

# Preparing High School Students for College-Level Writing: Using ePortfolio to Support a Successful Transition

Stephen R. Acker  
and Kay Halasek

Secondary school educators—writing teachers included—face increasingly challenging and competing demands, not the least of which is preparing all students to pass state-mandated tests while simultaneously preparing “college-prep” students for the demands of college writing and “AP” students for advanced placement essay testing. This is not to say that the various objectives are necessarily contradictory, but increasingly teachers report and studies show that teachers are compelled to bend to the pressures of accountability (Spellings Commission, 2006) at the expense of innovative teaching and challenging learning opportunities that benefit all students (Conley, 2003). This dilemma is further complicated by the “mixed messages” sent to students who successfully complete graduation requirements and pass state-mandated proficiency tests only to find themselves unprepared for first-year college course work—a phenomenon that the Center for Educational Policy Research (CEPR) has shown is detrimental to students’ self-concepts and academic performance (Conley, 2003). The CEPR *Mixed Messages* study, funded by the Pew Foundation and the Association of American Universities, further indicates “that state exams in their current form may not be aligned well enough with college success standards to provide feedback to high school students and teachers regarding college readiness” (Conley, 2003, p. 13). A lack

of alignment was most troubling with critical thinking and research skills, and the study calls for “more authentic measures of student learning” (Conley, 2003, p. 13). Proficiency tests—what they measure and their ability to direct classroom instruction toward high school completion objectives—muddy the already murky waters of K–16 alignment. Public school systems are aware of these tensions, and of the twenty-five states that require high school exit tests, Texas and Maryland already have begun pilot studies to help high school students better gauge their readiness for college-level work (Sullivan et al., 2005). Although our own state, Ohio, has not yet initiated such a pilot study, the Ohio Board of Regents and State Department of Education have convened several content-area committees (including English language arts) to address the issue of K–16 alignment.

As taxpayers and policy makers turn their attention to quantifiable performance indicators (Miller & Ewell, 2005) and fiscal accountability (National Commission on Accountability in Higher Education, 2005), educators find themselves necessarily concerned with improving K–12 and university alignment. High schools are being held accountable for graduation rates and college and workforce preparedness. Colleges and universities seek students prepared to succeed because many studies indicate that college student success is heavily determined by the entering characteristics of students (Pascarella & Terenzini, 2005) and because state subsidy for remedial course work at public institutions is either low or nonexistent. Rather than pointing accusatory fingers at one another, K–12 education and higher education have reasons to collaborate on student success.

In an effort to work together on these issues, Ohio State University and two high schools from which it enrolls numerous students conducted the “ePortfolio Project,” a program through which high school and university personnel conducted joint research to address K–16 English language arts (ELA) alignment and student success in the postsecondary environment. These collaborators recruited student authors to write essays and receive feedback on those essays from both university and high school writing faculty within an ePortfolio system. We reasoned that feedback from both sides of the transition would help students better understand differences and similarities of what constitutes “good” writing in high school and the university. Moreover, we reasoned that the ePortfolio system itself—which enabled students to submit their writing and then read and compare responses from both university and high school teachers and *have continued access to those responses within a single instructional environment*—would provide a richer, innovative, and “more authentic” measure of student writing called for by the CEPR *Mixed Messages* study. In short, the entire writing process and process of assessment—from draft, revision, and final copy through summative feedback and evaluation—would be laid bare and demystified. The students would be engaged in the process throughout.

Initially, the ePortfolio Project brought together university faculty in communication and English, district technology coordinators, area high school

teachers, and over forty area high school students. Initial framing of the project began during the June 2004 OhioWINS Summer Institutes (<http://ohiowins.uc.edu/>), gatherings of high school writing instructors on college campuses sponsored by the Ohio Board of Regents to improve writing instruction. At the OhioWINS Institute convened at Ohio State, teachers from across Ohio were introduced to and used ePortfolios themselves and later participated in building ePortfolio rubrics to support English language instruction for students.

Because of the flexible licensing terms and customization options, the project team selected OSP open-source software (<http://sakaiproject.org/>) for this research and populated the shell with resources useful for English language instruction. Collectively, the team was driven by a desire to integrate enabling technologies into the classroom as a means of improving pedagogy while maintaining creative approaches and working *with* and not *against* state ELA standards.

More specifically, the college and high school faculty collaborators used ePortfolio as a delivery system for teacher response to student writing and to determine whether this collaborative teaching and learning environment could be structured to improve student writing. They sought to create *authentic, observable, and shared* writing tasks and assignments (Acker, 2005) that would improve the alignment between critical writing skills acquired by high school students and those identified as important by instructors responsible for college first-year writing programs. The project team established *authentic* tasks through a guided collaboration between high school and university writing instructors, made these tasks *observable* by creating electronic writing portfolios to hold student work, and *shared* them by granting student ePortfolio viewing privileges to both high school and college faculty. The overall expectation of project participants was that constructive “eResponses” provided by high school and university writing instructors would improve high school student writing and conform their output more closely with expectations held by college faculty. Working within this collaboration, the research team sought to

1. Involve high school students and teachers and college faculty in a year-long collaboration constructed around meaningful and productive discussions about writing.
2. Describe, analyze, and interpret the differences found between high school and college writing teachers’ methods of responding to student writing.
3. Determine whether such differences had an adverse effect on the quality of student writing or if the dissonance led to growth.
4. Illustrate the positive effects of multiple readers’ responses on students’ revisions.

5. Identify the types of responses most effective in encouraging substantive revision.
6. Create a series of surveys, discursive (self-)assessments, and discourse-based interview questions for further development and refinement of writing pedagogy.
7. Evaluate whether student writing improved because of these interventions and multiple critiques.

Within the accountability context and driven by the goal of building a high school–university collaboration around student writing, this research project tested the following hypotheses:

- H1: Students who receive feedback from both high school and college instructors will improve their writing as assessed on a rubric correlated with successful college writing.
- H2: Methods of responding to student writing differ between high school language arts teachers and college composition teachers.
- H3: Different response patterns (if differences exist) have adverse effects on the quality of student writing and revision.
- H4: Students receiving responses from multiple readers from both high school and college faculty will make more informed (and therefore better) decisions about revision.
- H5: Some styles of faculty responses yield more substantive revisions from students.

These hypotheses were motivated by a desire to determine whether differences exist between high school and college expectations about, and senses of, “good” writing and how to prepare students for a successful college experience. Like other scholars, Fran Claggett (1996) has argued that student work developed, composed, and revised over time offers more potential than proficiency tests for illustrating the complexity of student writing and generating a clearer understanding of the presumed *quality* of that writing—especially if high school and college faculty share access to and assessment of the student work. With shared access, the student work becomes an object of conversation among students, high school teachers, and college faculty and provided the data for our study.

## Method

Participants in the project, students ( $n = 41$ ) from area school districts, were briefed following Institutional Review Board (IRB)—approved procedures

and were told they would have the opportunity to participate in a collaborative university–high school writing project that used ePortfolios (see Appendix A). Those who chose to participate were instructed to write a three- to five-page essay and later a revision of that essay within their personal ePortfolio. Paired “eReaders”—high school teachers and college instructors—responded to the students’ essays, with each essay receiving formative (on the draft essay) and summative (on the final essay) numerical scores and comments from each of the readers. These numerical scores and comments, coupled with a content analysis of the workshop conversations about the variables and writing practices introduced, constituted the data analyzed in this research.

## Data Analysis and Interpretation

The research team used two distinct methods of data analysis in the project. First, the numerical Likert ratings of the draft and final papers were compared using standard *t*-test procedures. Second, the discursive responses—of teachers to student drafts and of students to the assessments of their writing—were gathered, recorded, coded, and analyzed by the project research assistant and one project leader. They grouped the comments by identifying recurring patterns of comment, concern, or practice. Researchers hypothesized that clusters of comments and patterns of response across students or eReaders provided a reliable means of identifying a nexus of value, a concern or issue of importance to the participants. In gathering, logging, and coding the discursive responses, the two researchers worked independently. Only after completing their initial analyses did the two compare the patterns they had identified. They then created consensus descriptions, noting all of the patterns that appeared in both of their analyses. Patterns identified by only one researcher were retained as minority (individual) descriptions.

The consensus and minority descriptions, along with the quantitative data analysis, were used as points of departure for the June 2005 OhioWINS Summer Institute discussion. The descriptions were presented *not* as conclusive documents but as working descriptions of the researchers’ interpretation of the data. The participating teachers were encouraged to respond to the descriptions, providing a “member check” of the researchers’ interpretations. The project research assistant and one project director kept notes independently on the ninety-minute discussion, which was not recorded.<sup>1</sup> The project leader and research assistant then worked from these notes to identify recurring patterns in and consensus among teachers’ comments, observations, and opinions.

## Results

H1: Students who receive feedback from both high school and college instructors will improve their writing as assessed on a rubric correlated with successful college writing.

Faculty assessed the draft and final essays submitted by students on a five-point Likert scale using a rubric adapted from the Northwest Regional Educational Laboratory (see Appendix B) and also contributed comments on both essays. The rubric, selected by high school teachers attending the 2005 OhioWINS Summer Institute, is a well-known and validated assessment tool. It addresses both local (e.g., conventions) and global (e.g., ideas and content) elements of writing. Comparison of the faculty assessments on the two versions of each essay supported the first research hypothesis. On each of the six subscales—ideas and content, organization, voice, word choice, fluency, and use of conventions—as well as a holistic evaluation of the student work, faculty assessments documented improvements in the student writing (see Table 1). Adding support to the faculty assessments, students self-reported benefits of using ePortfolios. In responses to surveys, students indicated that they developed skills in defining, managing, and assessing their own learning artifacts; tracing their own development and growth across disciplinary and educational boundaries; drawing connections across and among those disciplines; and taking responsibility for and authority over their own learning and writing.

TABLE 1 Change in College and High School Instructor Assessment of Student ( $n = 41$ ) Writing

Variable	Difference	<i>t</i> Value	P-Value
Ideas and Content	0.51	5.93	< .001
Organization	0.56	6.82	< .001
Voice	0.24	3.28	< .002
Word Choice	0.12	3.12	< .001
Fluency	0.38	4.11	< .001
Conventions	0.27	3.07	< .004
Overall Evaluation	0.20	4.26	< .001

NOTE: Pre–post difference scored on a five-point scale. Interrater reliability *within* institutions was >0.6 to 0.8 on all scales. Interrater reliability of evaluation *across* institutions was >0.6 on Voice and Fluency.

H2: Methods of responding to student writing differ between high school language arts teachers and college composition teachers.

High school and college writing teachers do not so much look for or respond to different elements of writing as much as they *emphasize* different elements. High school teachers' responses were informed by what Hjortshoj (2001) describes as following "some basic principles." For example, "All good writing should have a thesis, clearly stated in the introduction. Following paragraphs should each present a point that supports this thesis, and the essay should end with a logical conclusion. Writing throughout the essay should be clear, concise, and correct." In contrast, the college teachers' responses were informed by an understanding of "good writing as having features [that] . . . vary from one situation to another. These variations depend, for example, on the subject of the writing, its purpose, and the reader's expectations. The form of writing used in a field of study often structures those expectations. As a consequence, the features of good writing in a literature course will differ greatly from the features of good writing in business or astronomy, and what seems clear to one audience might not be clear to another" (Hjortshoj, 2001, p. 33).

H3: Difference response patterns (if differences exist) have adverse effects on the quality of student writing and revision.

Despite difference between high school and college teachers' responses (with college instructors emphasizing global features with a more rhetorical focus), no consistent effect on the quality of writing was found. Additional study and refinement of the method of soliciting, gathering, and analyzing data are necessary to investigate this hypothesis.

H4: Students receiving responses from multiple readers from both high school and college faculty will make more informed (and therefore better) decisions about revision.

Students indicated that they appreciated the multiple responses to their texts. Students revised their essays successfully, making significant progress in the quality of the writing. That high school and college teachers *responded* differently did not negatively affect the students' revisions, as H3 proposes. In fact, that students had the *benefit* of *two kinds of readers*—one who focused on local and a second who focused on global issues—may have contributed to the improved quality of their writing.

H5: Some styles of faculty responses yield more substantive revisions from students.

Students were divided on their assessments of the eReaders' responses. Data are limited with respect to this question, making it impossible to articulate claims about responding styles and their effects on student revising practices.

## Discussion

Although student writing improved between the draft and final essay, the quantity and quality of the feedback most likely constituted the influential factor, not the ePortfolio technology itself. The ePortfolio served to structure the learning environment and increase the convenience of the interactions to a threshold that permitted rewriting, recommending, comparison, and reflection. The teachers and readers worked within the ePortfolio system to help students improve their writing.

By engaging students in conversations about writing through the ePortfolios, we created a powerful learning environment in which students explored and evaluated the technology in terms of their own writing. As Helen Barrett (2006) argues: "Greater learner ownership and control over the contents, purpose, and process of portfolio development . . . will lead to more intrinsic motivation to use the portfolio to support lifelong learning."

This was also true for the teachers in the ePortfolio Project. The ePortfolio system initiated, facilitated, and sustained collaboration and community among its various users. The faculty in the ePortfolio Project shared curricula, writing assignments, and assessment and evaluation methods and worked to create innovative means of implementing technologies in their classrooms. Many continue to use ePortfolios to facilitate their own professional development and sustain the community they created during the Summer Institute and ePortfolio Project.

The collaborative community facilitated by the ePortfolio Project had lasting and meaningful effects on the teachers involved, as evidenced by one exchange when teachers and readers involved in the project met to discuss the results of the study. At that time, they discussed the results surrounding the assessment of "Voice." As one of the more vexing attributes of quality writing, the notion of voice—and the differences among high school and college readers' assessments of voice—became an issue of great debate. Through a lengthy discussion about the definition of voice, its role in the writing classroom, and its presence (or absence) in personal and academic essays, participants determined that a division existed between high school and college teachers with

respect to voice. In short, high school teachers typically encouraged students to create a voice in personal essays (e.g., personal narratives or opinion pieces) but discouraged them from using that same “voice” in more academic pieces (e.g., research papers). The distinction was not one generally made by college teachers, who encouraged students to create voice in all of their academic writing. Although the group did not reach consensus about a definition for voice or even when (or how) it should be taught in the high school and college writing classrooms, the discussion did set in relief a critical pedagogical and even philosophical difference that had real, concrete effects on the writing classroom (Cambridge, Kahn, Tompkins, & Yancey, 2001; Yancey, 1998).

### Institutional and Systemwide Issues

The open-source software selected for this project is freely downloadable, and the Open Source Portfolio community maintains and debugs the software and shares solutions to problems. Throughout this collaboration, teachers provided numerous responses to the technology—encouraging developers to create even more innovative, accessible, and sustainable structures for ePortfolios in the English language arts. Teachers’ initial concerns (e.g., a static and unwelcoming structure for arranging artifacts; too much redundancy in the system when entering, sharing, and responding to artifacts; no “drag and drop” function for text documents or teacher responses) have influenced the development of the open-source ePortfolio software.

Although server maintenance, user support, and the faculty and student effort required to construct ePortfolios are issues in both community-source and commercial ePortfolio implementations, open-source solutions are uniquely positioned to benefit collaborations. The work of members of the high school community and the university community can be combined on a single system, and infrastructure costs are correspondingly reduced (Acker & Murray, 2006). The common software selection also supports transitioning student portfolios from one institutional setting to another. Indeed, the State of Ohio is piloting a shared open-source eLearning infrastructure in part to evaluate whether implementing a shared student record infrastructure can reduce the considerable overhead of articulation and transfer so pronounced in our mobile student population.

The limitations that remain for the implementation of ePortfolios on a local (district) level are largely fiscal, tied to needed professional development activities and administrative commitment. For example, to implement ePortfolios in the Columbus Public Schools, the district would need to dedicate annual-rate monies (funds that are renewed annually to support a person or project; also known as “continuing” monies) for personnel, provide ongoing professional development,

and contribute to the costs of a shared infrastructure. Regrettably, most large initiatives aimed at increasing graduation rates and preparing students for college are funded by external monies—not by the annual-rate dollars that create sustainable programs. Consequently, schools have increased their dependence on external support, limiting the degree to which individual teachers can determine the direction of curricular innovation. Open-source projects encourage teacher-driven innovation with fewer fiscal or philosophical impediments. Villano (2006) summarizes a variety of institution-wide assessments using ePortfolio.

At the national level, the Inter/National Coalition for Electronic Portfolio Research (<http://www.epacinternational.org/>) is critically situated to affect change in language arts education, pedagogy, and assessment. ePortfolio software not only is an appropriate and affordable technology for the classroom needs of P–12 and college educators but also provides a critical vehicle for conversation among disparate national communities.

## Summary and Conclusions

Students in transition from high school to college demonstrated improved writing competency on six subscales of an instrument adapted from the Northwest Regional Education Laboratory and on a holistic measure of their writing ability. The six attributes of their writing that were assessed more positively by both high school and college instructors included ideas and content, organization, voice, word choice, sentence fluency, and conventions. Although the study did not yield unambiguous support of hypotheses regarding the effect of teacher comments on student writing in the ePortfolio environment, the study does point to the benefits of high school and college faculty writing instructors working together to address the complicated transition from high school to college writing; the participants in this study demonstrated the very real generative value of ePortfolios. Additional data, gathered in multiple contexts at multiple levels of the student career, are needed to fully understand the contribution ePortfolio use may make to student writing competency development.

Unless institutions actively support ePortfolios systematically and across educational boundaries, students will not enjoy the developmental benefits of ePortfolio. As Love, McKean, and Gathercoal (2004) argue: “Webfolios [ePortfolios] may have the most significant effect on education since the introduction of formal schooling. When fully matured and implemented by capable professional educators throughout every discipline in an educational institution—and across institutions spanning K–16 contexts, webfolios promise a viable alternative to current, high-stakes testing, which focuses education on test-taking rather than teaching and learning” (p. 24). ePortfolios—when fully supported

by an institution, or better yet cooperating institutions spanning the high school–university transition—hold great promise as a means of creating a culture of lifelong learning among users. Swenson (2006) echoes the importance of community over technology in invoking technology to address methods for improving English education, and her conclusions are supported by the data and experiences of this project.

## Appendix A: Student Solicitation Script

Hello. I'm Professor Kay Halasek from Ohio State. I'm here today at HIGH SCHOOL to describe to you and invite you to participate in an innovative collaborative project between SCHOOL DISTRICT and The Ohio State University: "The ePortfolio Project."

The research project will introduce you to ePortfolio technology, which will allow you to store, retrieve, revise, and share your writing with classmates, teachers, and college professors. In particular, those of you who agree to participate in the project will have an opportunity to share your writing with both college professors and high school teachers from Ohio high schools who will respond to your writing and recommend improvements.

The project will run throughout the academic year, and as a participant in the project, you will compose two drafts of an essay (assigned by TEACHER as part of the requirements for her course) that will then be forwarded electronically to the eReaders. Those eReaders will then compose and forward back to you comments on your writing.

In every exchange, your identities will be protected. No defining personal information (e.g., name, home address) will be available to the eReaders responding to your essays. Moreover, eReaders' responses to you will be available to TEACHER *only* if you elect to forward their responses to her. Readers' responses will in no way figure into your grades in the course. Although you may access your ePortfolio from any computer with Internet access, you need not have a computer at home to participate successfully in the project.

Those of you who elect not to participate in the project will not be penalized in any way. We anticipate, however, that with the benefit of multiple eReaders' responses to their essays, those students who elect to participate will develop greater confidence in their writing skills, a more sophisticated repertoire of strategies to meet writing challenges, a clearer understanding of college writing expectations, and an improved ability to revise their own work to meet those expectations.

Please consider joining us in this project.

## Appendix B:

### Assessment Rubric Used to Evaluate Student Writing Adapted From the Northwest Regional Educational Laboratory

#### RUBRIC WORKSHEET

Author I.D.: \_\_\_\_\_

Reader I.D.: \_\_\_\_\_

*Ranking (5 = best) Circle one*

#### *Ideas and Content (Development)*

Clear and focused 5 4 3 2 1

Holds the reader's attention 5 4 3 2 1

Relevant anecdotes and details  
enrich the central theme 5 4 3 2 1

#### *Organization*

Organization enhances/showcases  
the central idea/theme 5 4 3 2 1

Order, structure, or presentation of  
information is compelling and moves  
the reader through the text 5 4 3 2 1

#### *Voice*

Writer speaks directly to the reader  
in a way that is individual/  
compelling/engaging 5 4 3 2 1

Writer crafts the writing with an  
awareness/respect for the audience  
and the purpose for writing 5 4 3 2 1

#### *Word Choice*

Words convey the intended message  
in a precise/interesting/natural way 5 4 3 2 1

Words are powerful and engaging 5 4 3 2 1

#### *Sentence Fluency*

Writing has an easy flow/rhythm/  
cadence 5 4 3 2 1

Sentences are well built, with strong and varied structure that invites expressive oral reading	5	4	3	2	1
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*Conventions*

Writer demonstrates a good grasp of standard writing conventions (e.g., spelling, punctuation, capitalization, grammar, usage, paragraphing)	5	4	3	2	1
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Writer uses conventions effectively to enhance readability	5	4	3	2	1
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Errors tend to be so few that just minor touch-ups would get this piece ready to publish	5	4	3	2	1
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NOTE:

1. Because they had not sought IRB permission to do so, researchers were unable to audio- or videotape the teachers' discussion.

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