

Writing in the Disciplines, Technology, and Disciplinary Grounding

Carolyn Sterling-Deer, LaGuardia Community College

Abstract: This essay examines the impact of WAC/WID methodology and technology in an Education Capstone Course for Childhood Education majors at LaGuardia Community College/CUNY. Written discourse and ePortfolio development of students enrolled in the writing-intensive capstone course is examined within the framework of Veronica Boix Mansilla's (2004) work on assessment of student interdisciplinary learning in learning communities under the auspices of the Harvard Interdisciplinary Studies Project. Boix Mansilla's (2004) criteria for assessing disciplinary grounding and interdisciplinary understanding in learning communities forms the basis of an examination of interdisciplinary understanding of students enrolled in a thirteen-week education capstone course prior to graduation and transfer to the four-year college. The use of Blackboard eLearning course management technology to share documents and lectures, and ePortfolio technology bolstered deeper levels of reflection essential to disciplinary grounding and interdisciplinary understanding. Students' written Reading Reflection and Linking Knowledge to Practice papers demonstrate their disciplinary grounding in education and linguistic principles and their interdisciplinary understanding. A digital portfolio format firmly establishes students' integrative learning and clearly illustrates their deeply personal and academic connections to the teaching profession and display of an emerging teacher identity. Student ePortfolios additionally illustrate the struggle to provide an academic and/or professionally focused ePortfolio in the face of limitations imposed by use of available general-purpose ePortfolio templates. Close examination of students' written discourse and student learning in this multimedia WID environment reveals ways in which technology reinforced and enhanced students' deeper reflection as evidenced in their visual and textual links to education and linguistic pedagogies.

The future of WAC, like its past, is about forging new alliances, expanding with new connections.

-- David R. Russell, 2006

Across the Disciplines

A Journal of Language, Learning and Academic Writing

DOI: <https://doi.org/10.37514/ATD-J.2009.6.2.16>

wac.colostate.edu/atd

ISSN 554-8244

Across the Disciplines is an open-access, peer-review scholarly journal published on the WAC Clearinghouse and supported by [Colorado State University](#) and [Georgia Southern University](#). Articles are published under a [Creative Commons BY-NC-ND license](#) (Attribution-NonCommercial-NoDerivs) ISSN 1554-8244. Copyright © 1997-2017 The WAC Clearinghouse and/or the site's authors, developers, and contributors. Some material is used with permission.

Writing Across the Curriculum Principles and Technology

The last decade has witnessed the inclusion of technology in several modes of instruction including courses specifically devoted to writing (Warschauer, 1999) and in Writing Across the Curriculum (WAC) courses (Hardcastle & Hardcastle, 1998; Portillo & Cummins, 1998; Taylor, 1998). The inclusion of technology in WAC classrooms was anticipated as a natural next step, particularly with the implementation of the writing intensive course design (Hocks & Bascelli, 1998). The technological path has been a challenging one. Nonetheless, many of us engaged in teaching major courses in the disciplines have taken up the challenge to include technology in teaching and learning in WAC courses.

The subject of this article is the impact of WAC methodology in a childhood education course in the two-year college. The course, entitled Language and Literacy in Childhood Education, is a required capstone course for childhood education majors. As a capstone, the course is at a higher level and is interdisciplinary in that it covers both the linguistic basis and classroom methodology for the teaching of literacy in elementary education. An additional feature is that it bears the writing-intensive designation (Peterson, 2006), as do all capstones at LaGuardia Community College, City University of New York. Following my participation in WID training, the course was taught in a writing-intensive mode including WAC/WID pedagogy. When taught for the first time in a newly established Department of Education and Language Acquisition, technological features were naturally incorporated into course design, largely due to my previous experience with technology in teaching and learning (Sterling-Deer, in press).

The work reported on in this writing is guided by WAC methodology and, particularly, by writing-intensive guidelines outlined by pioneers in WAC pedagogy (Bazerman & Russell, 1994; Bean, 2001; Farris & Smith, 1992; Sorcinelli & Elbow, 1997). As Hocks & Bascelli (1998) point out in their claim of the benefits of a multimedia approach, the use of technology in this case proved to be a valuable asset in teaching and learning. In this instance, it proved beneficial in enhancing students' learning in the interdisciplinary study of teaching literacy to children in the elementary grades. In tandem with "disciplinary grounding," a related framework undergirding an examination of the impact of WAC methodology on community college students, is Veronica Boix Mansilla's (2004) research on "interdisciplinary understanding," as it is observed in the work of students in learning communities (p. 3).

This essay examines the impact of WAC/WID methodology and technology on a writing-intensive education course, very much in line with writing intensive features outlined by Townsend (2001) in her discussion of writing intensive courses in the WAC framework. It is my claim that the use of technology in combination with WAC principles enhanced classroom and independent learning and moved students to a higher level of understanding in the discipline of language and literacy in education. Moreover, the variety of course technologies promoted the reflection essential to interdisciplinary understanding in educational pedagogy and linguistics as well as the disciplinary grounding necessary for interdisciplinary understanding. Before providing an analysis of student work, the nature of writing-intensive coursework for this class and a brief overview of the WID Program at LaGuardia are outlined.

The Writing-Intensive Course Design

The LaGuardia Community College Writing in the Disciplines (WID) Program has made a significant impact on teaching and learning at the college. Through the program's professional development effort and its expansion over the years since its inception in 1995, WID at LaGuardia has trained over

200 full- and part-time faculty and has recently added refresher courses for WID graduates. A growing number of faculty throughout the college now recognize its importance as a learning tool and are committed to developing curricula that move writing beyond the English Department into the disciplines. The LaGuardia WID Program distinguishes its WAC initiative as Writing in the Disciplines to reflect the view that writing is a "discipline-specific activity," in line with Bazerman & Russell's (1994) distinction of WID as set apart from the broader application of WAC as learning across the curriculum. Faculty participants in WID receive released time to aid participation, stressed by McLeod (1994) as an essential factor in the survival of WAC programs. In its institutionalization of WID, the college now requires WID training of all faculty teaching capstones in majors across the curriculum.

The subject of the capstone course in this writing is on the teaching of language and literacy in the elementary grades. Most students enrolled in the course are at the end of their two-year college studies. In line with college requirements, my WID training was completed prior to the onset of teaching. WID training at LaGuardia generally involves experimenting with the non-WID version of a course and subsequently restructuring the course along WID guidelines. As co-author of the ELE 203 course proposal, it was incumbent upon the proposal authors to coordinate course content in articulation with one of our four-year colleges so that criteria for transfer of credit would be met. In addition, the course contained a variety of learning tasks to be accomplished within the time constraints of a thirteen-week semester.

The learning goals of the course were similar to those described by Russell (2006) regarding the benefits of "*learning through writing*" in the context of "communicating about course material and preparing for professional roles" (p. 12; italics in original). This is precisely the observed benefit of technology in a WAC setting. The technology infused in the capstone education course facilitated the production of documents essential for the course and were paramount to the expression of learning and deeper reflection. Most important were the interdisciplinary connections made by students as they created the various assignments.

Upon entering WID training, initial work to infuse WID techniques in the original course design began. In accordance with the literature on Writing Across the Curriculum, both high and low stakes writing assignments were included in the curriculum (Elbow, 1997). Low stakes assignments included Reading Reflection papers requiring students to summarize and reflect upon selected reading assignments, and Linking Knowledge to Practice papers of their reflections upon field experiences. Three short papers, which may be considered mid-stakes writing assignments, were also assigned. These papers required summarizing, analyzing and/or synthesizing readings related to individual research topics. An introductory writing assessment was the Literacy Narrative paper, in which students were asked to reflect on their own acquisition of literacy. The major writing assignment for the course was a staged, ten-page research paper on a self-selected topic in language and literacy. Individual topics were selected prior to a library research seminar and an in-class exercise on the process of selecting topics and writing research questions. To further facilitate the research process, students were required to submit an annotated bibliography on their topics including three general (book) sources and four specific (varied) sources within two weeks following the library research seminar.

In addition to these assignments, students were engaged in collaborative activities in class related to lesson planning for language and literacy at specific grade levels. Class discussions centered on topics in the assigned reading and issues related to classroom pedagogy. Student evaluations of the course text, the course and their learning needs were also incorporated. Peer response as outlined by Sargent (1997) was also an integral component of the course as students shared initial and final drafts of research papers. Individual midterm student conferences were held to discuss research

progress. In all, students were engaged in extensive writing, small group collaboration and both professional and personal writing as espoused by Bean (2001) to promote learning. Finally, students provided oral presentations of their research in class and posted final drafts of their research papers online.

The Students

All registered students were childhood education majors. Many of the students at LaGuardia are non-traditional, first-generation college students, precisely the population which was a motivating force for the WAC movement in its early stages of development (Bazerman & Herrington, 2006). In addition, approximately 65% of the student population does not share English as a first language, and a majority is female. The ELE 203 class consisted of a total of nineteen students, all female. Class participants mirrored the cultural diversity in the New York City area. From individual student-teacher conferences during the semester and observations of student behavior, the group can be described as highly motivated to become teachers and to be engaged in teaching young children.

Faculty Challenges

It must be acknowledged that as the instructor, this newly developed capstone course was a test of my ability to facilitate acquisition of disciplinary concepts while implementing various modes of technology in the course. The most important test was adequate coverage of interdisciplinary concepts to prepare students to move ahead as expected in the articulation agreement. Needless to say, the greatest challenge was assisting students in both acquisition of the course content and providing adequate opportunities to improve writing ability through multiple drafting of the high stakes research paper.

In the course of adapting my teaching to accommodate student need, it was necessary to avail students of opportunities that I might not have ordinarily considered, prior to the WID experience. As a result, students were permitted to hand in multiple drafts of any assignment for a better grade. I strongly feel it was WID training that set the tone of a more conciliatory approach to teaching, and which naturally encouraged my carving out space and time for revision of any assignment that warranted additional revision to be academically acceptable. The result of this more positive focus was a more content group. For me, it was the pleasure of teaching and learning which made the work enjoyable. For my students, it was the assurance of a second opportunity to produce quality work. This is not to say that our satisfaction was the result of perfection. Rather, it was more the result of a desire to aim for perfection that contributed to our overall enjoyment. Without question, enhancement of coursework with technology was essential to ultimate accomplishment of the course goals and the work required to meet those goals.

Course Technology

Technology is a major component of all courses I teach. However, it has most frequently been implemented in the teaching of second language writing to facilitate submission of multiple drafts of written essays. In addition, students in writing courses have traditionally created an electronic portfolio (ePortfolio) of their work and have had experience in Blackboard course management software (Sterling-Deer, in press). However, teaching a writing intensive major capstone course opened up new challenges in the use of technology because of the writing intensive feature. The decision to encapsulate course content in Blackboard was a deliberate decision to facilitate student access to all course materials, including lectures. Use of Blackboard was supplemented by teaching the course in a "smart" classroom equipped with state-of-the-art multimedia technology. The smart

classroom in combination with Blackboard presented an added benefit for students, since they not only *experienced* in-class lectures, but also were able to access the same lectures online in Blackboard in addition to other course materials.

Introduction of the electronic portfolio was an innovation for this group since it represented the first time an ePortfolio was created by pre-service teachers at the college. Students enrolled in ELE 203 are additionally required to take a Cooperative Education (Co-Op) Seminar which consists of a field placement and development of an ePortfolio. Students in the course received guidance in the basics of ePortfolio development but essentially made their own decisions about design, layout and content. The ePortfolios students developed were student-generated pre-service portfolios which reflected students' decisions about artifacts important and relevant to them in the study of language and literacy. In many ways, student ePortfolios resemble the "experienced" curriculum outlined by Kathleen Blake Yancey (1997) in her research on student teaching portfolios in a senior college methods course for student teachers of English (pp. 250-251). I refer to Yancey's work because the digital portfolios created by education majors were illustrative of their grounding in the disciplines of education and linguistics as well as their deeper personal connection to the teaching profession, similar to Yancey's students' display of actual experienced learning from in-class lectures. Although at a less advanced level than Yancey's students, disciplinary grounding is embedded in my students' experienced learning, or their disciplinary perceptions of the subject of language and literacy.

Furthermore, it is through the use of various types of technology that students were able to more deeply engage in reflection necessary for future teachers. The ease with which students were able to generate written documents added to their ability to affirm their grounding in education and linguistics as well as to demonstrate their interdisciplinary understanding.

Theoretical Framework

The analysis of the capstone experience and the impact of WID in an electronic environment is undergirded by the conceptual base outlined by Veronica Boix Mansilla (2004) in her work with the Harvard Interdisciplinary Studies Project which explored a framework within which to examine students' interdisciplinary understanding. Boix Mansilla (2004), who has undertaken the goal of assessment of interdisciplinary understanding, notes that "interdisciplinarity" has not readily been defined in academia and is, in many ways, "semantically evasive" (p. 4). For Boix Mansilla, development of a clear definition of what constitutes "quality interdisciplinary work" is essential and at the core of any examination of student work across disciplines. Three concepts presented by Boix Mansilla (2004) to determine the nature of disciplinary understanding are *disciplinary grounding*, *integrative leverage*, and *critical stance* (p.6).

The concept of disciplinary grounding refers to the disciplinary base of student work and the "disciplinary insights" which may be manifest in students' interdisciplinary studies. In Boix Mansilla's conceptualization of disciplinary grounding, a close study of this feature of student learning provides an opportunity to address "misconceptions" and to offer students "additional opportunities for enrichment" (p. 11). Integrative leverage refers to students' ability to demonstrate their integration of "disciplinary perspectives" in the creation of new inter/disciplinary "understanding" not achieved by the study of a single discipline (p. 11). Boix Mansilla adds that there must be evidence of an integration of disciplinary views so that disciplinary concepts are not "merely juxtaposed" but "inform" and "leverage" each other (p. 6). Key to this concept is her notion of "epistemic exchange," which naturally occurs when interdisciplinary understanding is complete. Last, the notion of critical stance is related to students' ability to assume a "self-critical stance" or "healthy skepticism" of outcomes (p.13). For Boix Mansilla, interdisciplinary understanding is "purposeful," meaning that it

culminates in "cognitive advancement" (p. 6). A summary of Boix Mansilla's definition of interdisciplinary understanding states: "Interdisciplinary understanding goes beyond simple 'mastery and recall stressing disciplinary grounding and demanding 'integration and leverage' over simple 'multidisciplinary juxtapositions'" (p. 7).

This criterion is outlined as useful in assessment of student interdisciplinary work because her study revealed that substantive assessment was lacking in traditional forms of faculty assessment of student interdisciplinary work. In interviews with faculty, Boix Mansilla noted their inability to offer a definitive evaluation of ways in which interdisciplinary work is evaluated.

Examination of a major course in the WAC framework using Boix Mansilla's criteria is most suitable because of the intersections of Boix Mansilla's framework and WAC principles. First and foremost, WAC pedagogy has been built upon a disciplined focus with WAC pedagogy intrinsically tied to the disciplines with a concentration on "learning in the disciplines" (Holder & McLeod, 2006, p. 69). WAC goals have been targeted to address writing and disciplinary learning, particularly in Writing in the Disciplines, which makes a direct link between writing and disciplinary learning. Moreover, WAC principles have long espoused a focus on interdisciplinary learning (Holder & McLeod, 2006) as noted in Holder's discussion of the "experimental discipline-based" writing course she offered in 1981 (p. 69). This is additionally stressed by Maimon (2006) in her discussion of the development of "interdisciplinary thematic intersections" as standard practice in WAC pedagogy (p.27). Maimon (2006) further points out that Learning Community pedagogy was in fact born of WAC principles. Thus, the linkages between Boix Mansilla's emphasis on disciplinary grounding and interdisciplinary understanding are closely aligned with the same principles in WAC pedagogy.

Another important concern of WAC leaders has been the issue of critical thinking and the connection between critical thinking and writing essential for college students, just as Boix Mansilla is concerned with critical stance and students' ability to use critical stance to move forward in disciplinary thinking. The importance of integrative learning and its relationship to interdisciplinary understanding is also evident in both frameworks. Therefore, the integrated learning outlined by Boix Mansilla is in direct alignment with the concept of integrated learning in WAC pedagogy. In fact, the recent move to more deeply embed integrative learning in learning communities for the purpose of deeper interdisciplinary work has been more explicitly emphasized as sound pedagogy in present-day learning communities across universities (Lardner & Malnarich, 2008). This goal is very much in sync with WAC pedagogy of the past, present and future centered on writing to learn in the disciplines. Most important for this paper is an appreciation of the meaningful intersections in two enduring pedagogies which inform current classroom practice to the benefit of student interdisciplinary learning.

Performance-Based Definitions of Disciplinary Grounding & Integrative Learning

Professionals in the area of learning community pedagogy have recently undertaken the quest to examine ways in which student learning intersects knowledge across disciplines to demonstrate interdisciplinarity (Boix Mansilla, 2004). A closer examination of student work in the area of writing has been most useful in providing teaching faculty with a preliminary glimpse into the connections that students make in their learning across disciplines. In her work on disciplinary grounding, Veronica Boix Mansilla (2004) points to "multiple sources of expertise" which provide a basis for examination of "multi-dimensional phenomena" in student learning (p. 2). For Boix Mansilla (2004), provision for "interdisciplinary learning projects" at colleges across the country invites educators to

take a closer look at work across the disciplines and outcomes of integrated learning experiences (p. 2).

As previously pointed out, Boix Mansilla's work and WAC pedagogy share a common base. This foundational connection facilitates an examination of interdisciplinary understanding within a WAC framework. Writing in the Disciplines requires expanded writing experience in major courses with the goal of improving both disciplinary learning and writing ability. In many respects, writing generated by students in the process of learning represents an ideal opportunity to examine disciplinary grounding and interdisciplinary understanding.

The feature that distinguishes Boix Mansilla's (2004) definitions of disciplinary grounding, disciplinary understanding, and integrative learning is the focus on "performance" over previously established definitions associated with information "mastery and recall" (p. 7). In ELE 203, student writing in language and literacy shows a move toward learning which emphasizes deeper insights and grounding in linguistics and teaching methodology necessary for entry into the teaching profession. Although students at the community college level will transfer to a senior college where they will be engaged in a more rigorous immersion into the field of education, this group of two-year college students displayed clarity in disciplinary grounding and interdisciplinary understanding as they moved from one segment of the course to another. The next section attempts to capture the essence of selected students' attempts to more fully engage the disciplines of linguistics and education.

Disciplinary Grounding in Student Writing

The goal of all content area coursework in the major is the expression of disciplinary grounding in the field under study. It is the confirmation of learning that every teacher hopes to find in student work. An additional area that we hope marks student work is the integration of disciplinary concepts providing a window into a learner's ability to pull from multiple areas of learning in analyzing and synthesizing data in the discipline. These elements of learning in any field are considered the epitome of learning and acquisition of concepts relevant to the discipline. In the case of this course in language and literacy for childhood education majors, both linguistic theory and teaching methodology share equal ground. One informs the other. From a teaching/learning perspective, the two specialties are intertwined because both fields share a rich methodological repertoire. In assessing student work for the course, attention was on students' expressions of disciplinary grounding in education and linguistics and ways disciplinary grounding and interdisciplinary understanding contributed to their overall development in teaching language and promoting literacy in children.

Reading Reflection and Linking Knowledge to Practice papers were assigned students throughout the course. In Reading Reflection papers, students were required to write a brief summary of the main ideas of the reading and a reflection focusing on some aspect of the reading that was especially meaningful to them. Linking Knowledge to Practice papers were based on assigned tasks at the end of textbook chapters (Christie, Enz & Vukelich, 2007) and generally asked students to observe and report on teacher and/or student behavior in field assignments. Though guided, Linking Knowledge to Practice papers left room for open-ended student response. It was in these low-stakes writing assignments that students' integrative learning in the disciplines of linguistics and education were most apparent. Reflection is an essential self-regulatory practice in teaching and teacher training. Therefore, an assignment of this type is in many ways organic to the teaching profession. Nonetheless, it is noteworthy that students at this early level of training showed a more intimate connection to the concepts integral to the pedagogy of teaching language and literacy.

In many papers, students demonstrated personal connections to learning in the text and made those connections explicit in their writing. Student responses to reading assigned for the course elicited a variety of views about teaching and learning. An analysis of written discourse in students' unedited writing provides evidence of integrative learning. Excerpts from the writing of one student (Nina) are illustrative of this feature.

Analysis of Discourse in Student Writing

Often in response to readings, students display various types of connections between their understanding of pedagogy and that presented in the text. Written responses to assigned reading show disciplinary grounding in pedagogy and linguistics as well as personal connections to the act of teaching.

With reference to interdisciplinary connections between theory and pedagogy, revealing statements in Nina's writing on assessment display her understanding of teaching methodology. In Nina's writing on assessment, she links constructivist pedagogy to teacher involvement:

... Teacher involvement is key for children to obey and trust their teacher. For a long time teacher's roles were just to set the rules, give the work and not interact with students. This has changed and it is very important to have in a classroom. Observation is also part of [a] teacher's involvement because, by observing the student's behavior, how they interact with others can help to shape for the teacher how this particular student is progressing. Observing can also help determine if this child needs any special attention, or academic help.

As can be observed from Nina's writing, theory and practice are integrated to express her view of disciplinary practice concerning assessment of student learning in language and literacy. She has effectively linked concepts learned in the course with her evolving pedagogy in teaching and the linguistic methodology to advance vocabulary acquisition:

... This is part of the writing stage children learn how to identify letters and the correct formation of words... I believe that spelling is much more than just memorizing how to spell a word—it is extensive. The can use...children words to express themselves. By knowing how to spell a word, they can form new words...

In another response regarding teaching word formation, Nina mentions the prephonemic stage of development in spelling in which children have not yet learned that letters represent phonemes or sounds in words. She again links her formal classroom learning with classroom observation, displaying a deeper level of interdisciplinary understanding:

... Of the five stages of spelling I like the first stage which is the prephonemic stage because I have had the experience of being around children who just blurt words out without knowing the meaning. This is a very good start because without even knowing it the children are learning new words just by saying or putting... letters together...

With this writing, Nina highlights her grounding in linguistics with field observation and practical application. Her discussion draws on disciplinary understanding of the stages of vocabulary acquisition and morphology, which form the linguistic basis of teaching children word-formation.

The extensive use of technology prompted students' ability to enter an interdisciplinary conversation in education and linguistics. In addition to integrating theory and practice, students in this education capstone course drew heavily on field experiences and demonstrated integrated learning. Many students discussed linkages between classroom lectures, textbook reading and field experiences. In fact, it appears that observed teaching behaviors in fieldwork did not come into full perspective until students' participation in the education capstone.

Nina's growing expertise in recognizing and directly commenting on interdisciplinary knowledge enriches her Linking Knowledge accounts of classroom experience with young children. In her observation of a kindergarten class, Nina reports on her observations and connects both pedagogy and disciplinary grounding in reading theory:

... The teacher showed the children the cover of the book and she read them the title and then she read who the author was and the illustrator. The teacher than asked the children what the author does and what the illustrator does... The teacher proceeded to the title page of the story and after she read the title page she told the children that every book has a title page... The teacher continued reading each page and stopping to ask the children what... will happen next. The teacher and the children were engaging in this reading time... Both the children and the teacher spent reading time exchanging ideas and predictions...

Nina's account of classroom practice in the reality of everyday teaching demonstrates her ability to locate teaching practice in theory, particularly since teaching reading generally involves teaching learners to predict upcoming events in a story.

To conclude, Nina's grounding in the disciplines of linguistics and education is readily apparent in her writing during the course. Moreover, the excerpts provided have been drawn from the low-stakes writing assignments completed on computer during the course. It appears that it was the low-risk, non-judgmental nature of these assignments which contributed to Nina's and other students' ability to express the true extent of their disciplinary grounding, integrative learning and interdisciplinary understanding. Most impressive was students' ability to express linkages between former coursework, current studies, and field assignments, particularly given the increased demands of capstone study. No doubt, the use of computer-generated writing reduced the burden of production to permit deeper reflection on course content.

Student ePortfolios

Student ePortfolios display the creators' love of children and teaching as well as their appreciation of the visual medium. Students' interdisciplinary understanding is also readily observed through text and visuals presented in their digital portfolios. Engaging an electronic format for pre-service teaching portfolios enhanced the dimensions of choice and self-presentation. Potential audiences for students in the capstone were professors who may judge their work in the major, four-year schools, education programs to which students may apply for transfer, and finally, professionals in the field of education.

The goal of ePortfolio preparation was primarily academic/professional. While students had the opportunity to make their ePortfolios available to friends and family, they geared design to a professional audience which might judge them academically and/or professionally. This is apparent in the digital portfolios which tend to balance academic and personal attributes directed at professional competence or academic and professional potential. Students' academic/professional

ePortfolios have social elements, but the social aspects of their ePortfolios are centered on drawing attention to their personal and/or academic competence as future teachers. Indeed, it is interesting to observe techniques students employed to present a more professional self in the context of a general-purpose ePortfolio. Even more interesting were the adjustments students employed to compensate for the limitations of the general ePortfolio format.

Specific pages from two portfolios will be shared to illustrate ways in which students elected to present themselves to a potential professional audience. The preparation of ePortfolios in the seminar course reflects the earliest version of such portfolios for preservice teachers at the college. The creation of digital portfolios for this group was a first experience in the Co-Op Seminar. Therefore, in addition to the writing-intensive feature of the course, Web technology was implemented at beginning and intermediate levels of ePortfolio development. Over time, and with increased experience with ePortfolios specifically geared for the teaching profession, our intention is refinement of pre-service electronic teaching portfolios. However, in this project, basic pre-service teaching ePortfolios were developed using general-purpose templates available to all students at the college. It was use of the general-purpose ePortfolio template which uncovered a need for a template directly focused on the education major and the teaching profession.

Challenges of the General ePortfolio Design

Standard ePortfolio categories are *Welcome*, a page which welcomes viewers to the portfolio; *About Me*, a page which contains a short autobiographical narrative of the developer; *Classes & Projects*, a section which contains selected coursework; *Educational Goals*, outlining students future educational plans; *My Links*, a list of relevant links; *Resume* and *Contact*. However, not all of these categories are necessarily standard for teaching portfolios. It must be noted that the standard ePortfolio templates lacked essential categories for pre- and in-service teachers. In fact, the templates showed no disciplinary or professional connection to the teaching profession. They were devoid of the professional categories which must be addressed even at the pre-service teacher training level.

The general ePortfolio categories presented a challenge for education majors in that students were compelled to search for appropriate academic or professional representations of their connections to education and the teaching of literacy in the elementary grades. The key word here is *professional*—the standard template simply lacked the professional focus expected of future teachers in a field which requires a teaching portfolio as evidence of educational and professional growth. The general format lacked sections for *Educational Seminar*, *Educational Philosophy*, *Professional Development Plan*, and *Professional Standards*. The ePortfolio categories for the education capstone needed to be created and organized to match professional expectations. The most important reason for this is that students should have the opportunity to begin building a professional ePortfolio which can be used for transfer as well as demonstration of academic and professional ability to enter the field.

Moreover, creation of a digital teaching portfolio documents growth over time and also fulfills the required standard of technological expertise for teachers entering the profession. The lack of disciplinary connection to the field of education prompted me to search for an alternative that would be more appropriate for students in my education capstone course. A newly designed Capstone Education ePortfolio template has been accepted for use in the education capstone course. It is an adapted format of one established by Johns Hopkins University for teaching portfolios. The education capstone template includes an *Introduction* which contains an introductory statement and a linked resume, *Coursework* and the additional sections mentioned above (*Educational Seminar*, *Educational Philosophy*, *Professional Development Plan*, and *Professional Standards*). It is currently being piloted

with ELE 203 classes. Ultimately, it should be a comprehensive digital teaching portfolio which encompasses undergraduate study, field practice, academic transition and professional employment.

Even in its early use, ePortfolio technology permitted a type of "digital flexibility" which students readily engaged in selecting visuals and developing initial teaching portfolios. Observation of their efforts shows that they strove to reflect their connection to the teaching profession and the children they will serve. Moreover, it was students' efforts to embed their experiences in education which motivated me to explore a template which would be more appropriate for their future academic and professional needs.

Analysis of Student ePortfolio Pages

A central focus of the digital portfolio was understood to be academic and/or professional. However, students employed personal perspectives to enhance their presentation of academic and or professional characteristics. For two students, Marie and Lourdes, personal focus is grounded in the disciplines of language and literacy from different perspectives. The digital portfolios created by these students represent their first attempt at ePortfolio development. As many students involved in this activity, a great deal of energy seems to have been dedicated to (re)shaping the general format into a more academic/professional document. Moreover, for these students substantial effort was devoted to molding the general template to suit what they anticipated is expected of future teachers. Upon observing the ePortfolios of the class at the end of the semester, I noted the struggle students seemed to be having with working around the general format. I felt the need for a more professionally-directed product, even at the early stages of teacher preparation, particularly since ELE 203 is in articulation with a four-year college which presumes established knowledge and readiness to teach language and literacy. Moreover, the fact that future elementary and secondary level teachers must meet certain prescribed professional standards set the tone for a more professionally designed ePortfolio. It was interesting that students attempted to compensate for the lack of professional categories by displaying an overt connection to their emerging identity as teachers.

As a sociolinguist who has been engaged in analysis of both written and visual discourse to determine what those texts reveal about positioning and identity, it can be assumed that a text of any type is employed by ePortfolio creators to represent who they are, what they believe in, and what they know. The medium is public and potentially addresses a public audience of professors, potential employers, peers, family and friends.

An examination of the ePortfolios of Marie and Lourdes tells us a great deal about how these students perceive and position themselves in the field of education. A closer look at selected pages paints a picture of two future colleagues who are deeply immersed in teaching and learning. Web pages from the general template selected for close analysis include the *Welcome* page, the *About Me* page, and the *Educational Goals* page. Each web page reflects these students' careful selection of text and visuals.

Marie's Welcome Page

Welcome pages for each student take on quite different structures and display different intentions. Marie's *Welcome* page contains an introductory opening within which she introduces herself and immediately associates the teaching profession with lifelong learning. (See [Appendix A](#) for a large format screen capture of Marie's ePortfolio.) She adds additional information about how she elected to enter the teaching profession. It is interesting to note that she emphasizes her independent decision to be an education major, against the wishes of her family. Her desire to teach is intrinsically motivated by her desire to "give back to others." The visual inserted in Maria's *Welcome* page foregrounds her connection to the classroom and young children. She uses actual photos to establish children as the center of her current training and future professional world.

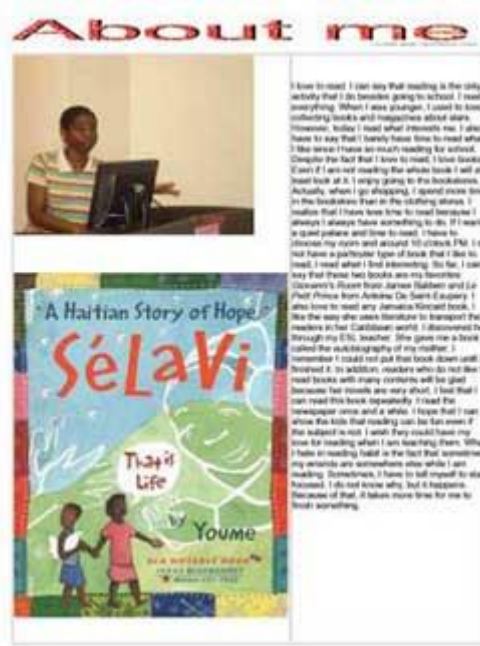
On the other hand, Lourdes provides brief introductory remarks on her *Welcome* page rather than extended discourse on her background or views on education, as Marie does. (See [Appendix B](#) for a large format screen capture of Lourdes's ePortfolio.) Instead her welcome frames portfolio content in the context of childhood education. Though Lourdes makes only a brief mention of her major and career goals, the drawings she has inserted reflect her connection to children.

Lourdes's Welcome Page

In examining the visuals on both *Welcome* pages, focus on children is stressed while the text serves a different purpose. In Marie's case, a narrative providing a glimpse of her as a person is provided, bringing her viewers closer to her personally as she shares her rationale for entering the teaching profession, while Lourdes provides a very brief statement of what viewers can expect to find in her ePortfolio pages. This is interesting since the *Welcome* page is generally used to welcome visitors and to provide a brief overview of what viewers can expect to observe as they navigate the ePortfolio. Marie's narrative goes far beyond the usual intent of the *Welcome* page, since her personal narrative draws the viewer in on a more intimate level immediately. It appears that her extended personal narrative is an attempt to invite viewers to know and understand her on a personal level.

The About Me Page

The *About Me* page is customarily the location in the ePortfolio for a short essay about the developer's background and interests. However, both Marie and Lourdes are more purposeful in their development of this page. The lack of categories for education majors has left the choice to what they deem appropriate. The lack of a more professional structure has also permitted a great deal of variation in what students elect to include on each Web page of the ePortfolio.



Marie's About Me Page

In emphasizing her accomplishments in her *About Me* essay, Lourdes highlights her academic readiness to enter the profession along with her personal suitability for working with children. Viewers' attention is drawn to the academic qualities of her ePortfolio, particularly to her "accomplishments and personal abilities." This is an indication that Lourdes understands that her ePortfolio will potentially be viewed by professionals in the field of education who may judge her work for advanced study or employment in the teaching profession.

Lourdes's *About Me* page also contains personal elements as she presents her reasons for entering the teaching profession, taking viewers directly to her deeper personal connection to the profession. She emphasizes that teaching is work motivated by her own positive learning experiences and observations of good teaching. For Lourdes, positive role models in the profession have reinforced her own desire to become "an effective teacher." This is an interesting link between the academic and personal qualifications Lourdes sees as essential to enter the teaching profession.

In addition, Lourdes has inserted a self portrait which appears to be a photo of her at elementary school age. While the visual is more closely linked to the text, its message is on the teaching of children who may be at about the same age as she is in the photo. The visual Lourdes has inserted reinforces her deeply personal connection to teaching and learning. In interesting ways, both Marie and Lourdes have included text and artifacts which center on their personal qualifications to teach literacy as well as their educational aspirations and qualifications. For these students, it may be that the traditional view of teaching as a "calling" remains an equally valid reason for entering the profession.

The Educational Goals Page

On the *Educational Goals* page, presentations for Marie and Lourdes are quite different in terms of areas they wish to stress for viewers. For Marie, her educational aspirations related to education are of primary importance. She presents herself as a goals-oriented individual through the visual she has included of a T-shirt imprinted with the words, "Don't go through life without goals." However, all her goals are degree-focused rather than career centered. The goals highlighted are specifically linked to higher education and academic achievement, intimating recognition that academic preparation is of primary importance in readiness for teaching. As seen on her *Welcome* and *About Me* pages, Marie seems to express a need for increased academic study. She, therefore, withholds overt assertions of disciplinary expertise. This is not surprising since in student-teacher conferences, she has expressed concern about her need to become more deeply grounded in literacy theory and classroom practice. It may be that the emphasis on personal qualifications to teach assists in her compensation for a sensed inability to claim knowledge of the disciplinary grounding required for interdisciplinary thinking.



ePortfolio
@ LaGuardia Community College

Home About Us Contact & Projects Resume Education/Work My Links Contact

My goals

made with www.spurtoon.com



So far, I am working on getting my Associate degree in Childhood Education at LaGuardia Community College. I am very excited. After, I would like to go Queens College because I heard they have a great education program. If I do not get accepted at Queens, I will go to another school, but I really would like to receive my bachelors in the upcoming three years. I have not decided what my minor would be but I know my bachelor would be in Childhood Education. Later I would like to receive my masters I am pretty sure that it would be related to foreign language. My most important concern is to receive my degree then being able to work. I would like to be an efficient teacher.

Marie's Portfolio Educational Goals Page

In contrast, Lourdes provides viewers with an extended essay which outlines her motivation to teach and her realizations regarding the work of teaching in terms of commitment and time. She focuses on her future professional placement as a teacher, her devotion to children and interactive learning. The notion of acquiring excellence in teaching through practice is emphasized as well as a need for individual response to students' learning. Lourdes's own anecdotal account of a personal difficulty in learning and its resolution supports her claim of the need for peer interaction or collaborative learning. The visual on this page has been used to represent the collaborative nature of learning, displaying Lourdes's grounding in constructivist theory and pedagogy. Lourdes demonstrates a deeper understanding of the teaching profession but has also interwoven linguistic and education theory demonstrating a higher degree of disciplinary grounding and interdisciplinary understanding. In the final analysis, Lourdes is able to speak with greater authority on the teaching of language and literacy.



ePortfolio
eLQuanta Community College

Home | About | Contact | Privacy Policy | Terms of Service | Site Map

Educational Goals



The profession of teaching has interested me in many ways, the work environment, the ability to reach children and progress their growth and the personal aspiration to communicate knowledge has all made me pursue this career.

The work environment is important in any profession as well as the hours put into it, in the teaching profession, teachers have a fair time to spend working at school and at home. Most school classes are taught in the morning from 8:30 till 3:00 o'clock and it leaves teachers enough time to correct student's papers and plan a lesson as well as time for their own use. Part of the environment is the setting which after time it becomes like a second home. The purpose of a school is to learn and have a positive environment; some schools are designed for the student to interact with the teacher by making the classes smaller. Many teachers socialize with other teachers and have met people who become their best friends at school. I hope to work in a good school in which its main purpose is to have a close bond with the student and the faculty.

I have always liked children and interacting with them is just a must if you want to be a teacher. Children are impressive, they learn quickly and are at a stage in which they are building up their personalities. I will be in a way shaping their future, which I hope to do well because it is a huge responsibility. Another exciting fraction with being a teacher is that you are able to see your effort rooted in those children when they move on with the grade and graduate. The teacher helps the children grow while they accumulate their knowledge and demeanor.

The ability to share knowledge is the ability to affect those around you or to simply share something you read or learned. Being the instructor of a class takes certain skills and individual character. The skills are mostly learned at school but the teaching style is acquired in the classroom itself in front of the 30 students while trying to figure out what is the best way for them to learn. Since all the students are not the same I hope to distribute different styles at the same time so that everybody understands.

In my past, I had various teachers teach differently. I never understood math very well and the teacher I had never explained it to me in a way that I would understand yet others in class did well in the subject. I remember there was an upcoming important test and I tried studying by myself but got nowhere because nobody was helping me and so I went to a student for help and she explained it to me so easily I remember feeling as like a blindfold was taken out from my eyes, it was so easy and from there on I got in the habit of asking other students who do well for help. Teaching students to work with others is also important, other students can help you and you also get a sense that you are not helpless in a difficult situation.

Becoming a teacher is a big responsibility and with the proper training I am sure I will become a fine educator. These are three of my reasons that inspired me to become a teacher. It is a job in which I will be surrounded with children and passing on knowledge and interests as well as having a nice and stable environment.

Home | Contact | Privacy Policy | Terms of Service | Site Map

© 2010 eLQuanta Community College

1000 University Ave., Suite 1000, San Francisco, CA 94133

Lourdes's Portfolio Educational Goals Page

Conclusion

Given the increased workload required of students in writing-intensive capstone courses, accomplishing the course goals while instilling both critical thinking and reflection in student work is a formidable task. At first glance, technology might appear to be more a burden than an asset. However, early experience with technology and WAC has proven that the use of technology not only encourages accomplishment of the course goals, but moves learning a step further to a deeper level of analysis and understanding of learned concepts and observations. The key factor of this advantage is the use of a variety of technological tools and formats. For this education capstone course, the daily use of technology as an aid to learning through Blackboard eLearning software and ePortfolio has facilitated rather than hampered learning for the Childhood Education majors studying language and literacy.

The writing-intensive mode, computer-assisted writing, and ePortfolio development promote reflective practice essential to development in the teaching profession. In fact, without the aid of technology, greater depth and breadth of learning may not have been possible. For students who reshaped the ePortfolio to reflect their classroom learning in education and linguistics, technology

was effectively used to advance their disciplinary grounding through extensive writing. For students who were somewhat reticent in terms of displaying disciplinary grounding, the foundation has been laid since teaching is primarily a reflective practice, regardless of specialization. Therefore, those students who were just beginning to use technology as a tool for reflective thinking, have begun to create a space which can be used to deepen the disciplinary linkages they will ultimately make as they advance in major area studies. For others, the process of reflection so essential to disciplinary grounding and interdisciplinary understanding is well underway.

The intersection of WID pedagogy and technology is observable in student writing for this education capstone course, particularly in low-stakes writing assignments. Reading Reflection Papers required students to summarize readings and offer a response to the reading. Beyond asking for a written response, no other directives were given so that this assignment was not only low stakes, but open-ended. While somewhat more guided, Linking Knowledge to Practice assignments included asking students to write about their observations but left room for individual interpretation of experience. These assignments provided students the opportunity to draw upon both field experience and textbook learning. Subsequently, students made connections between theory and practice based on their learning in the course and successfully articulated interdisciplinary linkages in low-stakes assignments and ePortfolios. It was in these assignments that students demonstrated their disciplinary grounding and interdisciplinary understanding as the course progressed. Moreover, it was my observation of the profound change in students' ability to make interdisciplinary connections which prompted this project to study the process of transformation. Students reflected on observed teaching in the field and connected their observations to in-class lectures and concepts presented in the text.

Toward the end of the course, students' writing became increasingly interdisciplinary as they composed Linking Knowledge to Practice papers and Reading Reflection papers. The interdisciplinary connections students made in their writing often made it difficult to discern which low-stakes paper was the topic of the writing because both papers evolved into keen reflections of interdisciplinary understanding. Again, technology was the facilitator. The variety of technological modalities made possible interconnections that may have been difficult without the aid of technology. Creation of the ePortfolio was the interdisciplinary crescendo because it displayed students' deeper connection to learning, teaching and their appreciation of the disciplines of education and linguistics.

In conclusion, it appears that the computer-generated, low-stakes writing assignments and ePortfolio development added to the richness of the course curriculum and heightened student reflection on disciplinary matters. Many students offered remarks on the extensive writing and the level of energy required to complete the coursework. However, at the same time, students added that they felt they had improved competence in disciplinary writing. In end-term written comments regarding the course, students confirmed their grounded learning experiences during the course.

As a professor, this marked a time when teaching was most enjoyable, not because I did anything particularly momentous, but because this was a group of learners motivated to do the work. They were undaunted by the infusion of technology. In fact, it appears that technology encouraged more complete coverage of materials, taking students outside the traditional presentation of learning. Moreover, from a pedagogical perspective, technology has presented a framework on which to build as I undertake future teaching of the course. It allows me to refine and rework course content to accommodate changes in the field and increased technological advantages. Nonetheless, the use of technology in the course remains a work in progress. Refinement of all course elements, including the ePortfolio, is continually reevaluated to reach a point where students are engaged more deeply in interdisciplinary learning in a productive intersection of WAC principles and technology.

APPENDIX A



Welcome

made with spanlee.com



Hi, my name is Marie and I am majoring in childhood education. I really like it. I think that teaching will be fun because I think that through teaching I will be learning everyday.

I never thought about becoming a teacher because my dream was always to become a lawyer. But I got older I moved from Haiti to New York, and then My family wanted me to become a nurse so I can make a lot of money. Even though I love helping people, I do not think that biomedical field is the right path for me to do so. I am a little introverted, I said this because that I am working on becoming more open. I love to read, travel and art. Actually, I am very interested in jewelry making. I love beads.

The reason why I chose to teach is because literacy is becoming a big issue, as it has always been. However, in a country, like the United States, people put emphasis a lot on education and some are trying to give all the help they can. Therefore, through teaching I can give back to others and practice what I like to do.

Marie

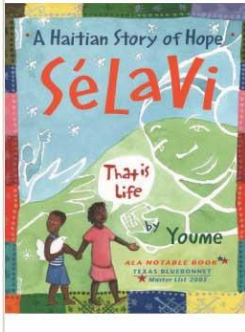


About me



I love to read. I can say that reading is the only activity that I do besides going to school. I read everything. When I was younger, I used to love collecting books and magazines about stars.

However, today I read what interests me. I also have to say that I barely have time to read what I like since I have so much reading for school. Despite the fact that I love to read, I love books. Even if I am not reading the whole book, I will at least look at it. I enjoy going to the bookstores. Actually, when I go shopping, I spend more time in the bookstores than in the clothing stores. I realize that I have less time to read because I always I always have something to do. If I want, a quiet place and time to read. I have to choose my room and around 10 o'clock PM. I do not have a particular type of book that I like to read, I read what I find interesting. So far, I can say that these two books are my favorites: Giovanni's Room from James Baldwin and Le Petit Prince from Antoine De Saint-Exupery. I also love to read any Jamaica Kincaid book. I like the way she uses literature to transport the readers in her Caribbean world. I discovered her through my ESL teacher. She gave me a book called the autobiography of my mother. I remember I could not put that book down until I finished it. In addition, readers who do not like to read books with many contents will be glad because her novels are very short. I feel that I can read this book repeatedly. I read the newspaper once and a while. I hope that I can show the kids that reading can be fun even if the subject is not. I wish they could have my love for reading when I am teaching them. What I hate in reading habit is the fact that sometimes my friends are somewhere else while I am reading. Sometimes, I have to tell myself to stay focused. I do not know why, but it happens. Because of that, it takes more time for me to finish something.



My goals

made with spanlee.com



So far, I am working on getting my Associate degree in Childhood Education at LaGuardia Community College. I am very excited. After, I would like to go Queens College because I heard they have a great education program. If I do not get accepted at Queens, I will go to another school, but I really would like to receive my bachelors in the upcoming three years. I have not decided what my minor would be but I know my bachelor would be in Childhood Education. Later I would like to receive my masters I am pretty sure that it would be related to foreign language. My most important concern is to receive my degree then being able to work. I would like to be an efficient teacher.

APPENDIX B

The image shows a vertical sequence of six screenshots from a presentation titled "ePortfolio".

- Slide 1:** Features the title "ePortfolio" at the top. Below it, there are two small images: one of a person's face and another of a group of people.
- Slide 2:** Shows a close-up of a person's face, possibly a student, with a neutral expression.
- Slide 3:** Displays a collection of colorful, abstract shapes and patterns, resembling a collage or a digital artwork.
- Slide 4:** Shows a close-up of a person's face, similar to the one in Slide 2, but with a slightly different expression or lighting.
- Slide 5:** Features a cartoon illustration of two children, a boy and a girl, standing together. The boy is on the left, and the girl is on the right. They are both smiling.
- Slide 6:** Shows a circular diagram or infographic with various icons and text arranged around a central point.

References

- Bazerman, Charles & Herrington, Anne. (2006). Circles of interest: The growth of research communities in WAC and WID/WIP. In Susan H. McLeod & Margot I. Soven (Eds.), *Composing a community: A history of Writing Across the Curriculum* (pp. 49-66). West Lafayette, IN: Parlor Press.
- Bazerman, Charles & Russell, David R. (1994). Writing across the curriculum as a challenge to rhetoric and composition. In Charles Bazerman & David R. Russell (Eds.), *Landmark essays: Writing across the curriculum* (pp. xi-xvi). Davis, CA: Hermagoras Press.
- Bean, John C. (2001). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. San Francisco: Jossey-Bass.
- Boix Mansilla, Veronica. (2004). *Assessing student work at disciplinary crossroads*. Cambridge, MA: GoodWork Project, Harvard University.
- Christie, James F., Enz, Billie Jean & Vukelich, Carol. (2007). *Teaching language and literacy: Preschool through the elementary grades, third edition*. New York: Allyn & Bacon.
- Elbow, Peter. (1997). High stakes and low stakes in assigning and responding to writing. In Mary D. Sorcinelli & Peter Elbow (Eds.), *Writing to learn: Strategies for assigning and responding to writing across the disciplines* (pp. 5-13). San Francisco: Jossey-Bass Publishers.
- Farris, Christine & Smith, Raymond. (1992). WAC and general education. In Susan H. McLeod & Margot Soven (Eds.), *Writing across the curriculum: A guide to developing programs* (pp. 71-86). Newbury Park, CA: Sage Publications.
- Hardcastle, Gary L. & Hardcastle, Valerie Gray. (1998). Electronic communities in philosophy classrooms. In Donna Reiss, Dickie Selfe & Art Young (Eds.), *Electronic communication across the curriculum* (pp. 282-295). Urbana, IL: NCTE.
- Hocks, Mary E. & Bascelli, Daniele. (1998). Building a writing-intensive multimedia curriculum. In Donna Reiss, Dickie Selfe & Art Young (Eds.), *Electronic communication across the curriculum* (pp. 40-56). Urbana, IL: NCTE.
- Holder, Carol R. & McLeod, Susan H. (2006). The start of Writing in the Disciplines/Writing Across the Curriculum in the California State University System. In Susan H. McLeod & Margot I. Soven (Eds.), *Composing a community: A history of Writing Across the Curriculum* (pp. 67-84). West Lafayette, IN: Parlor Press.
- Lardner, Emily & Malnarich, Gillies. (2008). A new era in learning-community work: Why the pedagogy of intentional integration matters. *Change: The Magazine of Higher Learning*, July-August 2008, 1-8. Retrieved August 20, 2008, from <http://www.changemag.org/July-August2008/full-new-era.html>
- Maimon, Elaine P. (2006). It takes a campus to teach a writer: WAC and the reform of undergraduate education. In Susan H. McLeod & Margot I. Soven (Eds.), *Composing a community: A history of Writing Across the Curriculum* (pp. 16-31). West Lafayette, IN: Parlor Press.
- McLeod, Susan H. (1992). Writing across the curriculum: The second stage, and beyond. In Charles Bazerman & David R. Russell (Eds.), *Landmark essays on writing across the curriculum* (pp. 79-86). Davis, CA: Hermagoras Press.
- Peterson, Linda H. (1992). Writing-intensive courses: Tools for curricular change. In Susan H. McLeod & Margot Soven (Eds.), *Writing across the curriculum: A guide to developing programs* (pp. 71-86). Newbury Park, CA: Sage Publications.
- Portillo, Margaret & Cummins, Gail Summerskill. (1998). Creativity, collaboration and computers. In Donna Reiss, Dickie Selfe & Art Young (Eds.), *Electronic communication across the curriculum* (pp. 170-179). Urbana, IL: NCTE.
- Russell, David R. (2006). Introduction: WAC's beginning: Developing a community of change agents. In Susan H. McLeod & Margot I. Soven (Eds.), *Composing a community: A history of writing across the curriculum* (pp. 3-15). West Lafayette, IN: Parlor Press.

- Sargent, M. Elizabeth. (1997). Response to low stakes writing in a WAC literature classroom. In Mary D. Sorcineli & Peter Elbow (Eds.), *Writing to learn: Strategies for assigning and responding to writing across the disciplines* (pp. 41-52). San Francisco: Jossey-Bass Publishers.
- Sorcinelli, Mary Deane & Elbow, Peter. (1997). *Writing to learn: Strategies for assigning And responding to writing across the disciplines*. San Francisco: Jossey-Bass Publishers.
- Sterling-Deer, Carolyn. (In press). ePortfolio technology in the second language writing classroom: Reflections on praxis. In M. Clayton & T. Carter (Eds.), *Teaching writing with technology*. Southlake, TX: Fountainhead Press.
- Taylor, Todd. (1998). Teacher training: A blueprint for action using the World Wide Web. In Donna Reiss, Dickie Selfe & Art Young (Eds.), *Electronic communication across the curriculum* (pp. 129-136). Urbana, IL: NCTE.
- Townsend, Martha A. (2001). Writing intensive courses and WAC. In Susan H. McLeod, Eric Miraglia, Margot Soven & Christopher Thaiss (Eds.), *WAC for the new millennium: Strategies for continuing writing-across-the-curriculum programs* (pp. 233-258). Urbana, IL: NCTE.
- Warschauer, Mark. (1999). *Electronic literacies: Language, culture, and power in online education*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Yancey, Kathleen Blake. (1997). Teacher portfolios: Lessons in resistance, readiness, and reflection. In Kathleen B. Yancey & Irwin Weiser (Eds.), *Situating portfolios: Four perspectives* (pp.244-262). Logan, UT: Utah State University Press.

Contact Information

Carolyn Sterling-Deer
LaGuardia Community College
City University of New York
31-10 Thomson Avenue
Long Island City, New York 11101
Voice: (718) 482-5359
Email: CSterling@lagcc.cuny.edu

Complete APA Citation

Sterling-Deer, Carolyn. (2009, January 19). Writing in the disciplines, technology, and disciplinary grounding. [Special issue on Writing Technologies and Writing Across the Curriculum] *Across the Disciplines*, 6. Retrieved from <https://wac.colostate.edu/docs/atd/technologies/sterlingdeer.pdf>