writers. While acknowledging barriers, WAC

specialists have to find ways to introduce conferences as an option in some classes, demonstrate their value (in a large-scale assessment of writing-intensive courses on our campus, for example, students identified conferences with their instructors as one of the most effective methods of writing instruction in these courses (Solomon & Knobloch, 2001, p. 31), suggest ways to be as efficient as possible, including group conferences, and explore the possibility of integrating undergraduate writing fellows into disciplinary courses (e.g., Hall & Hughes, 2011) .

Intersections of WAC and Diversity and Social Justice

The fact that within their learning goals only a few early-career faculty signaled interest in diversity and social justice, which are some of the most important current interests in WAC, teaches WAC professionals how crucial it is that they open up conversations about these topics as part of WAC. As we saw above, a few of the goals about responding and evaluating included social-justice concerns about fairness for student-writers and about differences in literacy preparation for disciplinary discourse. In the goals about learners, a few faculty wanted to explore the pedagogical implications of students' differing home discourse communities, levels of experience and skill with writing, and material circumstances in which they study and write. But those were the exceptions. In the past ten years, WAC scholarship has argued compellingly for WAC leaders to emphasize diversity and social justice within our conversations with disciplinary faculty—especially focusing on race, not just on multilingualism. Anson (2012), for example, called for increased attention to diversity within WAC scholarship at the same time that he acknowledged complications that WAC specialists might face if they open up discussions about race: "the subject of race is perceived to generate layers of additional complexity over principles, theories, and pedagogies already challenging to faculty in various disciplines to interpret and apply to their teaching" (p. 19). Using a powerful example from a consultation with a professor designing a writing assignment for a health policy class, Poe (2013) argued that as WAC leaders "we need to anticipate these moments where race and writing come together across the curriculum and share ways of working through these moments as we work with faculty and teaching assistants in helping them design, deliver, and assess writing" (p. 2). Poe went on to offer some initial suggestions for WAC practitioners to "integrate discussions about race in our interactions with faculty, graduate students, and administrators across the curriculum" (p. 3).

Recent scholarship has, appropriately, taken a more critical stance. Walton et al. (2019), for example, made powerful arguments for and offered models for making social justice central to the study, teaching, research, and practice of technical communication. Kareem (2020) pushed WAC specialists to introduce culturally sustaining educational practices. Inoue argued that WAC should focus on anti-racist work,

especially around assessment, "to [address] ways in which the discourse expected of nurses, business majors, engineers . . . are quite simply white supremacist" (Lerner, 2018, p. 115). As WAC professionals, we need to be prepared to open up some of these conversations with disciplinary colleagues, even if they are not initially asking about how teaching with writing in their disciplines intersects powerfully with diversity and race. Many of the faculty fellows in the MTLE program are likely to be a receptive audience for these conversations, given that the faculty in these cohorts are diverse, that they are early in their careers, and that as scholars some of them study race, culture, diversity, sociology, and education. It is also interesting to speculate whether within their goals they might have signaled more interest in diversity and social justice if the WAC unit had followed, rather than preceded, the unit on inclusive teaching practices in the MTLE curriculum.

WAC Theory and Research

It's no surprise, of course, that these disciplinary faculty also did not ask about WAC theory and research directly—but it's our job, as WAC specialists, to know this theory and research and to bring it strategically into our consultations and workshops. These disciplinary faculty did not ask, for example, about designing "meaning-making tasks," what Anderson et al. (2015; 2016) identified from NSSE research as "constructs" to increase student engagement with writing activities—but they did ask about motivating students, which is clearly related to engagement research. None asked what the latest research says about which kinds of WTL assignments lead to more learning (e.g., Gere et al., 2018). Only a few asked what makes writing assignments meaningful for students or about personal connections students can have with assignments or about agency, and the few who asked what made assignments meaningful for instructors did so in an oblique way—but they would benefit from hearing about this research (Eodice et al., 2016; 2018). None asked about AAC&U research on writing-intensive courses as high-impact practices (Kuh, 2008). In their questions about responding to and evaluating student writing, none indicated any awareness of Sommers' (2006) research about how important the partnership between students and teachers is in determining how students respond to feedback.

No one, of course, referred explicitly to Anson's (2015) threshold concepts about WAC, but many of those threshold concepts lie behind, beneath, and around their learning goals—and clearly almost all of these early-career faculty had journeyed through the threshold concept that teaching students about writing is a shared responsibility for faculty in all disciplines. Their asking important questions about increasing students' motivation about writing opens the door for WAC specialists to share powerful ideas from writing studies more broadly, such as Russel Durst's (1999) thoughtful responses to the instrumentalism and careerism that students

bring to first-year writing courses. Disciplinary faculty looking to motivate their students about writing assignments might do well to acknowledge students' resistance and use concepts like Durst's "reflective instrumentalism," which "takes advantage of the motivation students bring to their areas of specialization, provides students with useful knowledge, and engages students in critical scrutiny of schooling and society" (p. 179). Disciplinary faculty did not ask about this research and theory because obviously this knowledge comes from our discipline, not theirs. WAC specialists of course absolutely need this depth and texture in their knowledge, in order to expand what disciplinary faculty understand about writing as well as to support their WAC-specialist pedagogical recommendations. And they need to be willing to bend a learning goal in a new direction, toward some of the specialized knowledge WAC professionals possess.

Closing Thoughts

I hope that the results of this study can help galvanize new and future WAC professionals' interest in the pedagogical concerns that matter so much to early-career disciplinary faculty. I also hope that the findings and analysis presented here help our field develop a more comprehensive, more accurate understanding of disciplinary faculty as WAC learners. The faculty in this study truly were an intellectually exciting group of learners, coming from a striking variety of disciplines, including many science faculty and many international faculty. Despite the very high research expectations of their university, these faculty were eager to learn about WAC, dedicated to incorporating writing activities of a wide sort as they teach their disciplines, and ready to ask many of the genuinely difficult and appropriately critical questions about WAC pedagogy. Most impressive were their deep interests in learning more about designing assignments that align with learning goals and the widespread evidence of their concern for students as learners. Because they were all assistant professors, these faculty represent the long-term future of engaged disciplinary faculty who can expand WAC in exciting ways.

I hope that these findings also inspire further research. It would be fascinating to compare these WAC learning goals with ones from faculty at different stages of their careers and at different kinds of schools and colleges and universities, and to explore the differences in these goals based on home disciplines. A follow-up study could help us understand how goals evolve as a result of changing teaching assignments (Walvoord et al., 1997), or of development as a result of the MTLE program and of deepening teaching experience. WAC specialists could use these findings to collaborate among themselves and with the WAC Graduate Organization (2020) to develop a curriculum for graduate students who aim to be future WAC specialists in their faculty careers.

Finally, the faculty in this study say something important about where we choose to do WAC work within our universities. The eagerness these faculty had to learn about WAC, their powerful curiosity and critical perspectives—reflected in the sheer volume and the sophistication of their goals and specifically the interests in learners and learning—show clearly how beneficial it is to integrate *some* WAC faculty development into broader campus faculty learning communities devoted to teaching and learning. It's no accident that these faculty were primed from the earlier parts of the MTLE curriculum to learn about WAC. It's also powerful to remember that these faculty were, almost exclusively, not teaching required writing-intensive courses in their departments. I've always strongly believed that WAC programs should not focus exclusively on faculty teaching such courses, but instead cast a much broader net. There's a powerful synergy between WAC and a larger, well-designed faculty learning community built around a comprehensive approach to teaching and learning, a connection that makes this kind of WAC conversation and learning and this kind of research possible.

Acknowledgments

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