



Improving Writing, Teaching, and Learning in Higher Education

Reflections from WAC and SoTL in the U. S.

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In diesem Beitrag reflektieren die Autoren die Entwicklung von "Writing Across the Curriculum" (WAC) und "Scholarship of Teaching and Learning" (SoTL) in den Vereinigten Staaten und schildern Beobachtungen sowohl zu den gemeinsamen als auch zu den unterschiedlichen Elementen dieser beiden Bildungsreformbewegungen. Sie präsentieren diese Analyse in aller Bescheidenheit und erkennen an, dass Lehre und Wissenschaft immer in institutionellen und disziplinären Normen und auch in nationalen, kulturellen und historischen Kontexten verwurzelt sind. Anderson und Felten beschreiben dann, wie die Beiträge in diesem Band Wege aufzeigen, wie WAC und SoTL an deutschsprachigen Universitäten produktiv zusammengeführt werden können. Aufgrund der entstehenden Brücken zwischen diesen beiden Bewegungen in Deutschland glauben sie, dass deutsche Lehrende und Wissenschaftler*innen wichtige Stimmen in der zunehmend pluralistischen und globalen SoTL- und WAC-Praxis sein können - und sollten. Die Autoren schließen mit Vorschlägen zu möglichen Beiträgen, die jede der beiden Bewegungen zum gemeinsamen Ziel leisten könnte, das Schreiben und Lernen von Studierenden an Hochschulen zu verbessern.

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Reflections from WAC and SoTL in the U.S.

PAUL ANDERSON, PETER FELTEN

Kurzfassung

In diesem Beitrag reflektieren wir die Entwicklung von „Writing Across the Curriculum“ (WAC) und „Scholarship of Teaching and Learning“ (SoTL) in den Vereinigten Staaten und schildern Beobachtungen sowohl zu den gemeinsamen als auch zu den unterschiedlichen Elementen dieser beiden Bildungsreformbewegungen. Wir präsentieren diese Analyse in aller Bescheidenheit und erkennen an, dass Lehre und Wissenschaft immer in institutionellen und disziplinären Normen und auch in nationalen, kulturellen und historischen Kontexten verwurzelt sind. Wir beschreiben dann, wie die Beiträge in diesem Band Wege aufzeigen, wie WAC und SoTL an deutschsprachigen Universitäten produktiv zusammengeführt werden können. Aufgrund der entstehenden Brücken zwischen diesen beiden Bewegungen in Deutschland glauben wir, dass deutsche Lehrende und Wissenschaftler*innen wichtige Stimmen in der zunehmend pluralistischen und globalen SoTL- und WAC-Praxis sein können – und sollten. Wir schließen mit Vorschlägen zu möglichen Beiträgen, die jede der beiden Bewegungen zum gemeinsamen Ziel leisten könnte, das Schreiben und Lernen von Studierenden an Hochschulen zu verbessern.

Schlagerworte: WAC; SoTL; Schreiben; Lernen; Disziplinen

Abstract

In this paper, we reflect on the evolution of Writing Across the Curriculum (WAC) and the Scholarship of Teaching and Learning (SoTL) in the United States and offer observations about both the shared and the distinct elements of these two educational reform movements. We present this analysis humbly, recognizing that teaching and scholarship are always rooted in institutional and disciplinary norms and also in national, cultural, and historical contexts. We then describe how the papers in this volume, taken together, illustrate ways WAC and SoTL are productively joining forces in German-speaking universities. Because of the emerging bridges between these two movements in Germany, we believe that German instructors and scholars can – and should – be important voices in increasingly plural and global SoTL and WAC practices. We conclude by suggesting possible contributions each movement might make

towards the common goal of improving students' writing and learning in higher education.

Keywords: WAC; SoTL; writing; learning; discipline

1 Introduction

Funded by the Quality Pact for Teaching, in 2013 Bielefeld University hosted “Writing in the Disciplines”, a conference where faculty and writing center staff from German-speaking countries were invited to reflect on ways to make writing an explicit, continuous, and regular experience for students from any discipline. Seven years later, Bielefeld organized a second conference, “Concepts for Teaching Writing in Higher Education: Case Studies and Reports”, which aimed at harvesting and reflecting upon what has been achieved.

This collection's 21 papers from the latter conference are authored or coauthored by instructors in 13 disciplines at 14 German-speaking Universitäten and Fachhochschulen (hereafter *universities*). They describe a wide variety of projects that employ the assumptions, aims, and strategies of two international pedagogical reform movements in higher education: Writing Across the Curriculum (WAC) and the Scholarship of Teaching and Learning (SoTL). These papers display the creativity and intellectual verve that German instructors and scholars have invested in the effort to 1) provide evidence-informed guidance for investigating and improving the teaching of writing in the disciplines, as well as learning more broadly, and 2) suggest the intellectual and pedagogical synergy that could be generated by bringing together WAC and SoTL, movements that developed separately in the U.S.

In this paper, we aim to foster the integration of WAC and SoTL by first describing their separate evolutions in the United States. We are not suggesting that scholars and instructors in German-speaking countries should emulate or adapt U.S. practices. Every successful SoTL or WAC project, program, or initiative is firmly anchored not only in its institutional and disciplinary location but also in its national, cultural, and historical contexts (Chng & Mårtensson 2020). The international maps of WAC and SoTL describe a multidimensional landscape. Looking at other locations than one's own requires both alertness to commonalities and a sensitivity to differences that, while often subtle, are nevertheless consequential. Our brief histories of WAC and SoTL in the U.S. invite instructors and scholars in German-speaking countries to view the distinctive incarnations of these two movements in their locations, possibly sparking new or revised ways of conceptualizing and enacting their own work. We then describe how the papers in this volume, taken together, illustrate ways WAC and SoTL are productively joining forces in German-speaking universities. We conclude by suggesting additional contributions each movement might make in their united effort to improve students' writing and learning.

2 The Evolution of Writing Across the Curriculum in the United States

Writing Across the Curriculum sprouted from the fertile ground of *dissatisfaction*—a century of frustration with the weak writing abilities of college students and graduates.

Early in U.S. history, all students at a college followed the same curriculum, taking the same classes as a cohort through their years of study. There were no departments. A faculty member might teach any subject. Students practiced written and oral communication (declamation) in most courses. However, as the country's population gradually moved west and universities grew much larger, newer schools developed courses of study aligned with professions and disciplines. By the 1880s, the German model of a university arranged in departments populated with specialists began to dominate U.S. higher education. In this new version of American universities, writing instruction was delegated to English departments, which developed the first-year composition course that is now required for almost all undergraduate students, a course with no parallel in Germany then or now (Bazerman, Little, Bethel et al. 2005; Brereton 1995; Russell 1991).

Many in U.S. higher education believed that writing in any field or context required the same fundamental writing competencies, which the first-year composition course would teach. However, faculty in the disciplines often found that students who had completed the composition course could not write effectively in their programs. Employers complained, too. English departments at many schools faced stinging criticism for failing to teach the essential writing competencies.

English departments replied that disciplinary departments should take partial responsibility by including writing instruction in their programs. Writing, they argued, is an ability that develops over years. A single course in the first year is not enough to develop students' writing abilities to the level desired inside the university or outside after graduation. However, nationwide the proportion of disciplinary faculty who included direct writing instruction in their courses remained low for many years.

In the 1960s and 1970s, new understandings of the relationship between communication and cognitive development emerged, producing the foundation for the WAC movement as it exists today in the U.S. Innovative British research on school-age students indicated that writing can help students learn the subject matter they are writing about (Britton 1970), and similar research soon confirmed this finding in the U.S. (Emig 1971, 1977). The belief that writing could promote learning—*writing to learn*—provided the emerging grassroots WAC movement with a rejoinder to faculty in the disciplines who asserted that addressing writing would take time away from essential course content (Russell 2006). On the contrary, writing could help students learn that content.

Later developments in writing theory argued that the distinctive features of writing in a discipline—its characteristic genre, style, etc.—reveals its intellectual structure (Carter 2007). Learning to write like a biologist or an economist means learning

how to think like one, thereby becoming enculturated into the field. Including writing in disciplinary courses—*writing in the disciplines*—helps students learn more than factual content; it helps them develop and perform the identity of a member of their disciplinary communities.

Building on this intellectual foundation, early WAC in the U.S. concentrated on increasing the amount of writing in courses by offering interdisciplinary workshops that attracted faculty already desiring to improve student writing. The workshops often suggested short, generalized assignments and exercises, such as keeping journals and writing one-minute papers in which students recorded at the end of a class period what they learned or did not understand.

Throughout WAC's history, the development of practical strategies for incorporating writing into disciplinary classes paralleled the development of research and theory, which gradually moved to the foreground, where it more powerfully shaped the strategies advocated to disciplinary instructors.

As WAC scholarship evolved, proponents advocated deeper attention to writing in the disciplines. Eager to find an institution-wide response to complaints about student writing, many schools established writing-intensive (WI) course programs that require students to take one to three courses offered by any department that include a substantial amount of writing and writing instruction. More recently, WAC has emphasized the development of more advanced writing abilities in students' fields of study (Cox & Melzer, 2018). Some institutions require departments to identify the writing abilities their graduating students should possess and then create curricular plans to help students progressively develop these higher level abilities over their years of study (Elon University 2020a, 2020b).

3 The Evolution of the Scholarship of Teaching and Learning in the United States

By the 1990s, 20 years after its sprouting, WAC had developed a prominent but still-evolving presence in U.S. higher education. Its general claims and methods were widely known. It had established itself in the organizational structure of many universities, secured places at professional conferences, developed its own conferences, and published its own journals. At this time, another educational reform movement appeared in the U.S., the Scholarship of Teaching and Learning, which became a second powerful force for making writing a core component of teaching in the disciplines and professions. Depending on institutional culture and organization, SoTL can serve as a partner, surrogate, or means through which WAC expresses itself in scholarship, pedagogy, and institutional policy and action.

SoTL developed to address a fundamental problem in U.S. higher education. Since the beginning of the twentieth century, most colleges and universities hired and promoted instructors based on their research quality and production, teaching effectiveness, and service to the institution and external communities. During that century

—especially after the second world war—the emphasis on research grew dramatically, often eclipsing the recognition given to teaching. Despite cries for better teaching from inside and outside the academy, research became the overwhelming force in faculty reward systems, academic status, and the socialization of graduate students.

Ernest Boyer, a leading voice in U.S. higher education, addressed this fraught situation in his highly influential book *Scholarship Reconsidered* (1990), urging faculty and institutions “to move beyond the tired old ‘teaching versus research’ debate and give the familiar and honorable term ‘scholarship’ a broader, more capacious meaning, one that brings legitimacy to the full scope of academic work” (p. 16).

The concept of a “scholarship” of teaching and learning emerged out of Boyer’s call for rethinking the priorities of the professorate. In a foundational article of the nascent SoTL movement, Bass (1999, p. 1) contrasted the nature of research and teaching “problems” for faculty in American higher education:

“In scholarship and research, having a problem is the heart of the investigative process; it is the compound of the generative questions around which all creative and productive activity resolves. But in one’s teaching, a ‘problem’ is something you don’t want to have, and if you have one, you probably want to fix it. Asking a colleague about a problem in his or her research is an invitation; asking about a problem in one’s teaching would probably seem like an accusation. Changing the status of the problem in teaching from terminal remediation to ongoing investigation is precisely what the movement for a scholarship of teaching is all about. How might we make the problematization of teaching a matter of regular communal discourse? How might we think of teaching practice, and the evidence of student learning, as problems to be investigated, analyzed, represented, and debated?”

As Bass described, from its origins SoTL has aimed to enhance the position of teaching in the academy by re-conceptualizing the work of teaching as scholarly activity. Enacting this lofty aspiration has been difficult because of the immense scale and diversity of higher education in the U.S. Indeed, SoTL has never achieved a single definition in the U.S., but across its many variations SoTL tends to share at least three characteristics outlined in these early years.

SoTL in the U.S. is a form of scholarly *inquiry*. As Hutchings and Shulman explain, SoTL “requires a kind of ‘going meta’ in which faculty frame and systematically investigate questions related to student learning” (1999, p. 13). The most common form of SoTL inquiry is a three-step cycle that begins with a question about student learning that launches and guides the inquiry—what Bass called a “teaching problem”. The SoTL scholar then gathers and analyzes evidence related to that question, often by focusing on the writing or other demonstrations of student learning being produced in a course. Lastly, the SoTL scholar analyzes the evidence to inform and improve their teaching related to their original question—and the scholar also shares what they have learned from their inquiry with colleagues so that others can benefit from and critique this work.

SoTL scholars in the U.S. often draw on their *disciplinary* training to conduct that inquiry. In other words, SoTL is not simply a form of educational or social science research applied in university classrooms. Instead, SoTL has “disciplinary styles”

(Huber & Morreale 2002) that reflect and build on the expertise and research methodologies of the faculty who are inquiring into student learning. SoTL scholars in the U.S. typically ask questions rooted in their fields and draw on disciplinary research tools to analyze student learning (for example, historians doing SoTL tend to ask questions about students' historical thinking and then analyze student-generated written texts as evidence). Recently U.S. SoTL increasingly involves interdisciplinary teams of faculty combining their expertise to pursue lines of inquiry, such as a historian and an educational psychologist using "think aloud" interviews from psychology to study how students read primary source documents (e. g., Calder 2018).

SoTL scholars in the U.S. aim to use their inquiry to *improve their own teaching* and their own students' learning. SoTL is a form of applied research that tends to be classroom- and practice-oriented rather than theory- or hypothesis-driven (Felten 2013). SoTL scholars share their work with peers for critical review and to enhance teaching practice more broadly, but the driving motivation for most SoTL activity is the improvement of teaching and learning in the scholar's own classroom.

These shared characteristics have seeded the widespread flowering of SoTL practice across U.S. higher education in the past twenty years. SoTL has become a signature feature of many educational development centers in America, using classroom-based inquiry to support pedagogical improvement initiatives (Felten & Chick 2018). This campus-based activity has generated a growing number of local, disciplinary, and general SoTL journals, and SoTL articles now routinely appear in some of the leading U.S. scholarly journals in a variety of disciplines (Deslauriers et al. 2019; Sandrone & Schneider 2020; Westhoff & Johnston 2020). Recently, prominent SoTL voices in the U.S. (e. g., Chick 2019) have called for more public-facing forms of SoTL that speak directly to the concerns of students and the broader community about the purposes, effectiveness, and outcomes of teaching and learning in higher education.

The focus of SoTL inquiries in the United States also has evolved over the past two decades. Early SoTL research often emerged from questions about student learning of specific disciplinary knowledge, skills, or capacities. Although many of these pioneering studies began as highly contextual inquiries, both their research methods and their results influenced SoTL scholars in many other disciplines. For example, the History Learning Project at Indiana University started as an inquiry into questions about first-year student learning in history courses, yet this project spawned the Decoding the Disciplines SoTL research methodology that has been adapted to explore questions far from its original disciplinary home (Middendorf & Shopkow 2017; Pace 2017). These early SoTL studies also underscored how learning is not a purely disciplinary process; instead, affective, social, and meta-cognitive factors powerfully influence student learning, and SoTL scholars now frequently focus their inquiries on these factors (Ciccone 2018). More recently, SoTL scholars have begun to systematically integrate students as partners with faculty into the entire inquiry process, providing new perspectives into learning and teaching (e. g., Cook-Sather, Bovill & Felten 2014).

4 Like and Unlike

The impetus for this book involves the ways WAC and SoTL resemble one another. In the U.S., both share the assumption that teaching can be improved and that the improvements will increase student learning. Both assume that by using systematic inquiry, faculty can identify the strategies and curricula that work best in their courses and programs. Many WAC and SoTL projects employ the same fundamental process. This harmony may not be obvious at first because WAC is sometimes viewed as a movement that offers a practice (use writing in your courses) while SoTL offers a procedure (identify a teaching problem and then investigate a potential solution).

Actually, in the U.S. both employ the same basic process: 1) pose a question, 2) gather evidence, and 3) systematically interpret the evidence in light of the question. Their inquiry paradigms are distinguished only by a small difference in the typical way questions are developed. For both an underlying question is whether instructors can increase the effectiveness of teaching a particular concept or process by replacing their current approach with a new one. To frame this question, WAC most often begins by identifying the new strategy, which typically involves some use of writing. A WAC workshop for instructors may describe many strategies for incorporating writing into a course; participants are invited to choose one to make an assignment that would improve a particular student learning outcome—this agenda is reflected in Bean’s (2011) popular guide. A SoTL workshop may begin by asking the participating instructors to identify a “bottleneck”—a learning outcome that a significant portion of their students have difficulty achieving. Participants then identify a new teaching strategy, such as one described in the literature, conference presentations, or conversations with colleagues. For both WAC and SoTL, the new strategy is tried out to determine whether it produces results superior to those achieved previously. To conduct their inquiries, WAC and SoTL draw on the same pool of methods, which range from informal investigations (“I personally felt the results were better based on my reading of student papers”) to rigorously designed, specialized research techniques.

Ashwin & Trigwell (2004) use audience and purpose to classify SoTL studies according to the comparison methods they use. The classification works equally well for WAC.

Level 1: Inquiry to inform *myself*, so the purpose is to generate knowledge useful to *me*; the inquiry methods should be persuasive to *me*.

Level 2: Inquiry to inform *colleagues in a context we share*, so the purpose is to produce *local* knowledge and the methods should be valued *within that context*.

Level 3: Inquiry to inform a *wider audience*, so the purpose is to generate *widely useful knowledge* and the methods must be considered *valid by that general audience*.

From the viewpoint of “Schreiblehrkonzepte an Hochschulen”, the key point is that in the U.S. the two curricular and pedagogical reform movements share aims and methods that converge dramatically in their focus on the teaching of writing in disciplinary courses—and writing as both a method and an outcome of learning. For WAC, the focus is in the name itself. For SoTL, the interest arises because students encounter substantial learning bottlenecks when writing. Also, SoTL solutions often involve writing instruction where its efficacy is determined by examining the evidence of written products by students. The boundary between the two movements is so porous that, for instance, any WAC study could be classified as SoTL and most SoTL projects that involve writing could be counted as WAC endeavors.

Nevertheless, in the United States SoTL and WAC have lived side by side for years like neighbors in a large apartment building. In the elevator, they say hello and occasionally they have a friendly (and not too critical) conversation over a drink, but they spend most of their time behind closed doors in their own homes. Their different histories have landed WAC and SoTL in different locations in institutional structures. As a grassroots movement, WAC has built its own locales in institutions, sometimes in an English department, sometimes in a student writing center, sometimes as its own independent unit. SoTL, in contrast, did not emerge from a single academic department but rather tended to arise from a multi-disciplinary group of interested faculty, and often it has been taken up by Teaching Development Centers as one effective approach to supporting teaching improvement. Consequently, WAC and SoTL activities are housed in separate locations with separate reporting lines and separate budgets. Further, while WAC focuses on writing and learning through writing, SoTL addresses a wider range of teaching and learning issues. Each tends to concentrate largely on its own literature, conferences, and traditions. The same separation occurs at German universities such as Paderborn.

Bielefeld University stands as an exception, at least from the U.S. perspective. WAC and SoTL initiatives are located together in its “Zentrum für Lehren und Lernen”. For its Quality Pact for Teaching project, Bielefeld hired a cadre of 17 faculty in 14 departments, who were responsible for teaching subject courses in which they developed and modeled for their departmental colleagues the means and benefits of integrating best practices in teaching writing instruction into first-year disciplinary courses. The training, guidance, and mentoring for these instructors, called LitKoms, were initially drawn from the WAC tradition. In the final phase of the Pact project, Bielefeld introduced SoTL literature, practices, and projects into LitKom training. At other universities, some instructors have also learned from both the WAC and SoTL movements.

This book places WAC and SoTL papers alongside each other, enabling readers from either tradition to see how the work done in the other can advance their own goals. Some papers draw on both movements, hinting at the benefits of a deep and robust interchange.

5 Examples of WAC and SoTL in Action in This Book

We know that in Germany both WAC (Lahm 2016) and SoTL (Schmohl 2018) are developing their identities. Mindful of the caution we described at the beginning of our paper, we will identify studies that, from our outsiders' perspective, represent work in each tradition.

Ehls, Stahlberg and Podleschny test a variation of a WAC strategy that is very widely used in the U.S. Students were asked to write short reflective papers at home about topics discussed in class. Qualitative analysis of two implementations showed that students achieved high levels of reflective thinking and made new connections among different aspects of course content. *Jacoby* reports on the positive effects of providing instructors in an introductory, interdisciplinary course in social economics with training in Writing Enriched Curriculum (WEC) course design on topics including writing assignment design, peer review, and group work. Surveys, group discussions, and a partially standardized questionnaire reveal that instructors were able to integrate writing with subject matter learning and that teaching became more active and interactive after the training.

In the SoTL tradition, *Hippchen* begins with a question about the bottlenecks experienced by students during the introductory phase of their history studies. To answer his own question, he adopts a SoTL inquiry method, Decoding the Disciplines interviews with students and teachers, as well as surveys and statistical analyses. Like much of the recent SoTL in the United States that considers both disciplinary considerations and affective factors in learning, he finds that students not only “struggle with the genre and text type, and with the (sometimes unspoken) rules governing academic writing” but that students also “feel intimidated by the task of writing seminar papers”. *Everke Buchanan and Oberzaucher* describe a long-term project (2013–2019) pursuing the SoTL goals of achieving institutionalized commitment and continuous improvement (Hutchings, Huber & Ciccone 2011) to the teaching of writing in the Sociology and Ethnology program at Konstanz. Using focus groups and qualitative interviews, the project explores the perceptions of students, lecturers, and department heads of writing pedagogies that have been adopted. The authors conclude that although students appreciated some of the new teaching strategies, instructors seemed to lose interest in writing instruction over time: “Our article is less a plea for using projects described elsewhere and assuming that they will lead to an institutional change in a different context, but rather for a precise observation and a deeper understanding of the specific technical situation and to act and proceed gradually.”

6 What's Next for SoTL and WAC?

The varied papers gathered in this volume outline one answer to the question “What's next?” They foretell that the foci, breadth, and depth of future projects and programs in each movement will evolve in creative ways. Indeed, one of the most significant

next steps might be to expand many of the studies included in this volume into new contexts (e. g., from Level 1 to 2, or from Level 2 to 3), building on what has already been done and adapting research methods to suit an even wider audience.

We cautiously suggest another “next”, namely that the SoTL and WAC movements in German higher education might be particularly well positioned to explore collaborative opportunities to meet larger pedagogical goals, such as integrating writing into subject teaching. As we mention above, in the United States SoTL and WAC have lived side by side for years without forming strong connections—which represents a significant missed opportunity for U.S. higher education. In contrast, several authors in this collection demonstrate that they are well aware of both movements, suggesting that in the German context, mutually supportive SoTL-WAC interchanges are much more likely than in the United States. What are some ways these two might reinforce one another?

First, the presence of either a SoTL or a WAC program at an institution helps create a favorable environment for establishing and sustaining the other. Even if SoTL or WAC activity remains at Inquiry Level 1, it illustrates to potential participants that inquiries into teaching and learning can enhance student learning. Where both programs exist, each can complement the other as a partner in improving teaching and in helping students gain the most from their educations.

Second, SoTL programs can encourage participants to design inquiries that, like the majority of papers in this volume, draw their data from student writing. That is a logical data source for many SoTL inquiries. By focusing on the content and qualities of student writing, these SoTL inquiries will resonate with ongoing WAC work, forging new connections within an institution (such as bringing WAC specialists into many SoTL studies) and with the WAC literature (see WAC 2020). At the same time, WAC programs that support faculty inquiry can help participants find relevant SoTL literature, further linking WAC and SoTL.

Third, whether at individual institutions or through broader discussions of writing’s role in subject teaching, WAC could help SoTL by awakening its awareness of what “disciplinary writing” is— and, by extension, what disciplinary epistemologies are. While any type of writing exercise or assignment can be included in a department’s courses, *disciplinary* writing means teaching students to write the way that specialists in their field write. To teach disciplinary writing means teaching not only the terminology and kinds of evidence presented but also argumentative structure, rhetorical devices, genre conventions, ways readers will use the communication, and much more. Even for faculty in the disciplines, this point may not be obvious. To help faculty learn to teach disciplinary writing, SoTL practitioners could employ WAC theory and practice to help the faculty distinguish between general writing effectiveness and the distinct factors that characterize effective writing in their discipline.

Lastly, bringing WAC’s attention to departments and institutions into SoTL can magnify the influence of any inquiry. As WAC scholars have demonstrated, learning to write is a long-term process. WAC-informed curricula have specific writing goals, and courses are coordinated to progressively build students’ abilities toward those

goals. With help from WAC specialists, departments can learn how to coordinate the writing goals of individual courses to serve degree outcomes. This same approach holds for other complex aspects of student learning, too. Students cannot be expected to develop expertise in any significant area of a discipline in a single course, so any SoTL study on student learning might benefit from looking at a longer time span than one course; SoTL scholars could learn from WAC about how to conduct such longer term research and use the results to enhance teaching and learning throughout the curriculum.

This volume suggests the Quality Pact for Teaching has established a firm foundation for both individual and collective inquiry into student learning in German higher education. We are inspired by the ways the authors in this volume ask critical questions, gather and analyze evidence, and then use what they learn to improve their courses and curricula. By bridging SoTL and WAC divides, this collective work could foster collaborations to meet larger pedagogical goals, with integrating writing into subject teaching as just one example. Because of the emerging bridges between SoTL and WAC in Germany, we believe that German instructors and scholars can be an important voice in increasingly plural and global SoTL and WAC practices.

Bibliography

- Ashwin, P., & Trigwell, K. (2004). Investigating Staff and Educational Development. *Enhancing Staff and Educational Development*, 117–131.
- Bass, R. (1999). The Scholarship of Teaching: What's the Problem? *Inventio*, 1(1), 1–10.
- Bazerman, C., Little, J., Bethel, L., Chavkin, T., Fouquette, D. & Garufis, J. (2005). *Reference Guide to Writing Across the Curriculum*. West Lafayette, IN: Parlor Press.
- Bean, J. (2011). *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. San Francisco: Jossey-Bass.
- Boyer, E. L. (1990). *Scholarship Reconsidered: Priorities of the Professoriate*. Princeton, NJ: Princeton University Press.
- Brereton, J. (1995). Ed., *The Origins of Composition Studies in the American College, 1875–1925: A Documentary History*. Pittsburgh, PA: University of Pittsburg Press.
- Briton J. (1970). *Language and Learning*. London: Allen Lane.
- Calder, L. (2018). Student Think-Alouds: Making Thinking and Learning Visible. In N. Chick (Ed.), *SoTL in Action: Illuminating Critical Moments of Practice*, 109–116. Sterling, VA: Stylus.
- Carter, M. (2007). Ways of Knowing, Doing, and Writing in the Disciplines. *College Composition and Communication*, 58(3), 385–418.
- Chick, N. (2019). SoTL as Public Scholarship. Available under <https://nancychick.wordpress.com/2019/03/28/sotl-as-public-scholarship/>.

- Chng, H. H., & Mårtensson, K. (2020). Leading Change from Different Shores: The Challenges of Contextualizing the Scholarship of Teaching and Learning. *Teaching & Learning Inquiry*, 8(1), 24–41. Available under <https://doi.org/10.20343/teachlearninqu.8.1.3>. Accessed on March 26, 2020.
- Ciccone, A. (2018). Learning Matters: Asking Meaningful Questions. In N. Chick (Ed.), *SoTL in Action: Illuminating Critical Moments of Practice*, 15–22. Sterling, VA: Stylus Publishing.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging Students as Partners in Learning and Teaching: A guide for Faculty*. Hoboken, NJ: Wiley.
- Cox, M., Galin, J. & Melzer, D. (2018). *Sustainable WAC: A Whole Systems Approach to Launching and Developing Writing Across the Curriculum Programs*. Champaign, IL: NCTE.
- Deslauriers, L., McCarty, L., Miller, K., Callaghan, K., & Kestin, G. (2019). Measuring Actual Learning Versus Feeling of Learning in Response to Being Actively Engaged in the Classroom. *Proceedings of the National Academy of Sciences of the United States of America*, 116 (39), 19251–19257.
- Elon (2020a). <https://www.elon.edu/u/academics/writing-excellence/writing-excellence-initiative/>
- Elon (2020b). <https://www.elon.edu/u/academics/writing-excellence/writing-excellence-initiative/accomplishments/>
- Emig, J. (1971). *The Composing Processes of Twelfth Graders*. Urbana, IL: NCTE.
- Emig, J. (1977). “Writing as a Mode of Learning.” *College Composition and Communication*, 28, 122–8.
- Felten, P. (2013). Principles of Good Practice in SoTL. *Teaching & Learning Inquiry*, 1(1), 121–125. Available under <https://doi.org/10.20343/teachlearninqu.1.1.121>. Accessed on March 26, 2020.
- Felten, P., & Chick, N. (2018). Is SoTL a Signature Pedagogy of Educational Development? *To Improve the Academy*, 37(1), 4–16.
- Huber, M. T., & Morreale, S. P. (2002). *Disciplinary Styles in the Scholarship of Teaching and Learning: Exploring Common Ground*. Sterling, VA: Stylus.
- Hutchings, P., & Shulman, L. S. (1999). The Scholarship of Teaching: New Elaborations, New Developments. *Change: The Magazine of Higher Learning*, 31(5), 10–15.
- Hutchings, P., Huber, M. T., & Ciccone, A. (2011). *The scholarship of teaching and learning reconsidered: Institutional integration and impact*. Hoboken, NJ: Jossey-Bass.
- Lahm, S. (2016). Stories We Live By: A Review of Writing Center Work in Higher Education in Germany. In D. Knorr (Ed.), *Akademisches Schreiben Vom Qualitätspakt Lehre 1. Geförderte Schreibprojekte Universitätskolleg-Schriften Band 13*, 29–38. Available under <https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:20a663ce-6f15-463f-99d4-c6e7740c8fb2>. Accessed on Oct 25, 2020.
- Middendorf, J., & Shopkow, L. (2017). *Overcoming Student Learning Bottlenecks: Decode the Critical Thinking of Your Discipline*. Sterling, VA: Stylus.
- Pace, D. (2017). *The Decoding the Disciplines Paradigm: Seven Steps to Increased Student Learning*. Bloomington: Indiana University Press.

- Russell, D. (1991). *Writing in the Academic Disciplines, 1870–1990: A Curricular History*. Carbondale: Southern Illinois UP.
- Russell, D. (2006). “WAC’s Beginnings: Developing a Community of Change Agents”. In S. McLeod (Ed.), *Inventing a Profession: WAC History*, 3–15. Anderson, SC: Parlor Press.
- Sandrone, S., & Schneider, L. (2020). Active and Distance Learning in Neuroscience Education. *Neuron*, 106 (6), 895–898.
- Schmohl, T. (2018). Inquiry-Based Self-Reflections: Towards a New Way of Looking at the Scholarship of Teaching and Learning within German Higher Education. In B. Jansen-Schulz & T. Tantau (Ed.), *Excellent Teaching: Principles, Structures and Requirements*, 75–90. Bielefeld: wbv.
- WAC Clearinghouse (2020). <https://wac.colostate.edu>. Accessed on 26.03.2020.
- Westhoff, L., & Johnston, R. (2020). Peculiar Partners: Historians, Data, and the Search for Student Success in the Introductory History Course. *Journal of American History*, 106 (4), 985–988.

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