Introduction to Writing Across the Curriculum in Secondary Schools

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This special issue has resulted from our concerns that there is little known about what has been happening with Writing Across the Curriculum (WAC) in secondary schools over the past decades and in the present. As secondary school teachers of science, writing and English, we have had the good fortune of collaborating for many years; however, we also know that other secondary people have had active programs in their schools since the 1980s and many more are currently involved in starting and growing new programs. Our goal in this introduction is to acquaint readers with the basic tenets of WAC in secondary schools, share what we know about some other institutional programs, and describe our own experiences. Finally, we would like to introduce you, the readers, to the articles in this special issue that share some common themes even though they describe programs that are both unique and based on the individual needs of their respective students and institutions. Readers will find similarities to post-secondary models as well as differences, but we hope all will benefit from the shared information.

Background of Secondary WAC Programs

No one really knows when WAC programs began in secondary schools because teachers have been partnering with colleagues across disciplines in isolation forever. If one listens to parents or professional colleagues, he or she will hear stories of legendary teachers who used writing in accounting classes to test students' understanding of the basic rules of accounting; others who collaborated with teachers in other departments to teach innovative units still remembered decades later; and those who were Renaissance teachers who taught many disciplines under the heading of one discipline-based course. However, formal WAC programs seemed to follow the university initiatives of the 1970s, influenced by the research of Britton and Martin on Language Across the Disciplines in the secondary schools of the UK (Britton, Martin, & Rosen, 1966; Britton et. al., 1975; Britton, 1978; Britton, 1982).

Another strong emphasis on teaching writing across the curriculum came from research studies such as *The Composing Process of Twelfth Graders* (Emig, 1971), "Why Johnny Can't Write," (Sheils, 1975) and "Writing as a Mode of Learning" (Emig, 1977). By the 1980s university programs began talking about writing process across disciplines with works such as Elaine Maimon's *Writing in the Arts and Sciences* (1981) and Fulwiler and Young's *Language Connections: Writing and Reading across the Curriculum* (NCTE, 1982). Meanwhile secondary school teachers were reading Donald Murray's "Writing as Process: How Writing Finds its Own Meaning" in *Eight Approaches to Teaching Composition* (Donovan and McClelland, 1980), *Learning by Teaching* (1982) and talking about

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writing as process. Anne Ruggles Gere's *Roots in the Sawdust: Writing to Learn across the Disciplines* (1985) was the first major work that focused on WAC in secondary schools and was not followed by another major work until *Programs and Practices: Writing Across the Secondary School Curriculum* (Farrell-Childers, Gere and Young, 1994).

Other subtle influences filtered up from elementary and middle school educators who were teaching all disciplines in one room the entire day. Between whole language (Goodman & Gollasch,1982) and Nancie Atwell's *In the Middle: Writing, Reading, and Learning with Adolescents* (1987), K-12 educators began to see writing as important in more than language arts classrooms. Admittedly, we are leaving out many additional works that influenced secondary school teachers and their work with WAC (see Appendix below), but the important point is that by this time colleges' and universities' undergraduate and graduate secondary education departments were beginning to discuss WAC and writing process in their courses to reinforce what teachers brought to their own classrooms. The repercussions continued with these postsecondary institutions adding required courses in the teaching of writing for education majors across disciplines.

The Bay Area Writing Project, which began in 1973 and grew to become the California Writing Project then the National Writing Project (NWP), also had a profound impact on educators at all academic levels. The original purpose of the NWP in its early years was to co-construct a knowledge base for the teaching of writing (Gray, 2000). In 1982, James Gray, founder of the NWP, collaborated with the American Association for School Administrators to publish *Teaching Writing: Problems and Solutions (Neill, 1985)*, a precursor to NWP's *Because Writing Matters* (Nagin, 2003) and *The Neglected R* (2003). Today there are nearly 200 NWP sites in all 50 states, so many secondary school teachers involved in WAC have participated, and some have co-directed a NWP site, further influencing the use of writing by middle and secondary school teachers in all disciplines.

Although there have been many other influences on the growth of particular WAC programs in secondary schools, writing centers have also made significant contributions to WAC programs on the secondary level because they share natural connections in the areas of writing, genre, and interdisciplinarity (Jordan, 2006; Mullin & Childers, 1995). Each institution has its own unique story of how its faculty, administration and students have become involved in WAC-based writing centers, whether they are public or independent schools.

Our Experience with WAC in Secondary Schools

Our (Pam and Michael's) introductions to WAC began in different places and times, since we come from two different generations. Pam was introduced to the concept through a special program at Rutgers University that involved a few public schools in New Jersey. In 1979 Robert Parker, professor of English Education and one of the co-researchers with Britton and Martin, invited several school superintendents to recommend faculty from across disciplines to participate in the program. After giving an introduction to the concept of WAC with readings and writing activities, Parker asked groups of teachers from each institution to come up with a plan for their school. Dr. Donald W. Warner, superintendent of Red Bank Regional High School (Little Silver, NJ) supported the plan that Pam's team proposed, surveying the faculty and students to discover what kinds of writing teachers were assigning and students were doing. The results of the survey led to a recommendation to implement a writing across the curriculum program beginning with a WAC-based writing center (Farrell, 1989). Pam volunteered to create a pilot program to determine the need for the writing center, trained faculty across the curriculum to volunteer to staff it as part of the program, and thus began a long career involving WAC with colleagues in public high schools. In 1991, Pam was hired by The McCallie School in Chattanooga, TN, an all boys' independent day/boarding school, to fill a new

endowed chair, The Caldwell Chair of Composition, and to create and direct a writing center and a WAC program.

Michael wandered into the Writing Center at McCallie one autumn day in 1993. He had a vague idea that he could use writing in his physics classes, but he had no idea where to start. He remembered the words of an exemplary teacher he had as a high school student: "good writing is good thinking." As he learned from that day forward, writing may be deployed in a host of ways to cultivate learning. The WAC movement became an important vehicle for his professional growth as well as the growth of his students.

From this original meeting, we have collaborated on WAC in Michael's various science classes (Grant, Murphy, Stafford & Childers, 1997; Childers & Lowry, 1997), with faculty development projects, in writing articles and chapters for publication (Childers, 2007; Childers & Lowry, 2004a; Childers, 2004; Lowry & Childers, 2000), at consulting projects with other schools, and by leading workshops or presentations at conferences at the National Association of Independent Schools, IWCA, IWAC, NCTE, NSTA, and CCCC. Finally, our most unique collaboration involved creating and team teaching a senior science seminar called "Oceans: Past and Present" for a dozen years (Childers & Lowry, 2012; Childers & Lowry, 2005; Childers & Lowry, 2004b). Throughout our collaboration on WAC, we have discovered that by combining our individual experiences with literature, music, visual art, science, history, philosophy, mathematics, and many other subjects, we have been able to question, discover, experiment, and take risks with teaching through writing. Through our own collaboration and by visiting and interacting with schools across the country, we have had the good fortune to experience "best practices" in action.

Exemplary WAC Programs in Secondary Schools Today

Just to validate that our experiences are not unique, we want to mention two public high schools and one independent school WAC program that are making students and faculty aware of the value of writing to learn and writing to communicate in all disciplines. One has been around for decades, changing organically as it has needed to do so, and the other two are relatively new. Jeanette (Jenny) Jordan, the Writing Coordinator at Glenbrook North High School in Glenbrook, Illinois, has been involved in their WAC program since 1990. Through a schoolwide WAC initiative that began that year, faculty have designed numerous WAC projects, including Writers' Bloc Publications that started in 1995 with the in-house booklet *Designing and Assessing Writing*. In 2002, the writing center, library, science, English and social studies departments collaborated on their third publication, *Research & Writing Across the Curriculum*. Their writing center, founded in 1986, changed its name from The Write Place to The Academic Resource Center (http://www.glenbrook225.org/gbn/Academics/The-ARC/Faculty-Resources) in 2010 to incorporate a reading program and reflect its cross-disciplinary mission. In 2011, the school launched a Literacy Liaison program that included representatives from all departments to plan faculty development activities, including common readings like John Bean's *Engaging Ideas* for inservice programs that focus on the ways reading and writing contribute to literacy. This public school of 2,100 students north of Chicago continues to win accolades for its academic success with WAC.

A relatively new, informal WAC program at Minnetonka High School in Minneapolis, Minnesota, is producing innovative videos and regular activities to involve students and faculty in WAC through its writing center, directed by Maggie Shea (http://www.minnetonka.k12.mn.us/writingcenter). In this suburban school of almost 2,900 students, the writing center sponsors an annual evening entitled "Off the Page," devoted to conversations between students and guest writers. The March 2011

evening included the state poet laureate, the public affairs director of the Minnesota Twins, an ESPN NFL blogger, and a science, adventure, and environmental journalist, all of whom reinforced the value of writing in a variety of careers and genres. The high school student writing coaches work with students one-to-one in disciplinary courses, lead writing workshops based on faculty needs, or work with individual students in the writing center. These same student coaches also work with middle school students on writing projects across disciplines and elementary school students at several schools within the district. Day and evening writing activities connect faculty and students across disciplines, and staff development workshops include "Writing in the Contents," since students write in classes in all disciplines. New programs continue to develop in this large suburban high school.

Another WAC program at an independent school is also new but unique in that the whole plan for this program developed from one history teacher's concern with student writing. Windward School, a day school of 540 students in grades 7-12 located in West Los Angeles, California, began its WAC program in 2009 after members of a faculty task force from across the curriculum (including Peggy Proctor, Director of the Upper School and Spanish teacher, and Daniel Gutierrez, Director of Center for Writing and Rhetoric and a history teacher) visited Stanford's writing program and later met with a WAC consultant and other university and secondary WAC and writing center directors (http://www.windwardschool.org/writing). The task force led faculty workshops; conducted surveys of faculty, students, and alumni to discover how to improve the teaching of writing across disciplines; and shared common readings. After two years of workshops, research, meetings, and visitations, the task force – with administrative support – designed a WAC-based writing center that opened officially this fall after a spring pilot program (http://www.windwardschool.org/podium/default.aspx?t=204&nid=777051). Members of the task force have presented at IWCA and CCCC conferences with some of their collaborators at other institutions.

Issues Involving WAC Today

Today, WAC has gained more momentum from initiatives such as the Common Core State Standards (CCSS); Science, Technology, Engineering, and Mathematics (STEM) Education and Next Generation Science Standards (NGSS). New articles and books are coming out every day on these topics, and researchers regularly emphasize the logical connections between these movements and WAC (Childers and Lowry, 2011; Wessling with VanKooten and Lillge, 2011). On the postsecondary level, *Framework for Success in Postsecondary Writing* (2011) and the soon-to-be-revised *CWPA Outcomes Statement* (2008) also connect directly to WAC in secondary schools as teachers try to prepare their students for writing in the disciplines in college.

Essays in this Special Issue

The essays that we have included in this special issue offer a variety of approaches to WAC in secondary schools. What makes them different from postsecondary WAC studies are the age and developmental level of the students they are describing. As teachers of students in grades 9-12, we know the difference between 9th graders and seniors, and many times our seniors are not much different from college freshmen. However, the requirements for graduation, the array of state-mandated standardized assessments that students must face, and the socialization and sexual development of teens introduce important social and academic contexts that impact their experiences with writing. Whether their essays are discussing collaborative projects with science teachers, other secondary school teachers, or fellow students, or are reflecting on international issues in their social studies courses, their writing reflects these multiple, sometimes conflicting, contexts,

and secondary school teachers in all disciplines must be prepared to help them explore this complex, often confusing territory – rhetorically as well as academically. Teachers in all disciplines will need to take risks with the teaching of writing, and faculty development is a critically important part of the process.

Our first two articles describe high school-college WAC partnerships. Michelle Cox and Phyllis Gimbel, in "Conversations among Teachers on Student Writing: WAC/Secondary Education Partnerships at BSU," describe their ongoing collaborative WAC work with secondary education teachers, administrators, and pre-service students at Bridgewater State University. Their well-balanced program, involving teachers at both academic levels in a variety of disciplines, has become a vital learning experience for all those who participate. Through their organic projects and consideration of Common Core State Standards, they have learned that "[t]hough the context of secondary education differs greatly from the context of higher education, with differing constraints and processes for curriculum development, faculty development, program development, and funding, there is still much that can be shared across levels."

By teaming high school science teachers with postsecondary educators, the authors of "Writing Science in Hard Times" (McClellan, Myelle-Watson, Peters, Spears and Wellen) describe the challenges they have faced with budget cuts and assessments in a low-income, low test-scoring school district. Through innovative ideas and teamwork among science teachers and university colleagues, they are meeting the financial and demographic challenges with writing in science. In their article, they question the value of state-wide assessments whose scores return too late in the school year to be anything other than summative assessment with no room for improvement, arguing instead that "a district-designed test administered in quarters throughout the academic year promises to be [a more] appropriate means of getting timely feedback so that teachers can use writing to learn to intervene in areas where students need help most."

From a different international perspective, Herkner, Pydde and Tschirpke take us back in time to the infancy of the WAC movement. Or rather, they remind readers what those early years were like. In Germany, the concept of WAC is largely unknown in high schools. Although writing occurs in many ways in various disciplines, it is viewed primarily as an assessment tool. As the authors state, "There is not much awareness of writing writer-based texts to develop ideas and to prepare reader-based texts. Neither is there awareness of writing for different audiences or for improving texts with feedback and revision." The challenges the authors faced in forming a collaborative effort between a high school and university are instructive, even if the results of their initiative were less productive than they had hoped. "Even though we faced many challenges throughout the project," they note, "we definitely see that all of us grew over the course of time, especially with regard to communication and coordination skills. The high school students we were working with developed in a sense that they learned to be aware of the writing process and how to steer and optimize the latter with the help of writing strategies." Unfortunately, that was only a relatively small group.

In contrast, Amber Jensen's essay, "Empowering Student Writing Tutors as WAC Liaisons in Secondary Schools," returns us to the political and economic contexts of writing instruction in the United States. In a post-No Child Left Behind period that sees many states struggling to adopt the Common Core State Standards, does WAC have a role to play? If so, what should that role be? Jensen's essay addresses those questions and more. Jensen takes readers into her high school to follow the work of two tutors in an innovative WAC liaison program. Unlike the context described in Germany, we see a vibrant and innovative program at work. Even though "top-down messages and a test-focused learning environment present challenges that deter many secondary school teachers outside of the English department from teaching and assessing writing in the classroom," readers

nonetheless see how adaptable WAC principles are to the new demands. Her two students become dynamic agents of change for improving the teaching and learning going on at their school.

As we reflect on the successes (and occasional failures) of WAC programs at the secondary level, we must be careful not to forget about the importance of WAC with vocational students. Upstate Tech is the fictional name of a vocational high school in New York that, like other public schools, is obligated to fulfill the Regents requirements for English. The challenge, as Caren Converse describes in "It's Not Just the Facts, Ma'am: Writing for Success in Career Education," is "the school is not often the site for studying writing." She believes, "Students are working on cars, grooming dogs, sitting in a circle playing games with toddlers, operating a backhoe, dusting for fingerprints." In this article, we once again see how the principles of WAC can be employed in the hands of a talented educator. Converse shows us how writing can foster learning as well as develop critical thinking: from cosmetology students engaged in design projects to culinary students creating recipe books. When Dewey advocated the inclusion of vocational training into "the curriculum," he probably never realized that writing could play such a pivotal role in making that dream a reality.

In "Creative Literacy: A New Space of Pedagogical Understanding," Kelly Hrenko and Andrea Stairs describe an eighth and ninth-grade project called *Many Hands*that connects the culture of Native Americans in Maine with visual art and writing. The authors believe "a focus on writing across the curriculum has the potential to facilitate the exploration of art through the lens of cultural beliefs, family structure, heritage, tradition, social values, and norms of students and teachers." Although this project is similar to many WAC-based projects occurring in elementary, middle and secondary schools across the country, what makes it unique is its grounding in the culture of the Wabanaki people. Hrenko and Stairs discover that "both art and writing provided meaningful opportunities to heighten perception, engage emotions, deepen thought, and broaden one's understanding of the world." Whether the specific context is a particular culture or discipline, writing can provide such global learning opportunities.

Finally, we conclude with Danielle Lillge's essay making a specific case for WAC in relation to Common Core State Standards (CCSS). Her ideas emphasize how a movement with national impact can renew and strengthen the importance of WAC in secondary schools. Lillge describes ways in which secondary school teachers can apply writing in classrooms across disciplines with the help of WAC advocates. In "Illuminating Possibilities: Secondary Writing across the Curriculum as a Resource for Navigating Common Core State Standards," she describes how "WAC suggests the possibility for reconceptualizing CCSS-driven writing instruction in secondary classrooms not as addendum but rather as central to content area learning—a necessary support in meaning making and understanding." Though postsecondary WAC advocates will note many similarities between the program she describes at Chelsea High School and university WAC programs, this essay argues that the connection between WAC and the CCSS movement is an obvious one where these WAC advocates can make a difference at the secondary level.

We hope these essays will open more doors of communication between secondary and postsecondary WAC programs and offer secondary school educators blueprints of how to develop and sustain effective WAC programs. With the pressures of CCSS, statewide testing, and discipline-specific educational movements, teachers have an opportunity to collaborate across disciplines and academic levels to improve teaching and learning through writing.

References

Atwell, Nancie. (1987). *In the middle: Writing, reading and learning with adolescents*. Portsmouth, NH: Heinemann.

Britton, James. (1978). The composing processes and the functions of writing. *Research on composing.* Urbana, IL: National Council of Teachers of English.

Britton, James. (1982). Spectator role and the beginnings of writing. *What writers know: The language, process, and structure of written discourse*, 149-169.

Britton, James, Burgess, Tony, Martin, Nancy, McLeod, Alex, & Rosen, Harold. (1975). *The development of writing ability* (11-18). London: Macmillan.

Britton, James N., Martin, Nancy C., & Rosen, Harold. (1966). *Multiple marking of compositions*. London: Her Majesty's Stationery Office.

Childers, Pamela B. (2004, March) WAC, CAC, and writing centers in secondary education: Helping others, helping ourselves. *Across the Disciplines*, *1*. Retrieved from https://wac.colostate.edu/atd/secondary/column2004.cfm

Childers, Pamela B. (2007, February). High school-college collaborations: Making them work. *Across the Disciplines*, *4*. Retrieved from https://wac.colostate.edu/atd/secondary/column2007.cfm

Childers, Pamela B. & Lowry, Michael J. (1997, November-December). Engaging students through formative assessment in science. *The Clearing House: A journal of educational strategies, issues and ideas, 71*(2), 97-102.

Childers, Pamela B. & Lowry, Michael J. (2004a, July-August). Collaboration: Taking risks inside and outside the classroom. *The Clearing House: A journal of educational strategies, issues and ideas, 77*(6), 250-253.

Childers, Pamela B. & Lowry, Michael J. (2004b, Winter). Literature in an interdisciplinary science seminar. *Academic Exchange Quarterly, 8*(4), 65-67.

Childers, Pamela B. & Lowry, Michael J. (2005, December). Connecting visuals to written texts and written texts to visuals in science. *Across the Disciplines, 3*(Special Issue:Visual WAC).Retrieved from https://wac.colostate.edu/atd/visual/childers_lowry.cfm

Childers, Pamela B. & Lowry, Michael J. (2012). STEMing the tide: Using writing to learn in science. In Lesia L. Lennex & Kimberely Fletcher Nettleton (Eds.). *Cases on Inquiry Through Instructional Technology in Math and Science* (pp. 21-50). Hershey, PA: IGI Global.

Emig, Janet. (1971). *The composing process of twelfth graders.* Urbana, IL: NCTE.

Emig, Janet. (1977). Writing as a mode of learning. *College Composition and Communication, 28*(2), 122-128.

Farrell-Childers, Pamela, Gere,Anne Ruggles, & Yount, Art. (Eds.). (1994). *Programs and practices: Writing across the secondary school curriculum*. Portsmouth, NH: Boynton/Cook.

Fulwiler, Toby, & Young, Art. (1982) *Language connections: Writing and reading across the curriculum.* Urbana, IL: NCTE.

Gere, Anne Ruggles. (1985). *Roots in the sawdust: Writing to learn across the disciplines*. Urbana, IL: NCTE.

Goodman, Kenneth S. (1982). *Language and literacy: The selected writings of Kenneth S. Goodman* (Vol. 1). Routledge, Kegan & Paul.

Grant, Tripp, Murphy, Andrew, Stafford, Ben & Childers, Pamela B. Peer tutors and students work with formative assessment. *The Clearing House: A journal of educational strategies, issues and ideas*. 71(2), 103-105.

Gray, James. (2000, Fall). Teachers at the center: A memoir of the early years of the National Writing Project. *The Quarterly*, 22(4). Retrieved from http://www.nwp.org/cs/public/print/resource/41

James R. Squire Office of Policy Research. (2011, March). Reading and writing across the curriculum: A policy research brief produced by the National Council of Teachers of English. *Council Chronicle*, *20*(3), 15–18.

Jordan, Jeanette. (2006, November/December). Change from within: The power of a homegrown writing center. *The Clearing House: A journal of educational strategies, issues and ideas, 80*(2), 52-54.

Lowry, Michael J. & Childers, Pamela B. (2000). Whose essay is it anyway? In Charles R. Duke & Rebecca Sanchez (Eds.) *Assessing writing across the curriculum: Guidelines for grades 7-12* (pp. 119-129). Durham, NC: Carolina Academic Press.

Maimon, Elaine P. (1981). *Writing in the arts and sciences*. New York: Scott Foresman & Co.

Mullin, Joan & Childers, Pamela. (1995, September/October). The natural connection: The WAC program and the high school writing center." *The Clearing House: A journal of educational strategies, issues and ideas, 69*(1), 24-26.

Murray, Donald M. (1968). *A writer teaches writing: A practical method of teaching composition*. New York: Houghton Mifflin.

Murray, Donald M. (1980). Writing as process: How writing finds its own meaning. In Timothy R. Donovan & Ben McClelland (Eds.). *Eight approaches to teaching composition* (pp. 3-20). Urbana, IL. NCTE.

Murray, Donald M. (1982). *Learning by teaching*. Portsmouth, NH: Heinemann.

Murray, Donald M. (1987). *Write to learn*. New York: Holt, Rinehart, and Winston.

Murray, Donald M. (1989). *Expecting the unexpected*. Portsmouth, NH: Heinemann.

The National Writing Project & Carl Nagin. (2006) *Because writing matters: Improving student writing in our schools* (Rev. ed.). San Francisco: Jossey-Bass.

The National Commission on Writing in Our Schools and Colleges. (2003). *The neglected R: The need for a writing revolution*. New York: College Entrance Examination Board.

Neill, Shirley Boes. (1985). On *teaching writing: Problems and solutions*. Arlington, VA: American Association for School Administrators.

Sheils, Merrill. (1975, 9 Dec.). Why Johnny can't write. *Newsweek,* 58-65.

Wessling, Sarah Brown, with VanKooten, Crystal, & Lillge, Danielle. (2011) *Supporting students in a time of core standards: English language arts, grades 9-12*. Urbana, IL: NCTE.

Why Johnny can't write. (1975, December 8). *Newsweek.*

Appendix - Further References on Secondary School WAC

Barnett, Robert W., & Blumner, Jacob S. (Eds.). (1999). Writing centers and writing across the curriculum programs: Building interdisciplinary partnerships. Westport, CT: Greenwood Press.

Berthoff, Ann E. (1981). The making of meaning: Metaphors, models and maxims for writing teachers. Montclair, NJ: Boynton/Cook.

Blumner, Jacob, & Childers, Pamela. (2011, Fall). Building better bridges: What makes high school-college WAC collaborations work? WAC Journal, 22, 91-101. Retrieved from https://wac.colostate.edu/journal/vol22/blumner.pdf

Bruffee, Kenneth A. (1984).Collaborative learning and the 'Conversation of Mankind.' College English 46(7), 635-652.

Childers, Pamela B. (2006, Summer/Fall). The evolution of secondary school writing centers. Kansas English 90(2), 83–93.

Childers, Pamela B. (2011). Getting beyond mediocrity: Secondary school writing center as change agent. In Nicholas Mauriello, William. J. Macauley, Jr., & Robert T. Koch, Jr. (Eds.) Before and after the tutorial: Writing centers and institutional relationships (pp. 179-201). New York: Hampton Press series on Research and Teaching in Rhetoric and Composition.

Duke, Charles R. & Sanchez, Rebecca (Eds.). (2000). Assessing writing across the curriculum: Guidelines for grades 7-12. Durham, NC: Carolina Academic Press.

Elbow, Peter. (1973). Writing without teachers. New York: Oxford University Press.

Flower, Linda, & Hayes, John R. (1981). A cognitive process theory of writing. College Composition and Communication, 32(4), 365-387.

Schultz, Lucille M., Laine, Chester H., & Savage, Mary C. (1988). Interactions among school and college writing teachers: Toward recognizing and remaking old patterns. CollegeComposition and Communication, 39(2), 139–153.

Sommers, Nancy. (1980). Revision strategies of student writers and experienced adult writers. College Composition and Communication, 31(4), 378-388.

Sullivan, Patrick, & Tinberg, Howard. (Eds.). (2006). What is "College-Level" writing? Urbana, IL: National Council of Teachers of English.

Sullivan, Patrick, Tinberg, Howard, & Blau, Sheridan. (Eds.). (2010). What is "college-level" writing? (Vol. 2.). Urbana, Ill: National Council of Teachers of English.

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