ANALYSIS OF PORTFOLIO ASSESSMENT-AS-PEDAGOGY IN TECHNICAL WRITING INSTRUCTION

CAROLYN SPEAKMAN

B. Ed., University of Lethbridge, 1979

A Project
Submitted to the Faculty of Education
of the University of Lethbridge
in Partial Fulfilment of the
Requirements for the Degree

MASTER OF EDUCATION

LETHBRIDGE, ALBERTA

April, 2000

Dedication

For Thomas, Sarah, and Arlen, whose lives are a truly a gift.

Abstract

Portfolio assessment-as-pedagogy, as implemented in a college writing course, is examined in light of the themes present in the literature concerning portfolio assessment. The instructional processes used in English 155, Scientific and Technical Writing, at Lethbridge Community College, are described; and ten students' portfolios are analyzed, with primary emphasis on students' learning as expressed in their final reflective letters. Consideration is also given to their reflection worksheets and to drafts and revisions of individual projects. Together, these documents reveal the students' insights into their development as writers and into the significance of their writing products. Grounded in a constructivist view of learning, a portfolio classroom fosters social construction of knowledge. When students develop a sense of community, their participation in collaborative writing and peer revision can become an important part of composing. Because portfolios are informed by process theory of composition, they are not only a means of assessing writing, but they also guide student learning by documenting their writing processes and giving them a voice in interpreting their development. This reflection helps students identify themselves as writers who have ownership over their work and their learning. Portfolios also give the instructor a window into students' rhetorical awareness, perceptions of thinking and writing, and sentence skill development. Although this project was limited to one course, the depth of learning demonstrated by the students suggests that they may benefit from increased power in creating and assessing their portfolios. Other future possibilities include collaborative assessment among writing instructors and program-wide applications of portfolio assessment.

Acknowledgements

This project, like the learning described within it, has been nurtured in community, and I am grateful for the many people who have contributed to the lived curriculum represented in part in this work.

I have been privileged to study with caring and diligent professors in the Faculty of Education at the University of Lethbridge. I am indebted to Dr. David Townsend for identifying the writer in me, and then, along with Dr. Cynthia Chambers, giving me opportunities to compose. Thanks to Dr. Robin Bright for her ongoing interest and encouraging reviews of my work. I am also especially grateful to Dr. Pamela Winsor for her sustained support of my inquiry, as well as her thoughtful guidance in this project.

Teaching writing is collaborative, and I have been blessed with a fertile learning environment at Lethbridge Community College. I appreciate the many colleagues and students who have stimulated me to reflect on my work, particularly the English 155 students who engaged wholeheartedly in the growth process discussed in this project.

Finally, my community also includes many family members and friends whose support while I have pursued my studies has been incredible. Special thanks to Rev. Larry Kochendorfer for asking, listening, discussing, reading, and, especially, believing.

In each of these communities, I have been richly blessed.

Table of Contents

Dedication iii

Abstract iv

Acknowledgements v

Table of Contents vi

Introduction 1

Methodology 3

Theoretical Grounding 5

Constructivist Theory 5

Process Theory 7

Writing Assessment 9

Local Conditions for Implementing Portfolio Assessment 13

Desire for Change 13

Institutional Support 17

Course Context 19

Themes and Practices 19

Instructional Framework 19

Reconfiguring Assessment 19

Focusing on Literacy 25

Instructional Processes 31

Fostering Social Construction of Knowledge 31

Community Building 33

Collaborative Writing 35

Peer Review 36

Responding to Student Writing...44

Instructor Assessment 44

Self-assessment 48

Instructor Reflections..60

Confronting Issues of Integrity in Assessment 60

Opening Windows to Student Learning...66

Rhetorical Awareness 69

Perceptions of Thinking and Writing...73

Sentence Skill Development 73

Implications for Future Possibilities 76

Expanded Power Distribution 76

Increased Communal Assessment..81

References...86

Appendices...102

A. Course Outline 102

B. Consent Form Provided to Students..105

C. Portfolio Details 106

D. Project 1: Literacy Autobiography..109

E. Project 2: Audience Analysis 111

F. Presentation Portfolio Instructions 113

G. Peer Response Forms..115

H. Working Portfolio 1 - Student Forms 120

I. Student Reflections on Literacy Autobiography 122

J. Sample of Feedback as Given to Individual Students 123

K. Working Portfolio 2 - Self-Assessment Forms 125

Analysis of Portfolio Assessment-as-Pedagogy in Technical Writing Instruction

The primary focus of my graduate studies has been technical writing instruction in post-secondary programs. In my role as an English instructor at Lethbridge Community College, I have been particularly interested in current theory and practice, curriculum, and research developments in teaching writing. A thorough study of the literature related to portfolio assessment-as-pedagogy has led me to redesign one of my courses to incorporate portfolios as the primary means of assessment.

Writing portfolios at the post-secondary level were initially proposed by composition teachers seeking assessment strategies that would reinforce writing process (Connors & Glenn, 1995). Portfolios were seen as a bridge between classroom practice and testing (Yancey & Weiser, 1997). Portfolios are now being used not only to assess students' writing but also to guide student learning (Courts & McInerney, 1993). Lucas (1992) calls this "portfolio assessment-as-pedagogy" (p.10). Portfolio classrooms are those in which portfolio assessment is adopted.

Yancey (1992a), a strong voice in contemporary writing theory, points out writing portfolios' sensitivity to process and their emphasis on active learning, inquiry, reflection, and social construction of meaning. Writing portfolios document how the writer developed the product and thereby reveal the writer's cognitive growth. They also emphasize the process of reflection about the author's collection of writing and allow writers to pursue intuitions as well as cognition. Students are primary participants in

assessment, and their audiences may include multiple readers within the classroom and beyond. The definition developed by the Northwest Evaluation Association clearly expresses how portfolios focus on student learning:

> A portfolio is a purposeful collection of student work that exhibits to the student (and/or others) the student's efforts, progress, or achievements in one or more areas. The collection must include student participation in selecting contents, the criteria for selection, the criteria for judging merit, and evidence of student self-reflection. (as cited in Paulson, Paulson, & Meyer, 1991, p. 60)

Teachers participate as they become learners about their students. Because portfolios are not instantly collected, "the gift of time allows students to learn to become writers, rather than to learn to write papers" (p. 17).

Following Murphy's (1994) recommendations, I began with a portfolio design that has evolved as the students and I worked with it in the fall of 1999. Because portfolios allow room for the complex, problematic nature of teaching, which itself requires ongoing revision (Cerbin, 1994), I expected that as my students and I experienced writing development in a portfolio classroom, we would create opportunities to make new meanings personally and collaboratively. I expected to learn a great deal from my students about them and about myself.

To gain such insights, though, teachers need to find or create windows into students' learning processes and reflect on the correlation between their classroom practices and students' development. In this project, by reflecting on my work and the students' work as represented by their writing portfolios, I examine my decisions and the

outcomes of implementing portfolio assessment-as-pedagogy in English 155, Scientific and Technical Writing, at Lethbridge Community College.

This paper begins with an overview of the project's scope and methods, followed by a brief literature review outlining the theoretical grounding of portfolio assessment and a more detailed description of the local context of the project. The discussion presents a close analysis of the students' portfolios and my instructional decisions as they relate to specific themes in the literature on portfolio assessment. My goal in considering these meanings is to enhance my understanding and to share this knowledge with others.

Methodology

Because portfolio advocates agree that portfolios must be developed in the context of instruction, I targeted one course, English 155, Scientific and Technical Writing, at Lethbridge Community College (LCC). This is the one writing course required by students in all three programs in Environmental Sciences (Renewable Resource Management, Conservation Enforcement, and Watershed Management). After completing a two-year diploma program, students may enter the workforce, pursue a specialized certificate or applied degree at LCC, or transfer to a degree program at the University of Lethbridge.

During the fall of 1999, I implemented portfolio assessment as the primary evaluation method in all three sections of the course (see course outline, Appendix A). During the semester, I gathered the documents I produced in designing the course. Near

the end of the term, I invited all the students completing English 155 to participate voluntarily in this project by allowing me to use their portfolios (Appendix B)

Ten students volunteered: 4 from class A, where 22 of the 29 registrants completed the course; 5 from class B, in which 27 of 28 students completed the course; and 1 from class C, which had 13 of the 17 registrants complete. Although not a statistically representative sample, the group includes men (4) and women (6), all of them students in renewable resource management (5), conservation enforcement (3), or watershed management (2). Their final grades ranged from D+ (1) to B/B+ (4) and A/A+ (5).

Six of the participants entered the program within two years of completing high school. Three participants previous postsecondary writing experience; one was taking the course for the second time, one had a university degree, and one had studied composition in another college. Three participants had over five years of employment experience; one of these had worked in a field related to the program. The participants' names have been changed to ensure their anonymity.

In analyzing the students' portfolio contents, I looked for themes identified in the literature. I concentrated particularly on students' reflections about their learning as expressed in their final reflective letters and in the reflection worksheets they included in their working portfolios. I also examined drafts and revisions of individual documents as well to assess the comments and feedback I provided to the students throughout the process.

Theoretical Grounding

Writing portfolio assessment-as-pedagogy is grounded in a constructivist view of learning and process theory of composition, plus corresponding developments in the field of writing assessment.

Constructivist Theory

Most writers say that before the emergence of constructivism, positivistic views of the world prevailed (Conley, 1997; White, 1994). Knowledge was considered fixed, separate from the knower, and determinable through scientific inquiry. Education throughout this century has reflected this view of knowledge and students as fixed; teaching is, therefore, an act of transmitting knowledge, while learning is absorbing that information (Prawat, 1992b). Textbooks, curriculum, and tests reinforce the "mimetic tradition" in which students are presented with pre-determined knowledge and then reproduce this to demonstrate their learning (Wisconsin Education Association Council [WEAC], 1995, p. 5). In outlining the massive changes in American education over the past two decades, Conley (1997) points out that persistent notions of getting through the material, covering the contents, and breaking down learning into skill sets to be evaluated through objective tests characterize the industrial model of schooling in which schools operate like factories that package students, time, and credits while structuring learning into measurable units.

As Stage, Muller, Kinzie, and Simmons (1998) explain, the constructivist view is that knowledge is constructed by learners as they interact with their environment. Their analysis links constructivist theory to the work of Piaget, Bruner, Vygotsky. The

Wisconsin Education Association Council (WEAC, 1996) highlights also the importance of the social construction of knowledge as explored by theorists like Grumet and Habermas. New meanings are built upon previous understandings as learners develop cognitive processes and interact with others in dialogue and negotiation. Brophy (1992) states that research also supports constructivist theory.

> Current research . . . recognizes that students do not merely passively receive or copy input from teachers, but instead actively mediate it by trying to make sense of it and to relate it to what they already know (or think they know) about the topic. Thus, students develop new knowledge through a process of active construction. . . . Thus, teaching involves inducing conceptual change in students, not infusing knowledge into a vacuum. (p. 5)

Creating knowledge does not mean that each student reinvents the proverbial wheel; rather, it means that students "change information into personal understanding" (WEAC, 1996, p. 4). To "achieve true understanding, they need to develop and integrate a network of associations linking new input to preexisting knowledge and beliefs anchored in concrete experience" (Brophy, 1992, p. 5). Leinhardt (1992) explains that current research on learning demonstrates the impact of prior knowledge, for students continuously connect new information to their existing understanding: ". . . prior knowledge is more than a building-block of information. It can facilitate, inhibit, or transform a common learning task" (p. 22).

Teachers must therefore understand both their subject area and the ways students learn the subject so that they can use strategies that will produce growth in students'

conceptual frames (WEAC, 1996; Wilson, 1993). Students construct knowledge at the point where their prior understanding and experience intersects with the new information they meet in their studies. Teachers help them "to reinterpret their lives and uncover new talents as a result of their encounter with school knowledge" (Kinchloe & Steinberg, 1993, p. 301).

Because of the all-encompassing implications for teaching and learning, the shift to constructivist understandings requires educators to realign their belief systems; ". . . it is a complete rethinking of what we do, why we do it, and what happens as a result" (WEAC, 1996, p. 2). This shift is possible if teachers reconsider their subject matter and their students' instructional needs, and if they are willing to engage in dialogue and reflection about their process of conceptual change. Schön's (1987) pivotal work on teachers' reflective practice shares the current understanding of reality. Teachers engaging in reflection-in-action construct their reality, too, for "perceptions, appreciations, and beliefs are rooted in worlds of our own making that we come to accept as reality" (p. 36).

Process Theory

Parallel shifts in the epistemological currents directing composition theory occurred during the 1970s and 1980s (Hairston, 1992), and process pedagogy has now replaced classical rhetoric as the central theory guiding composition instruction (Minot, 1994).

In the 1950s and 1960s, dominant scholars of writing pedagogy such as Corbett (1963) revived classical rhetorical theory in their move to counter the specialized focus

on literary appreciation that had dominated English departments (Beale, 1990; Connors, Ede, & Lunsford, 1984; Minot, 1994). The assumptions of their product-oriented rhetoric were later challenged by researchers who asked a fundamental question: How do writers write? And then set about answering through research. Janet Emig's investigation (1971) into composition processes used by twelfth-graders set the stage for new scholarly inquiry into composing processes of writers. Sondra Perl's collection, *Landmark Essays on Writing Process* (1984), identifies several key understandings formulated by these researchers. Rather than being a linear three-part process, writing is a mode of thinking; it is recursive and holistic. Observations of writers showed that the whole both precedes and grows out of the parts. The stages of planning, drafting, and revision exist, but writers do not proceed through them sequentially.

Writing is an organic process that, in keeping with an interpretive world view, is author-centred, not text-centred. The relationships between knowledge and discourse and between thought and language are central. Through writing, knowledge is created. Learning to write is not a matter of rehearsing skills.

> Discourse--the ability to make and convey meanings through language--is conceived to be a natural human competence, not a system of basic and advanced skills to be acquired. As a competence, it can grow but it can't be instilled; teachers can facilitate writing development but it isn't something that can be transmitted. (Knoblauch & Brannon, 1984, p. 101)

Forms, therefore, arise out of the writer's choices along the way. Through the process approach, instructors have learned to help students realize that they could learn to write

by identifying "actual steps they could take to generate material, organize material, improve both content and organization, and then improve their style, mechanics, and force" (Minot, 1994, p. 4). In addition, process theorists argue that if students could instead experience writing as a process, they could think and write better (Berthoff, 1981).

Writing Assessment

Inquiries into the significance of writers' contexts and processes have naturally influenced writing assessment. In an historical analysis, Yancey (1999) identifies three "waves" of assessment in the history of composition.

From 1950-1970, writing was assessed indirectly. Objective testing was used for admission, classroom performance, and exit/proficiency evaluations. The emphasis was on achieving reliability most efficiently (i.e., with the least effort and expense) for the institution. Testing specialists provided the expertise in this model. Outcomes, not responses, are communicated to students. According to Huot (1996), such instrumental testing assumes that writing can be measured objectively because it is "fixed, consistent, and acontextual" (p. 550; see also Murphy, 1994), a view that is incongruent with composition theory.

Yancey's second wave, 1970-1986, arose as composition became a professional discipline in which informed voices called for stronger validity through direct assessment of writing. The result was a move to holistically scored essays. Edward White, first director of California State University Freshman English Equivalency Exam Program, led this move to "devise a writing test that could meet the standard stipulated by the testing

experts" (p. 490). This change meant also that the value of measurement correlation had to be de-emphasized. Essay tests were constructed with expertise provided by testing specialists and classroom teachers with pedagogical and disciplinary knowledge. This second wave took twenty years, for even though teachers saw the discrepancies between indirect testing and their classroom experiences, they didn't change quickly, nor has objective testing disappeared.

Applebee (1994), looking at three decades of language arts assessment, corroborates Yancey's observations. Although indirect assessment measures can ascertain writing performance and are cheaper than direct measures, they influence curriculum negatively: "Twenty years ago, one could teach writing without asking students to write. Due in part to changes in the format of writing tests, that is no longer true today" (p. 41). However, limitations of essay testing are also criticized because "limited samples of student writing work against attempts to require extended writing experiences, where students engage in a meaningful way with questions of some import to them" (p. 41). The practices of the second wave still dominated much writing assessment in the early 1990s. However, because this form of testing writing is seen as "a single construct which permits generalization about writing ability from one sample" (Murphy, 1994, p. 177), it is incongruent with the theory of writing as a process of thinking, discussing, and revising (White, 1994).

What has been emerging since 1986 is a third wave, characterized by direct measure of a wider writing sample, portfolios, and program assessment. Belanoff and Elbow, Writing Program Adminstrators, introduced portfolio assessment at SUNY-Stony

Brook in 1983 as an exit assessment to replace the essay test. Their intent was to increase validity by using classroom examples to provide readers with more than one sample. In portfolio assessment, trained markers are replaced by classroom teachers negotiating their judgements in context, giving room for complexity of readings.

Expertise is two-fold: Writing assessment is seen as a field of composition studies, but at the same time, many question whether the quantifying aspect of assessment conflicts with the humanistic thrust of teaching (Elbow & Belanoff, 1997). Expertise also includes the students in terms of writing well and demonstrating understanding of personal writing ability through the reflective components of the portfolio. Response is given directly to the student and also translates into teaching practice. Portfolio assessment connects instruction and assessment of complex skills (Paulson & Paulson, 1990). Murphy (1994) articulates the theoretical construct of this wave:

> writing ability is a capacity which varies situationally, according to the type of writing, the audience or purpose of the writing, the knowledge of the writer about the subject and the writer's interest in it, as well as factors which influence conditions for writing, including time and collaboration. (p. 177)

The third wave carries new understandings of reliability, "based not on statistics, but on reading and interpretation and negotiation" (Yancey, 1999, p. 492). Huot (1996) joins Yancey in recognizing locally developed evaluation procedures relevant to each site, shifting the focus away from the generalizations and standardization of artificially controlled exam-writing contexts and marker training. Inter-rater reliability thus gives

way to reliability based on experience with the curriculum; judgments must be made by teachers through negotiation. Together, readers develop community standards. Huot notes that reliability is redefined in terms of fairness, as assessment is made meaningful within the actual context of the writing. In this manner, portfolios "connect the context, genre, and discipline of the writing with those making evaluative decisions and the criteria they use to judge this writing" (p. 560).

Portfolio assessment continues to challenge measurement norms, particularly when being used in large-scale evaluation. Such tension is unavoidable, according to White (1990), because assessment specialists and writing specialists see the world differently and use different language to talk about what they see. Psychometric ideals like objectivity and certainty have traditionally been measured by such practices as inter-rater reliability. Clearly, the assessment practices described by Huot and Yancey are "'messy--that is, they are composed of multiple kinds of texts, and different students compose quite different portfolios, even in the same setting and for the same purposes, which in turn can make evaluating them difficult" (Yancey, 1999, p. 493).

Nonetheless, the powerful effects of portfolios at the local level are giving them staying power so far. Smith (1991) sees that making a shift from impromptu essay exams to portfolio assessment can reshape a writing program much like developing student-centered curriculum changes classrooms; therefore, "such assessment might also be called 'writing without testing'" (p. 280).

In these developments surrounding constructivism, process theory, and assessment, significant shifts in thinking have occurred. In a similar way, individuals can

experience conceptual change when three criteria are met: current beliefs are unsatisfying, viable and sound alternatives are discovered, and this new way of thinking can be related to earlier understandings (Postner et al., 1982, as cited in Prawat, 1992b). My research of the literature and my reflections on my classroom experiences have led me to pursue the discomfort of conceptual change.

Local Conditions for Implementing Portfolio Assessment

Desire for Change

When I began my inquiry into composition pedagogy nearly three years ago, I had a fuzzy notion that I was missing some pieces in my understanding of writing development. Although I had been an English major in my undergraduate years, I was the product of an almost exclusively literature-based program of studies. Then as I taught high school English, I encountered some composition textbooks that advocated a process approach to writing, but I had little background in the theoretical developments underpinning these instructional strategies. In my first paper in my Master of Education program, "Theory and Practice in Teaching Composition: Confessions of a College Writing Teacher," I expressed the starting point in the process of conceptual change:

> Eighteen years after entering my first high school English classroom fuelled by the enthusiasm of a first-year teacher, the knowledge of an English major, and the authority of a Bachelor of Education degree, I find myself asking basic questions about what has since become one of my primary instructional responsibilities, teaching writing. In a typical college classroom today, many students also ask

> basic questions: How long does it have to be? When is it due? How much is it worth? Does spelling count? Students legitimately expect clarification about how they will be evaluated; after all, they are investing time and money in their education, and their grades will affect their career paths. While I do not question the validity of such matters, I am also aware that it's possible for an instructor's vision to become narrowed to include only each day's "to-do" list of tasks reflecting practical concerns. What happens to the other basics like theory and reflection? And at what cost to the students?

Since that time, I have read, thought, and written about the theories and practices of teaching writing at the post-secondary level. It has become increasingly important to me to harmonize my current understandings with my practices. Implementing portfolio assessment-as-pedagogy has emerged as one way to integrate constructivist views of learning with growth in literacy in the context of my writing classes.

Newmann et al. (1995) assert that without a common framework for assessment and instruction, education is detached and meaning is trivialized.

> The problem can be attributed to many sources: a curriculum consisting largely of superficial exposure to hundreds of isolated pieces of knowledge, which is reinforced by teacher training institutions, textbook publishers, testing agencies, and universities; teaching loads and school schedules that exacerbate problems of classroom management, making it difficult for teachers to concentrate on individual students using their minds well; and student isolations from adults in the community beyond school who have made significant achievements. (p. 7)

School experience should go beyond knowing about many topics to making connections; it should include in-depth dialogue using all levels of language. To be authentic, disciplined inquiry should also have value beyond an in-school demonstration of competence. Assessment must accurately reflect this curriculum.

Portfolios can be a place where instruction and assessment meet (Paulson, Paulson, & Meyer, 1991). Hamilton (1994) clarifies the theoretical foundation of portfolio assessment this way:

> Portfolio assessment is responsive to the following six theoretical constructs about language learning:
>
> 1. There is no single way to define or to assess literacy; teaching and assessment will ideally acknowledge *multiple literacies*. Since student literacy varies by genre and context, assessment should consider a wide range of student writing.
> 2. Since portfolios contain texts of various genres composed over time in a wide range of contexts for a wide range of purposes, they are more valid indicators of writing progress than other forms of assessment.
> 3. Possibly more important than assumptions of greater validity is the capability of portfolios to provide congruence among classroom instruction, classroom assessment, and large scale assessment.
> 4. Writers should remain in charge of their writing.
> 5. Reflection and revision contribute to writing improvement.

6. Reflection and revision are enhanced in a *collaborative learning environment.* (pp. 160-161)

Murphy (1994) adds these beliefs:

1. Writing is both highly individual (what we write reflects our ideas, values, and abilities) and interactive (communication is a social act; meaning is created collaboratively).
2. Writing assessment should reflect these understandings. Assessment should help students learn what they know and can do, particularly in terms of writing strategies and the ability to make judgements about when to use them.
3. Students are responsible for their own learning and assessment. The classroom community is a resource to help students achieve their learning goals.

Portfolios can help them develop mastery of process and of performance (Murphy, 1994). Lucas (1992) sees the possibility of performance enhancement as more important than outcome assessment and says that portfolios give room for intrinsic rewards for learning. Such internal desire goes beyond grades and is essential to the kind of long-term effort to learn exhibited by athletes and artists, for example. Fayne and Woodson (1994) provide several indicators of their students' positive experiences with portfolios: students wanted their portfolios back at the end of the term, they believed their editing and writing skills would be used in other courses, and through their writing they were developing strong personal voices. Although the research on the impact of the Kentucky Educational Reform Act writing portfolios revealed serious flaws in Kentucky's portfolio assessment system, Mincey (1996) noted that students who had

prepared portfolios had stronger perceptions of themselves as writers than those who had not. This strength was evident in their comfort with writing and their understanding of the writing process.

One thing my recent professional development has reinforced for me is that teaching, like assessment and writing, is a recursive practice. Yancey (1998) says "teaching is a living thing: it changes" (p. 204). I do not, therefore, see implementing portfolio assessment as the end of a journey; it is simply a decision point in the middle of what I hope will continue to be a process of making meaning with my students.

Institutional Support

The environmental conditions for developing a portfolio classroom have been ideal. Implementation has come from the bottom up (me), the design has developed within the immediate context of English and environmental science studies, and the project harmonizes with the college's vision.

Because I am the sole instructor of the course, I am not obligated to conform to anyone else's approach, and as long as the students achieve the objectives already approved by the department, I am free to develop the curriculum according to my professional judgement.

The environmental science faculty have just completed an exhaustive curriculum review and are interested in their students' writing development. If the students' learning is enhanced by portfolios in this introductory course, the potential for expanding it throughout the program is high. The program's advisory committee has also expressed interest in this project.

Also complementary is the institution's direction. Lethbridge Community College defines its mission and its goals according to the learning college framework of Terry O'Banion (1997). Learning colleges

1. ensure that learners experience substantive changes
2. define roles of learning facilitators in relation to the needs of learner
3. create and offer as many options for learning as possible
4. make learners full partners in their education who assume primary responsibility for their choices
5. use collaborative learning activities and authentic assessment strategies
6. document improved and expanded learning as the indicator of success.

These six principles are intended to guide all areas of decision-making, including professional development, curriculum review, and classroom practice. Portfolios fit.

Course Context

The fact that no one model exists for portfolio assessment underscores the importance of local component (Bolender, 1996). Roemer, Schultz, and Durst (1991) in analyzing the implementation of portfolio assessment at the University of Cincinnati determined that their small and slow beginning allowed teachers to shape their approach. This was my intent as I implemented portfolios in English 155.

The course prepares students for writing in their field. Much like the course described by Wilkinson (1985), it is a co-requisite of the Foundations of Conservation course also offered in their first semester. The primary benefit of this collaboration is to contextualize the major research writing project in the English course by locating the

subject matter in their foundations course. The students work with both instructors to meet criteria of two audiences, while researching only one topic. Because I am not an environmental scientist, this teamwork has helped me become familiar with the expectations of the discipline, while still offering my expertise as a writing instructor. It also benefits the students in streamlining their workload and authenticating their assignments by tying the objectives to the disciplinary standards they can expect in their studies and in their workplaces.

The revised course outline for English 155 identifies six learning outcomes, which have not changed with the shift to portfolio assessment (Appendix A). The course design information is new, however; it links the course assignments with other academic and workplace contexts and indicates my assumptions about some of the connections between writing and learning and instructional processes. Self-assessment and peer review are introduced here as well.

Themes and Practices

Instructional Framework

Reconfiguring Assessment

One of the key features of portfolio assessment is that grading is de-centered. This is typically a significant shift for teachers and students. Despite the discomfort, though, Elbow (1993, 1994) argues that teachers do students no favours by always distilling evaluative feedback into a score. Teachers often feel pressured to rank students, which leads students to "care more about scores than about learning–more about the grade we

put on the paper than about the comment we have written on it" (Elbow, 1993, p. 190). The corollary is that teachers' comments become justifications of the grade rather than commentary on the students' communication, resulting in no engagement with the text. McClelland (1991) voices the frustration of many instructors: "I really resented the office hours I spent talking with a student about why the paper wasn't an A instead of working together on a draft of the next assignment" (p. 165). When quantified evaluation takes center stage, the spotlight is no longer on students becoming writers.

There is no guarantee that portfolio assessment will change the script substantially. If, for example, an instructor uses portfolios to defer grading and then at that point employs the conventional pattern of responding to simply the finished text, be it one paper or a collection of completed documents, the limitations of one-way authoritative evaluation will persist. As Cox's (1993) study shows, portfolio assessment can reinforce existing norms rather than create new ones.

Developing rubrics for portfolio assessment is a difficult process. Even teachers who approach portfolio assessment carefully may find their students confused if their learning values are not clearly reflected in their grading. Thelin (1994) concluded from his study of one instructor's classroom practice that the portfolio and the criteria for its evaluation must reinforce the same objectives if such confusion is to be avoided. Creating descriptors that respect the range and flexibility desired in portfolios while articulating the dimensions for learning being assessed is a challenge in classroom, school-wide and national standard-setting projects (Murphy, 1997).

Attempting to grade something that eludes quantification has sometimes led to practices that may increase or depreciate marks (Huyett, 1994). Agnew (1995) draws attention to the problem of trying to value with marks, but not with criteria, such things as student participation in the writing process. Such "credits" can inflate grades, and although it is easy to obtain some lower scores with unfair tests, such practices will neither increase standards nor help students become more learning-oriented than grade-oriented. She describes the relief a teacher may feel when final results include a few low grades in a class because otherwise administrators or peers may suspect the teacher is inflating the marks. Recognizing that composition theorists argue that decreasing grade pressure will benefit student writing, she is finding that portfolio assessment is a more satisfying source of information for students. Roemer et al. (1991) and Weiser (1992) also report that portfolio evaluation solved their problem of inflated grades in ways that teachers could live with ethically because they perceived these as valid grades.

Sometimes portfolios bypass grading altogether. Because of department constraints, Gold (1992) implemented non-graded portfolios which became the material for writing groups and revision. Although her students had learned through previous school experiences that "important" equaled "graded" (p. 22), their initial impression of the practice as busywork gave way to appreciation of the benefits of time for revision. A few postsecondary institutions, such as Evergreen State College, use only written evaluations in all their programs.

In most places, however, instructors are required to submit grades for their students. One way to "step outside of *most* grading" (Elbow, 1997, p. 9) is through

contracts. Criteria can be simply quantitative or include complex criteria. Valuing specific tasks like revising and copy-editing can be given high priority in the criteria, emphasizing the behavioural processes of writing over the products. It would be possible to design a portfolio approach in which grades are contracted. Bishop (1989) presents a variation of this where she gives the students a course grading rubric, a checklist of required assignments, and has students prepare portfolios including self-evaluations with a self-grade. She agrees with these 90% of the time; the remaining 10% become conference topics about what the students may not have seen when undervaluing the work, or what might reconcile the discrepancy.

White (1994) is the strongest advocate of holistic scoring of portfolios. Hamp-Lyons (1995) believes that White's writings stirred teachers to implement holistic scoring of essays in the 1980s. Because breaking the complex task of writing into small skills is problematic, holistic scoring emphasizes the whole. Although many writers object to the simplification and eventual quantification in holistic scoring (Hamp-Lyons, 1995; Huet, 1996; Huet & Williamson, 1997), the practice provides feedback in useful ways to students, instructors, and programs (Wolcott & Legg, 1998).

Elliot, Kilduff, and Lynch (1994) describe an holistic approach to summative evaluation by portfolios in a 300-level technical writing course. Throughout the semester, students gathered each assignment, along with evidence from all the stages of drafting, peer critique, and revision. Each assignment received an initial grade and could then be revised if students wanted to improve the grade. Because of the volume of these portfolios, students conferenced with instructors to select their two best pieces plus their

cover letter and résumé for a final portfolio assessment. The teachers then set a rubric and established standards; two readers (not the student's instructor) scored the portfolios, which went to a third reader if the first scores were not the same or adjacent. They achieved inter-reader agreement and reliability after three years of working with their measurement approach.

Elbow (1993) notes that portfolios at Stony Brook are assessed by multiple readers as either acceptable or not acceptable. Then individual classroom teachers decide each student's course grade. In his class, feedback on individual papers is given through narrative comments, criteria grids, and conferences. The final grade includes the portfolio and other course components (attendance, peer responding, and so on).

Huot (1996) says the assessment debate hinges on whose voice is privileged in the method chosen. Portfolio assessment has the power to privilege the student's voice:

> Each portfolio can be an individual record of a student's journey to understand herself as a writer. Efforts to standardize such a record cut into its ability to help the individual student make sense of herself as a literate person struggling not only to make meaning but to create a context within which she learns to read and write. (Huot & Williamson, 1997, p. 54)

A portfolio classroom strives to nurture such metacognition, but this goal of affecting student growth makes portfolio assessment "particularly slippery" (Courts & McInerney, 1993, p. 79). Courts and McInerney recommend that most responding should happen when the writing is in progress. Much of this response can be provided by peers and by self-evaluation, assuming that students are taught to engage in these practices

meaningfully. O'Neill (1998) points out that if self-assessment and reflection are fundamentals of writing development, they must also become part of the response sequence between students and teachers. She envisions a written conversation including "at least four texts: the student's reflective writing and self-assessment, the student's essay/draft, the teachers' response to the self-assessment and the essay, [and] a student's rejoinder to the teacher's comments" (p. 62).

Hamilton (1994) goes even further in her senior seminar, Advanced Expository Writing, a capstone course. Because her students have worked in a portfolio culture throughout their university studies, she practices "portfolio assessment-without-portfolios." The students create portfolios, and she responds to each submission, but her responses are replies to their reflections in transmittal letters, rather than to their papers. The students then reply to her responses. Her strategy successfully tilts the portfolio toward student ownership and undoubtedly makes reflection and dialogue the focal point of assessment.

The evaluation process I implemented in English 155 involved four components as specified in the course outline (Appendix A). Just over half (55%) of the students' final grade was based on their portfolios. Individual assignments were submitted to me for feedback, but they were not graded separately. Instead, these were collected into the students' working portfolios, which were assessed twice during the semester, each worth 15% of their grade. Then at the end of the term, their presentation portfolio and reflective letter determined 25% of their grade.

When I explained the evaluation process during our first class, I told the students a bit about how my study of writing and assessment influenced my decisions, and I explained my belief that snapshot assessment sends inappropriate messages about writing development and the value of revision. I later provided a more detailed handout on portfolio assessment that explained the rationale and clarified the assessment criteria (Appendix C). These criteria included features of the students' products and processes. Student reflection accompanied all the portfolio submissions so that students' voices could be represented, and I responded not only to their portfolio contents, but also to their reflections. Details on the outcomes of these decisions are discussed in later sections of this paper.

Focusing on Literacy

Yancey (1998) perceives that every classroom has three curricula: the delivered curriculum provided by the instructor and other resources, the experienced curriculum as received by the learners, and the lived curriculum brought by the students when they come to the class. Portfolio development may create a stage for each to become visible at least some of the time.

> Portfolios mean more than evaluation or assessment. They are tied to our definition of literacy. When we read and write constantly, when we reflect on who we are and who we want to be, we cannot help but grow. Over time, portfolios help us identify and organize the specifics of our reading and writing. They catalogue our accomplishments and goals, from successes to instructive failures.

> Portfolios ought to be personal documents of our personal literacy histories. (Sunstein, 1992, p. xii)

So although, as Shay (1997) contends, writing improvement as such cannot be measured in the span of a semester, if the process of developing portfolios helps the students become more aware of their writing experiences and growth, this would be an opportunity for them to see writing as more than a course they must pass.

One of my objectives is to introduce the students to the idea that scientists do have a way of thinking about and communicating their ideas; in this way, the students can begin to develop disciplinary awareness. Courts and McInerny's (1993) summary of literacy provides a thoughtful framework for the course:

> Literacies are personally as well as culturally shaped, and while there are different literacies, semiotics, and ways of making sense of the world through language, these do not exist in a hierarchical scale of bad to good or deficient to proficient. Literacies are diverse and embedded in, and shaped by, differing contexts, beliefs, and social practices. Language learning is not imitative, but creative; growth in language is engendered through purposeful, meaningful, and challenging uses and tasks. Language learning is developmental, and students need to learn how to use language to reflect upon and direct that process. Learning is constructive; learners must be allowed to be active participants in the making of meaning; a teacher must allow for the negotiation of meaning as well as the learner's integration of the personal woven together with "rational" epistemologies – true learning, according to Mary Field Belenky, is the "reconstruction of self," the process of

> becoming a "connected knower." And learners have much to teach their teachers. (p. 107)

Conceiving of the course as an opportunity for students to develop literacy in this way offers many possibilities. The curricular expectations of the program could be met, and the students' starting points could be honoured. In one of the few technical writing articles specifically about portfolios, Bishop (1989) explains that her students begin by writing and sharing literacy autobiographies; then they interview professionals about the writing they do in their work. Assignments like this could set the stage for the course as an introduction to disciplinary literacy and language literacy. Portfolios would give students the opportunity to develop these literacies and strengthen their awareness of their learning; their portfolios can also be a window into their growth and thereby guide instruction (Bolender, 1996; Murphy, 1994, 1997).

In the first three weeks of the semester, I established this literacy framework through the first two projects, the class discussion surrounding them, and guest presentations. I began by asking the students to prepare a literacy autobiography as their first project (Appendix D). In our second class together, I introduced the assignment by asking the students what the term "literacy" meant to them, and we discussed various meanings of the word and various types of literacy. I closed the discussion by explaining that this course is intended to continue their literacy development specifically in the disciplinary field of the sciences and in the professional worlds of renewable resource managers/conservation officers/watershed specialists.

Making this project a memo also allowed me to introduce some basics of office communication and the memo format. By explaining such things as writing subject lines and using direct strategy, I began to orient them to the relationships between audience, purpose, and message.

The second assignment, which I called an audience analysis, reinforced these key relationships while targeting literacy in the sciences (Appendix E). Students each selected an article from a current periodical in the college library; they were to find periodicals relevant to environmental sciences and new to them. I divided the class in half and directed each to find publications that targeted different audiences: technical or non-technical. Other stages of this assignment included shared writing and peer editing, which will be discussed later, but the most relevant here is that through the comparisons, students became aware of the way authors and publications shape their messages to meet their audiences' needs. They also became aware of the ways these different types of publications can be used by them as researchers when they begin to gather information for their research papers.

In the third week of classes, I arranged for two environmental science instructors with different professional backgrounds to speak to my classes about their experiences and views of writing in their professions. Students heard about how writing is used in conservation enforcement and in the world of scientific research and publication. Although the differences between their contexts were evident, both speakers emphasized the value of clear communication and the connection between strong writing abilities and

career advancement. They also shared their perception that writing continues to be hard work even with their years of experience. Bonus!!

At the end of the course, my instructions regarding the contents of the portfolio and the students' reflective letters (Appendix F) were worded to reinforce the concept of literacy. For example, I invited them to "Think about various criteria for selection and choose what will be most meaningful for you. For example, the projects may represent your best work, or they may demonstrate your range of literacies or your range of processes." I also asked them to consider the meaning of these contents: "Using your first writing assignment, the literacy autobiography, as a reference point, what new literacies have you developed this semester and how?"

Two students in the sample group included their literacy autobiographies in their presentation portfolios. One of these writers, Amy, connected her decision in part to literacy:

> The projects that we were assigned took my present skills and made me apply them to new projects allowing my skills to be developed. From our first writing assignments of looking into who we were as writers by our previous literacy experiences and the learning about ourselves in our resumes, we hand [sic] to vary our writing techniques and styles. . . . Out of the projects of the semester I consider our first assignment of the literacy experiences and my resume the best of my writing. I enjoy writing from a personal perspective and drawing my point of view into my pieces of writing. I find those types of writing quite easy to carry

out. The literacy experiences assignment was a direct personal autobiography which I enjoyed writing as it includes reflecting and thinking back to the past.

Amy also saw her literacy development as a process of building on prior learning. In contrast, another student, who had been away from the academic world for some time, felt that this was a beginning:

> Looking back, I have come a long way. I didn't realize that my writing experience before this course was actually zero, and still is as far as a lifetime goes, but I'm just getting started in the learning process not finishing up.

This was not just talk, either. To achieve her goal of "overcoming the weaknesses in my writing by practice and drilling into my head the basic grammar skill's [sic] necessary to be a good writer," Sue purchased a sentence development text from the bookstore and borrowed an answer key so that she could continue working after the semester was over.

Related to literacy development are several students' comments on their increasing awareness of the discourse community. Cam recognized the college environment as one such context:

> This semester was my first experience in a college writing class. I have learned how to write in a professional manner and have also learned the proper formats and processes required to do quality work. Learning how to constructively peer review others [sic] work was also very interesting. What I have learned this semester was a great first step in learning how to write in a college environment.

Other students also perceived the relevance of their skills in other contexts. Amy wrote,

> As a writer I have learned new ways to write in more of a technical based aspect that what I have written in past English courses. The writing that we have worked on enables us to do writing that researchers and companies do every day. From the basics of memos to the abstracts and research papers all of our past and new writing skills are put to use. The skills that I have learned will add to my present skills, which will give me more versatility in the work place.

Dave agreed: "I'm positive the skills I acquired through English 155 will be beneficial to me throughout my career."

Focusing on literacy and de-centering grading helped emphasize the process of writing development. This picture was reinforced through key instructional processes.

Instructional Processes

Fostering Social Construction of Knowledge

In keeping with constructivist theories, one of the tasks of the teacher in a portfolio classroom is to create an environment in which students participate actively in making meaning. Instead of the lecture "I talk--you listen" instructional strategy in which the teacher is "the sage on the stage," student activity becomes central, and the teacher becomes "the guide on the side," (Space Science Institute, 1996).

Wilson (1993), writing about constructivism's impact on instructional design, traces the theoretical constructs this way: Knowledge was thought to be containable, and the mind was the box. Debates about whether reality exists outside or inside this box have

been transformed by the holistic view of phenomenological philosophers such as Heideggar who reject of the separation between the individual and the world implied by the analogy. Instead,

> . . . the starting point is recognizing that we simply are in the world, working, acting, doing things. . . . On this view, individual cognition is dethroned as the center of the universe and placed back into the context of being part of the world. (p. 6)

Meaning, then, is mediated not only by individual understandings but also by human interaction. Leinhardt (1992) explains that "knowledge is a cultural artifact of human beings: We produce it, share it, and transform it as individuals and groups. . . . [K]nowledge is distributed among members of a group, and this distributed knowledge is greater than the knowledge possessed by any single member" (p. 23).

Concerns about the quality of learning have led researchers at Wisconsin University's Center on Organization and Restructuring of Schools to identify these criteria of authentic achievement:

1. students construct meaning and produce knowledge (vs reproducing declarative knowledge and algorithms);
2. students use disciplined inquiry to construct meaning; and
3. students aim their work toward production of discourse, products, and performances that have value or meaning beyond success in school. (Newmann & Wehlage, 1993, p. 3)

Instructional practices must create opportunities for students to participate in these meaning-making processes. In English 155 the social construction of knowledge was fostered through community-building, collaborative writing, and peer review.

Community Building

Prawat (1992a) explains that because learning happens through meaningful activities within a community, the teacher's task must include creating community in their classrooms. This cultivates the dialogue that will allow students to reveal and build upon their prior knowledge (Stage et al., 1998).

At the beginning of the term, I did several things to actively build community in each class. On the first day, I asked whether the students had a chance to find out each other's names yet, and as has been the case in previous semesters, they had not done much initial interacting in their other classes. Although most of the students travel through their classes and their semesters together and eventually do establish strong bonds, I provided a few catalysts. I asked all the students to take a few minutes to tell us what they wanted to say about themselves from a list of possibilities I provided. We spent part of the first and second classes doing this, and I asked them to learn everyone's name by the next day. By asking different students to name whom they could, I reviewed names briefly a few times as well. I explained that they would be working with groups, and that kind of collaboration is much easier if you know your partners. Also, because most of the students are new to Lethbridge and to LCC, this helps them identify where other students call home and who may share their interests. As they talked about their

interests and background, I threw in a few comments about possible research paper topics, pointing out that other students may be helpful resources for them along the way.

I believe all these things signalled that I am interested in them. I further reinforced this by using their names regularly in class and, as I learned them, whenever we passed in the hallways. In all my written messages to them, whether responses to their e-mail or to their projects, I personalized the messages by beginning with their names and then signing my name at the end. Throughout the semester, I asked frequently about things like their weekends, holiday plans, and overall workload, as well as about their progress in this class. For the two optional Saturday writing labs, I provided coffee, tea, and donuts for the same reasons.

I also believe that developing connections with peers can be a big part of adjusting to college life. Anything I can do to help them adapt successfully is important not only to my class and to my relationship with the students, but also to their life experience at LCC.

Two of my three classes established a collegial atmosphere within the first couple of weeks. In both, several outgoing individuals contributed to this by their positive interactions with others and their willingness to participate in class discussions and in group work. Having a few students take up this kind of active and interactive role seems to be an important ingredient in building community. In the third class, where no such catalyst emerged among the students, I was unsuccessful in achieving the same kind of positive learning community. Although I had positive one-on-one interactions with many of the students outside of class, the class atmosphere remained tepid. Even at the end of

the term, these students sat silently before class began; the few who interacted with one another were reserved in their conversations. The energy level remained low even in group interaction, and their responses to my questions about reading they had done, assignments, or even how their weekend had gone were usually met initially with silence and then, with further probing, with cautious or reluctant responses. Although it is difficult to single out a single limited factor in things as complex as interpersonal dynamics and learning, I feel that my inability to develop a strong sense of community in this class negatively affected the course outcomes. This possible correlation is explored at several points later in this discussion as well.

Collaborative writing

The social construction of knowledge is facilitated in a portfolio classroom through collaborative learning strategies, according to Gere (1987), who also connects the theories of language learning to writing groups. Both Gere (1987) and Bruffee (1993) present detailed analyses of the important social dimensions of learning and of writing.

One strategy that promotes dialogue and shared responsibility is collaborative writing, "writing involving two or more writers working together to produce a joint product" (Harris, 1992, p. 369). If there's shared power over the text, other terms include shared document collaboration and co-authorship. Atwood (1992) adds that while such activities may have positive effects on writing and help students experience some of the teamwork expected in workplace writing, they can also "make visible the processes of social construction as well as actively demonstrating (and promoting) cooperation as an alternative to competition" (p. 20).

The students' second project (Appendix E) required students to work independently to select and analyze a current periodical article. They then collaborated with a partner to prepare one memo comparing and contrasting the ways their two publications met their respective audience's needs. Rachel was a mature student with strong oral and written communication skills. She recognized both the benefits and the challenges inherent in collaborative writing:

> The beginning of the program demonstrated the difficulties in writing with other people. Differences in styles and approaches among team members is a challenge which must be overcome in order to produce a quality piece of work. In addition, it was interesting to see everyone's perspective in analyzing technical and non-technical audiences, and reflecting this in our memo was challenging.

This project was the only one in which students worked together to produce one document. Other collaborations involved group discussion in class as students prepared questions that would guide their research, focus group meetings in which I met with small groups to discuss their research paper resources and structure, voluntary participation in informal writing labs, and peer review.

Peer review

Newmann, Secada, and Wehlage (1995) explain that many current teaching strategies emphasize active learning through hands-on activities, discussion and shared writing. Teachers should expect students to build deep understandings of challenging material. They also caution that learning and activity cannot be equated, saying, "innovative techniques implied by the ideas will not necessarily lead to improved

intellectual quality in students' work" (p. 1). Hands-on or cooperative strategies, for example, will not by themselves foster students' learning. Teachers must look for techniques to help students take responsibility for their learning (Bujan, Havlin, Hendzell, Lokes, & Pries, 1996; Stage et al., 1998).

Peer review is often used in writing classes that value the writing process as well as the product. "Collaborative learning about writing involves interaction between writer and reader to help the writer improve her own abilities and produce her own text — though, of course, her final product is influenced by the collaboration with others" (Harris, 1992, p. 370).

Although students can become more critical readers of their own writing reviewing other people's writing, peer review can also be frustrating. Holt (1992) discovered from conversations with graduate students and colleagues that

> often, peer criticism consists of oral or hastily written comments by students in a classroom group; sometimes students fill out a checklist or a form that resembles a short-answer test. . . . In these cases, neither teacher nor student is taking peer criticism seriously as a writing exercise. Furthermore, much oral or checklist peer criticism is limited to students' evaluations of their peers' writing techniques, thus neglecting discussion of the substantive issues in the paper. Finally, much peer criticism focuses either on the subjective experience of the critic . . . or objectified standard criteria. (p. 384)

Yagelski (1995) investigated the connections between students' revisions and their classroom's workshop practices and physical features; teachers found that students

using peer review did more revising than was evident in other studies, but their revisions were superficial rather than substantive. Why? Evidently, despite the collaborative activities she implemented, the teacher still had a traditional pedagogy in keeping her role as authority/evaluator, so the students continued to perceive her as their primary audience and revised primarily to raise their grades. Clearly, just organizing writing groups isn't enough to break such undercurrents.

As Bishop (1989) asserts, "Students need to be trained to develop critiquing abilities and to value drafting and revising their work" (p. 16). In her class, for example, peer writing groups examine sample papers and develop critique sheets to respond to their own work and to each other's. Holt (1992) uses peer-response exercises that combine reader-response items with the dialogic kind of peer-critique sequence followed in professional journals. Like Bishop and Holt, Grimm (1986) requires her students to write their responses to one another's writing. Rather than give them short-answer questions, though, she outlines detailed guidelines for the response process groups will use during their two-day peer reviews. Similarly, Herrington and Cadman (1991) outline ways instructors can provide structure, autonomy, and illustrations to guide students writers and reviewers. Believing in the students' abilities to collaborate meaningfully is also crucial.

At the other end of the response spectrum is the concern that peer review can compromise the writer's authority over a paper (Fontaine, 1995; Saunders, 1996). Lessons from writing centers indicate that when providing feedback, the emphasis must be on process, that is, on help in producing writers more than producing writing (Clark,

1993; Fontaine, 1995). Time constraints can contribute to the shift in attention from the students' processes of thinking and writing to the polished piece of writing. It's difficult under the best conditions for students, reviewers, and teachers stop treating peer review as a search for the right answer.

The English 155 students first tasted peer review this semester while preparing their second project. I asked each pair of students to bring a draft of their audience analysis memo to class. We began the next phase by identifying together on the board the qualities that would describe an effective memo with this objective. After a bit of work simplifying the criteria, I asked each pair to exchange documents with another pair to read one another's memos and provide feedback on how their memos achieved the communication goals. A few groups were unprepared for this, so they could participate only as readers. Some groups had prepared only outlines of memos; they benefited by reading more fully developed documents, but they lost out by not receiving feedback on their completed work.

As I circulated among the groups, I observed wide variation in students' comfort levels; some had difficulty offering anything more than a "sounds good to me," while others easily expressed their reactions and questions. I was also happily amazed to overhear others discussing substantive issues as they examined the analysis, supporting evidence, and logical presentation in each document. Some students seemed intimidated as they read memos they thought were better than theirs and as they saw other students' confidence in offering feedback. This was not surprising to me; my hope was that this

would increase their awareness of the complexity of writing and the many decisions involved in preparing written communication.

I further reinforced this complexity when I returned their second projects with my written comments and suggestions for further revision. Before handing them back, I showed them overheads with samples of a number of different openings (without identifying the writers) and asked them to consider things like directness and clarity. We compared the effects of different approaches and I reinforced some guidelines for internal communication via memos. We also looked at different paragraph structures used by students in their memos and discussed things like topic sentences, development, and transitions, all in the context of decisions writers make in creating a document for a specific audience and purpose. Finally, we looked at a few common sentence concerns and reviewed the relevant grammar and punctuation conventions.

I later encouraged students to read one another's work when they prepared abstracts and other documents. This did not always happen in class, but we did take time to do things like read one another's second drafts of abstracts for style after we discussed strategies like eliminating wordiness to achieve conciseness.

Before students submitted their research reports to me for grading, they were required to review their work with at least one peer. Because not everyone was prepared to do this in class, and because many students still had limited experience providing this kind of feedback, I supplied them with handouts to guide them through two phases of review (Appendix G). In class, we looked at examples I had compiled to demonstrate

how I would review the samples for different aspects of review; we also did some brief in-class exercises on sentence-level revision.

When students handed in their papers, they were required to attach completed peer review sheets. This had value for some students, but not for all of them. Many were still writing their papers in the last days before the deadline, so their peer reviews were token efforts done simply to meet the requirements as the writers had no time to incorporate their readers' feedback into their revision. Some students were filling in the forms for the finished drafts just before class. This was likely a waste of time for them.

Students who incorporated peer review into their writing process early enough to use the feedback also had varying degrees of success. I noticed that some reviewers said almost the same thing on each paper they read; their responses were minimal and did not indicate that they had given much critical reflection to what they had read. I suspect that this is at least partly due to their lack of experience and possibly, for some at least, a lack of interest. For this to be more effective, students would need more opportunities to practice their skills as reviewers.

In their reflective letters, students expressed mixed reactions to giving feedback to their peers. Some of their concerns were about the validity of their perspective. Amy, for example, noted that the course

> included more of the peer response than what I have previously experienced. I learned that it wasn't as easy as it looked to edit someone else [sic] paper because your own ideas and beliefs come into play and the writer may not appreciate them or think in the same way.

Acting as a peer reviewer, though, reinforced Rachel's confidence in reviewing her own work more objectively: "Reviewing the work of classmates helped me foster some objectivity that I was able to apply when revising my own work." Sue expressed her regret at not having the experience Rachel describes, as she writes, "I should of [sic] dug in more on the peer review. I always seemed to miss out reviewing others because of different circumstances. I did look over other peoples [sic] work, just not that thoroughly.

Being the recipient of peer review also had its challenges. Again, one concern was the competence. Tim felt that "the biggest problem with the in-class peer revision was I did not know whether the peer had sufficient knowledge to make competent suggestions." He went on to question whether his caution was warranted by the fact that he had much more post-secondary education experience than his classmates: "Perhaps after four years of University a subtle arrogance has emerged with respect to my writing (or would that be knowledge or both)?"

Rachel recognized the possible limitations of her peers as well: "With regards to peer review, I must be frank and say that the peer review is only as good as your peer. . . . This class held students with a wide range of skills and experience levels and some were more insightful in the peer review process than others." Sharon agreed; in her words, "Peer reviews may be utilized in this process however, I must stress that its success would be dependent on the attitude, knowledge, and respect of all parties involved."

Rachel doesn't appear to question whether the process is relevant to her future career, though, as she assumes her professional peers will be more skilled in this area. "The principles behind this process are sound, in that once you get out in the field, your

peers will be qualified to provide you with feedback on your writing projects." Tim adds that trusting your reviewers' expertise is crucial:

> I had trouble accepting the results of the peer revision exercises at first; however, the recommendations were valid and important (and made by someone I respect). By making some of the suggested changes, the quality of the paper was enhanced.

Cam experienced peer review as a major part of his revision process.

> The peer revision is a great way to get a better look at your work because the reader isn't "into" subject like you are. The peer revision was a great asset for the research paper. This greatly improves the quality of work that I hand in.

Cam was able to find a small group of peers who had the reading, writing, and communicating skills as well as the constructive attitudes to become peer consultants for one another throughout the course. This would be the ideal for students to really experience its potential.

The class with which I never succeeded in establishing a sense of community engaged in this activity much less energetically than the other two classes did. I could identify only two pairs of students who received meaningful feedback from this, and two of these writers had students from one of the other classes review their work. Of the 15 papers submitted by students in this class, only 8 met the minimum requirements for the assignment to earn a passing grade. The class average on this group's papers was 63%, while the averages in the other two groups were 72% and 77% on the same assignment. While peer review was not the only determining factor, it's clear that they did not experience the potential benefits of the process.

Responding to Student Writing

In addition to facilitating interaction among students, portfolio classrooms incorporate various forms of instructor response and self-assessment.

Instructor assessment

Responding to student writing is a widely discussed issue in writing assessment generally. Students who "look to the faculty for informed, rigorous, constructive feedback" (Eaton & Pougiales, 1993, p. 59) will not be satisfied with vague comments or uncritical feedback. When Connors and Lunsford (1993) studied teachers' general evaluative comments on 3000 student papers, they report that

> the primary emotion [their readers] felt as they read through these teacher comments . . . was a sort of chagrin: these papers and comments revealed to them a world of teaching writing that was harder and sadder than they wanted it to be . . . a world, many said, whose most obvious nature was seen in the exhaustion on the parts of the teachers marking these papers. (p. 214)

Teachers most commonly presented themselves as general and objective judges; only rarely did their wording reveal subjectivity in their responses. Their comments are further described as "professional," "authoritarian," "insensitive," and "disappointed"; teachers rarely demonstrated personal engagement with the texts in the ways readers are taught to respond. At the 1999 College Composition and Communication Conference, Heidi Huse presented students' comments about teacher written response; they shared the same kinds of concerns as those reported by Connors and Lunsford. Students also expressed a desire

for feedback that is personal and helps the student think about the paper and the students' overall writing progress.

Sperling (1994) adds that when classroom practices reflect current thinking about writing as a social act, awareness of the way readers respond to the text is a crucial component. Sperling says teacher's comments can be categorized by their orientation as readers: interpretive (of self or the writer's world); social (as a peer or as an expert reader/instructor/scholar); cognitive/emotive (analytical or emotional); evaluative (positive or negative); or pedagogical (correcting, expanding, or supporting). The challenge is incorporate multiple orientations in ways that can help students learn. Here, too, the University of Hawai'i Manoa (1999b) offers a succinct suggestion: "Figure out what you want the students to do with your comments" (p. 3).

White (1994) provides further insight into the layers of meaning in teachers' responses to student writing. He explains that New Criticism, which dominated from the 1930s through the 1950s and still dominates high school literature study, treats the text as the sole source of meaning, independent of the context, the writer, or the reader. Thus, readers of literature–and of student writing–focus on the techniques evident. Attention to editing and appearance dominate this product-oriented understanding. White says the problem is that

> the theory of reading, and hence of writing, that defines writing as *only* or even *principally* a product distorts the teaching of writing. It turns the writing teacher into only a judge of texts and limits teacher intervention (and hence value) to the

> end of the writing process, where such intervention is not likely to do much good for the essay at hand. (p. 91)

Davis (1997), too, argues in favour of sustained dialogue about writing, asserting that the most important development in literary theory in the past thirty years is contextual thinking. The belief that texts are autonomous and can be read in isolation is based in positivism. Our practices are therefore inconsistent when we approach literature with sensitivity to the cultural and individual contexts surrounding it but read our students' writing as though it can be decontextualized.

As White (1994) contends, teachers' approaches to reading a student's text must change. When we read first drafts, for example, we cannot approach the text as

> literalists, ignoring our intuitions of what the student *meant* to say or our predictions of what the student *could* say if he or she followed the best insights now buried in the present text. . . . By comparing the student text with what Nancy Sommers . . . calls our "ideal text," we appropriate the student's writing, deny the creative impulse that must drive writing, and turn revision into editing to please the teachers' concept of the paper. (p. 96)

What follows, then, is a re-visioning of student writing, as we no longer see it as "an odd form of literature created for the sole purpose of being criticized" (p. 98). Instead of applying the standard vague evaluative comments, teachers

> will see their endless hours of work on these papers as part of the writing process, rather than simply "grading" products, and they will be more ready to invite other

> readers and different judgements (perhaps from other students) to become part of this process. (pp. 98-99)

Reading, therefore, becomes a community function.

Some of this communal effort happens through peer review. My feedback to the English 155 students often came after they had collaborated with one another. At that stage, my comments on the students' individual assignments were predominantly editorial with the intent that they would use my feedback during further revision. To address substantive matters, I wrote comments and questions rather than corrections; I identified sentence-level issues as well. At the end of each document, I gave general comments about its strengths and suggested some kind of focus for revision. All my feedback was pencilled in the margins in small writing, as it was often extensive and I thought it could seem more invasive if it were even more visually dominating.

I enjoyed being able to read students' work without focusing my thinking on what mark would best represent a document's success in achieving its goals. Instead, I could bypass the pressure of that decision and instead assume the role of editor or advisor. I don't think I ever perceived myself a simply a reader of someone else's communication. This may be partly because I didn't strive to do that, nor did I have the time to read each document numerous times from different points of view. The step away from evaluator felt good, though, and it seems possible to me that at times, even less advising could be beneficial to students as well.

There are some challenges for the students in deferring the grading this way. One is practical. Students are accustomed to being motivated by evaluation and often make

decisions about how they spend their time at least partly by considering what an assignment is "worth." If the consequence of not doing the work is not immediately evident, some students leave their initial drafts and revisions until the working portfolio is due. This seriously undermines the learning value of revision, as it becomes a means to a grade again, a way of giving the teacher what she wants rather than a process of strengthening my communication in this document. Most of the students who took this approach with the first working portfolio made some changes with the second collection, perhaps because they saw how the criteria were being applied as I responded to their first working portfolio contents and self-assessments, where students were required to explicate their learning.

Self-assessment

Simmons (1994) believes that students must be actively involved in assessment because "students cannot achieve deep understanding if they receive evaluation passively. Taking time and energy to reflect on and improve one's work are essential to the understanding process itself" (p. 23). Luce-Kapler (1996) notes that portfolios offer opportunities for student decision-making and ownership. Students use them to gather ideas and develop their writing; this evidence can be a springboard for discussion and reflection on how they are proceeding. Portfolios can lead them to explore the nature of writing, to ask questions about what works for them and for their readers.

One indicator of students' self-assessment this term can be found in their revision processes. Students in English 155 were given opportunities throughout the course to

revise their work and to include the various drafts in their working portfolios. Revision was integral to the course objectives, so it was one of the criteria for assessment.

This feature of portfolio assessment was new to most students. In her first working portfolio reflection sheet, Amy commented, "My writing process has been rusty as after I hand in my work I haven't had to work with the piece again. . . . [I've learned] that pieces can really change after you look at it for a second time." Dave also noted that he was learning from the process: "I think this portfolio system is a good way to learn because I have a chance to rethink my writing after receiving feedback from you and I think I learn alot [sic] more that way." To complete the starter "You can support me by . . . ," Dave responded, "You already help me alot by giving me the chance to revise my writings after you've looked at them."

Tim mentioned revision in every response on his feedback form. He felt what he'd done that was significant in the first part of the term was this: "I've taken more than a second glance at my work before submission. More in depth revision"; this was significant because "it helps to produce a much clearer paper" and "it helps to produce a more clear thinking procedure." He stated that his "writing process is improving with respect to revisions and train of thought. Ideas are being expressed more clearly."

This same theme appeared in Tim's reflective letter at the end of the term:

> The most important aspect of this course was the revision portion. I was made to look over my paper and assignments whereas in University it was not required. It is easy to look over your paper, but it is much more difficult to

critically examine what you have written. I think that this portion of the class was very important in achieving my quality of work.

> The revision techniques discussed in class (mechanics, flow, and appearance) were vital in the creation of my final draft [of the research paper]. I spent numerous hours revising my paper to improve its overall quality. This paper is still far from being perfect. I still need to expand the overall content of my paper; however, I am pleased with what I have produced.

Other students also appeared to be sold on the benefits of revision. Sue felt revision helped her gain control over not only her sentences but also her expression of ideas.

> To do a good job a lot of revision time is needed, especially if you have problems like I have with grammar. Revision is essential to anyone though, regardless of their writing skill. I think it is so important to take that step back and get away from what you are working on for a while. It is so easy to get caught up in what you're thinking and not realize what you're actually saying.

Cam, who had enjoyed positive formal and informal peer review experiences during the semester, wrote,

> The most important thing I have learned this year is how to revise my work after I have wrote [sic] it . Before this I never revised my work. I would sit down in front of the computer, write, and hand it in. Now I revise as I write, after I have finished and also after my work has been looked at by another party. . . . From now on I will always read and edit my work at least twice before it is submitted.

Self-assessment in portfolio classrooms also involves making opportunities for students to learn about learning. In reflecting on their writing development, students are encouraged to assume control over their writing (Herter, 1991). In this way, students are using language in a writing-to-learn act where the subject is their own literacy. Reflection empowers students and personalizes their learning. As they make connections between courses, experiences and themselves, they explore not just what they know about the material but also what they know about themselves (Eaton & Pougiales, 1993; Horning, 1997). Reflective writing exercises draw attention to form and content of writing, increase students' awareness of their processes, and encourage them to take new risks (Horning, 1997).

Integrating self-awareness throughout the course shifts the focus of learning. In their analysis of the theoretical foundations of self-evaluation in portfolios, Eaton and Pougiales (1993) affirm that "responses to content, rather than the content itself, become the 'center' of learning" (p. 54). Making this an ongoing practice is essential, for students' "creative reflection and criticism depend on seeing themselves as central to their learning, a feat accomplished not by a teacher saying that something is 'student-centered,' but through the experience of being at the center" (p. 51). Eaton and Pougiales articulate the constructivist foundations of this practice:

> Learning includes more than gathering facts and concepts in any one content area; accountability should include the voices of students; learning is more likely to occur when students have a sense of ownership, engagement, and agency and are encouraged to move beyond the stance of "received knower" to construct their

> own knowledge; learning involves making an action out of knowledge, using knowledge to think, judge, decide, discover, interact, create; learning succeeds to the degree that it gradually assists the learner to take control of his or her own learning process. Student self-evaluation embodies these assumptions. (pp. 54-55)

Graves (1992a) asserts that mastering the processes of self-evaluation is necessarily slow and time-consuming. He observes that as students learn to "read like writers" (p. 86), they can identify criteria to use in their responses to their own work. Instructors can encourage students to make deeper inquiries by raising questions that bring important things to the surface and then probing for more information. Their questions can also specify criteria to guide evaluation. Another important step is to help students identify their internal criteria for selecting pieces by giving them language to convey their values; by identifying what is significant about various pieces of writing (here I learned new things about a subject, this was hard to write, here I felt like I was catching on, . . .), student's self-awareness grows. The University of Hawai'i Manoa Writing Program (1999b) describes self-assessment this way:

> Students reflect on what they do, decide what works and what doesn't, and describe what works in terms that may apply to subsequent tasks. This basic sequence helps students articulate and internalize writing strategies they can use again and again. (p. 1)

They also recommend that instructors respond to the students' observations rather than on the entire draft of an assignment. Such guidelines address concerns raised by Martin (1997), whose study of student portfolios showed that students had learned only to

prepare predefined types of writing that had been prescribed in their program's portfolio assessment design. Their portfolios had become just a sample of types of writing rather than a means of exploring written expression. In contrast, Harrison (1991) reports that at her college, students are demonstrating growth in their use of rhetorical strategies and in the way they analyze and present themselves as writers in their portfolio reflections.

Many instructors give students specific questions to guide their reflection. Romano's (1992) approach is quite simple: Here's what I did that's significant, here's why it's significant, here's the process I went through, and here's what I've learned from that process. Rief (1992) provides a more extensive set of questions to help students practice articulating their learning content and process:

> What makes this your best piece?
>
> How did you go about writing it?
>
> What problems did you encounter?
>
> How did you solve them?
>
> What makes your most effective piece different from your least effective piece?
>
> What goals did you set for yourself?
>
> How well did you accomplish them?
>
> What are you able to do as a writer that you couldn't do before?
>
> What has helped you the most with your writing during this trimester?
>
> What are your writing goals for the next twelve weeks? (p. 59)

Th University of Hawai'i Manoa (1999a) gives similar suggestions; they also suggest ways for instructors to intentionally encourage students to make connections between

assignments and courses, and to develop writing criteria that can transfer to multiple contexts.

Portfolio contents can be the focus of small group conferencing between students; they can also be the center of teacher-student conversations (Courts & McInerney, 1993). Teachers can see how students are thinking about their work and guide them to deepen their thinking (Luce-Kapler, 1996). Simple questions like "What does this show about you?" (Milliken, 1992, p. 40) reinforce students' ownership of learning while helping the teacher practice more reflection through listening and questioning. Voss (1992) found that by shifting the focus this way, she had "real conversations" with her first-graders; the same outcome should be possible with adult learners. Questions can also steer students toward deeper critique: What steps would make this learning experience more constructive? (Courts & McInerney, 1993). A word of caution from Newkirk (1995) is that while writing conferences can be opportunities for teaching and learning, they are also complex social encounters filled with multiple meanings for the participants. Here, too, teachers must be aware of the nuances and be able to guide the conversation skilfully.

All these strategies help students experience what Lucas (1992) calls "reflective assessment," a type of formative assessment that is done by the learner. The resulting portfolio contains "documented experience with reflective commentary" (p. 10). As students make decisions in preparing their portfolios and commenting on their decisions, they are developing critical skills (Bolender, 1996) as well as metacogition (Courts & McInerney, 1993).

I decided to address implement some of these strategies in a very simple, brief activity at the beginning of our third class together. Before the students handed in their literacy autobiographies, they filled in a short reflections sheet about the project (Appendix H) which was inspired by the above ideas from the University of Hawai'i Manoa. Most students did not write extensive answers and some seemed unsure of what to say, but that was not a problem from my perspective. I would do it again because it signals that I want them to pay attention to their process, that it matters. Also, by asking them to identify the criteria they used to determine whether their document was successful and by giving them an opportunity to ask me for specific feedback, I was shifting the control over some of the decision-making from me to them.

Two other opportunities for self-assessment were connected to the students' submission of their working portfolios. Their first collection was accompanied by a reflection form in which I asked students to write about their perceptions of their writing as represented in their portfolios' contents (Appendix I). The questions were designed to help them see some value in their writing, identify what they had learned about both products and processes, and set goals. I also asked them to identify ways that I could support them in achieving these goals. One of my objectives was to direct their thinking. I wanted them to value their work, to see writing as developmental, and to develop a sense of ownership of their work. (See Appendix J for a sample of my feedback to the students' first portfolios.)

For both practical and theoretical reasons, I pushed self-assessment much further with working portfolio 2. Reading and responding to their first working portfolios turned

out to be a massive task; each one required up to an hour, and the contents were relatively limited. Their second submission was to include all their process work on their research paper, which I was also afraid would be nearly impossible for me to sort through meaningfully given the variety of approaches possible. Besides, I had just finished working through their research papers, and I was exhausted. This set of circumstances led me to consider other alternatives.

The solution proved to be better than my initial plan of repeating the first process: the students assembled their materials and met with me for individual 15-minute consultations in which they walked me through the contents and interpreted verbally what they believed the collection demonstrated about their writing. To facilitate this process, I reorganized the original evaluation criteria into a checklist on which the students indicated their assessment of their portfolio contents and then assigned it a grade (Appendix K). I also gave them a list of questions that they needed to be prepared to answer.

What a treat! In addition to resolving the practical nightmares, the opportunity for heightened personal conversation about their writing allowed me to reinforce their growth, respond to their concerns, and help them begin thinking about their presentation portfolios. Some of the students were hesitant about being in this role of leading me through their work and assessing it, but I think it helped that they had my assessment of their first working portfolio as a reference point. It certainly helped me to be able to go back to that and ask what was the same/different now, and how could that be reflected in the grade, for example. Most often I concurred with their assessment; most of the changes

I negotiated were increases where I felt they had underestimated some feature in their collection. Before I initialed their grade and entered it in my records, I asked whether they were comfortable with the mark, so we both had opportunities to negotiate this. Considering this was weighted at 15% of their final grade, this process became an opportunity for student ownership of many aspects of the learning process.

Although I cannot substantiate this with comparative data, I suspect that this consultation may have helped the students approach their final reflective letters as a personal communication between them and me. Sharon, for example, began by addressing me directly: "Welcome to my presentation portfolio." She then related her decision-making to our conference,

> Please find the five projects you requested which I believe demonstrate my best work. As I mentioned during our meeting, I cannot determine which of my pieces showed my writing ability as better or worse, so I chose the ones that portray rather, the scope that I am able to apply my writing skills.

Rachel demonstrated strong reader awareness as she explained, "The third article I included is in magazine style format, which should relieve some of the monotony of scientific writing and illustrate that I am able to diversify my styles."

Several students closed with personal notes such as "I hope you enjoy my presentation portfolio" (Amy), "Thank you very much for you [sic] patience, humour and support throughout this course. I thought it was a very worthwhile learning experience" (Rachel), and "Over all, I found your english [sic] class to be useful and educational. Thank-you for all of your pointers and I hope to see you around next semester" (Deb).

Tim took the opportunity to make a direct request: "Would you be able to supply a Letter of Recommendation that addresses my communication skills to include in my career portfolio?"

Some students' comments reveal their personal involvement with the writing compiled in their portfolios. Amy, for example, saw that "the writing of this letter allowed me to look back at what we had done this year and what was of most value to me." Her phrase, "As a writer I have learned. . . " could be simply a response to the instructions; it could also indicate that she has embraced this identity in some way.

Barb's explanation of her experience in writing her research paper is more pointed:

> My most significant piece of work is my research paper. I have restructured my paper so many times that it actually feels like it's mine. That's sounds wired [sic] but I have never seriously been affected by my work before. In lots of papers I write, it's like out of sight, out of mind. This research paper has been different. I have looked at my topic from so many different points of view that it is not just a one sided story, but a complex elaborate system. I know that what I have written about is real because I have seen it with my own eyes. When I saw pictures of [the paper topic], they weren't just pretty pictures in a book, I've seen the damage and know what it is like to feel useless to the destruction. The more I truly thought about my topic, the clearer it was to write about it. It was the whole learning process that gave my paper the outcome that it has and the meaning it has to me. I still want to write more but I have to put my pen down and listen to what more

knowledgeable people have to say. Maybe someday it will be [me] being the more knowledgeable one speaking and writing what I have to say.

Dave wrote about the personal significance of his learning as well.

> Prior to taking English 155, I didn't have any confidence in my writing, and I was a little nervous about taking a writing class. Throughout high school, I had problems trying to write clearly and coherently. Everything I wrote seemed sloppy, incoherent, and inconsistent. I'm thinking it may have been because I didn't apply myself. Now, I've gained confidence in my writing and as I read over my documents, they are no longer sloppy or incoherent. The one thing I'm going to work on is the minor grammatical errors that I make. I will use more care when writing, as I believe these errors are carelessness on my part.

The reflective letters were also a forum for students to closely analyze individual documents. Barb's assessment of her first abstract is one such analysis.

> I think the first abstract I wrote for "a new ear [sic] for carnivore conservation' shows the very primitive format of writing I use [sic] to have. I only skimmed the surface of information the article I was writing about contained. As a mild skeletal structure I did a good job but as an informative abstract I didn't come close.

Instructional Reflections

Confronting Issues of Integrity in Assessment

Every form of feedback in the portfolio classroom should be provided with integrity. Lucas (1992) sees a danger in approaching portfolio implementation with an uninquiring mind. Portfolio assessment can be weakened if people begin to apply it in less rich ways, if it becomes a tight, easily condensed fad. She recalls how collaborative learning has gone this path: "I am most of all struck by how little the 'new pedagogy' changes things unless teachers are willing to change more than how they arrange the desks and chairs" (p. 4). Murphy (1994) and Hamp-Lyons and Condon (1993) warn that although portfolio pedagogy is based on new ways of thinking about writing, not all instructional designs reflect new theoretical constructs. Even a collection of prescribed writing activities–right down to a pile of completed worksheets–gets called a portfolio now.

As an assessment instrument, then, portfolios must reflect learning in meaningful ways. Wiggins (1993) contends that tests typically minimize ambiguity and reduce the intellectual value of learning by not assessing whether students can apply their knowledge wisely in various contexts. A good test is congruent with real life; it is authentic. Wiggins maintains that performance assessment respects the context and includes characteristics like good judgment and habits of mind that elude traditional testing.

Portfolios can be a form of authentic performance assessment (Meyer, 1992). As Applebee (1994) observes,

> If thoughtfully and carefully implemented, portfolios do have the potential to contextualize assessment performance, providing a fuller portrait of the range of student abilities, and perhaps also of the nature of instruction since portfolios carry a reflection of their context with them. In turn, these virtues may lessen a variety of problems that undercut current assessments, including issues of motivation and ownership, and the artificial constraints of time, topic, and opportunity to reflect upon what one is doing that are inherent in controlled testing situations. (p. 45)

Portfolios give students opportunities to perform writing behaviours in a context that allows for the writing processes of real life (Black, Helton, & Sommers, 1994). Assessment is integral to that process. "Like the writing process, assessment is a recursive practice which sends us back to reevaluate contents and reexamine contexts. Students begin to see the incubation that some forms of writing require, the calibrating that other writing needs" (Herter, 1991, p. 91). Complex skill sets, diversity in students, and versatility in assessment are admitted into portfolio assessment (Belanoff, 1996).

Even though, as Belanoff (1996) concedes, we have "great difficulty generalizing about our classrooms, including defining what good writing is" (p. 354), portfolios are "giving us a better picture of what we are testing for" (Elbow & Belanoff, 1997, p. 25). As O'Neill's (1998) and Hamilton's (1994) designs show, knowing what we are testing for is a crucial part of deciding what the portfolio should contain.

Portfolios may be nonselective or selective (Courts & McInerney, 1993; Write Environment, Inc., 1998). In nonselective portfolios, everything from the course is

included. This complete record allows teachers and students to see overall progress; the collection can also help program reviewers see the range of activities in the course. The disadvantage associated with the volume of information is that nothing stands out (except perhaps the amount of time involved in reading it). Selective portfolios can be individual or programmatic. The student chooses certain pieces of work according to criteria established by the instructor or the program (Bishop, 1989; Blair, 1994). Murphy (1994) explains that pieces may be chosen to represent types or genres of writing; on the other hand, they may represent kinds of learning, such as use of processes/resources or evidence of accomplishment/growth as a writer. Another approach is completely open-ended, which "privileges diversity and individualization over control and standardization in both curriculum and assessment" (p. 195).

In the enthusiasm to incorporate portfolios, indiscriminate constructions have led Elbow (1994) to caution against portfolio overuse, which can induce what he calls "grading dystopia." That is, he cautions against creating situations where students feel that every iota of writing will be assessed. This will obviously undermine the learning value of portfolios.

As previously noted, all the students' work was included in their working portfolios. Their presentation portfolios contained five pieces, three of which each student could choose. By inviting the students to determine the criteria for selecting the three optional assignments in their portfolios, I encouraged them to take ownership of their assessment.

One indicator of ownership over assessment is evident in the students' reasons for selecting the three optional documents in the portfolios. They were invited to choose the criteria for these inclusions and then to comment on this in their letters.

Some students selected projects that revealed their growth as writers. Tim, for example, spoke of this as an evolution:

> I chose these projects because they reflect my writing evolution over the last four months. My first memo represents my writing ability at the start of the course and the research paper exemplifies my ability at the end. The various abstracts are included to demonstrate my ability to distill information and to present that information to different audiences. The importance of including the resume and cover letter is to show that I can accurately and professionally display the necessary information required to acquire a job or career.

Although he does not explain his decision so completely, Tony used a similar logic:

> The order of my writings is in reverse chronological order. It starts with an essay I wrote in High School on Hamlet, and ends with my resume and cover letter. It is meant to show how my writing has improved over the span of this course.

Other students explained that they believed the documents each showed something different about specific skills. Dave outlined not only composition, but also reading skill and rhetorical awareness.

> I included my abstracts because I think they effectively summarize the articles in clear, understandable writing. I think my biggest strengths in writing

these abstracts were my reading comprehension skills and being able to build coherent sentences with so much information.

> I decided to add my poster to my portfolio because I think it clearly demonstrates my ability to write for other audiences. I think it's effective because it emphasizes the need for public cooperation and possible consequences for noncompliance.

Rachel also personalized the collection by connecting her writing to her diverse interests and thinking abilities:

> I have included articles in this portfolio which I feel reflect not only my abilities as a writer but also my range of interests and aptitudes in the field of conservation. I have presented an article on crafting conservation policy, which demonstrates my ability to understand administrative processes. I have also included an abstract on fetal sex allocation which I consider to be an interesting topic but also demonstrates that I am able to consider conservation from a resource management perspective. The third article I included is in magazine style format, which should relieve some of the monotony of scientific writing and illustrate that I am able to diversify my styles.

Cam also emphasized his own learning and revealed his awareness of the assessment context of his portfolio when he wrote,

> I chose the abstracts and newsletter because these presented the most challenge. These items have the most information in them and there is more to work with. The other projects would be simple to rewrite and I would not learn much from

> simply rewriting the annotated bibliography or one of the memos. These selections can show improvement much better.

Similarly, Sue "chose to include the letter to [a topic expert] because I learned quite a bit from it." Other students spoke about a project being "the most important thing that I had to write" (Deb). Dave clarified the reason as well:

> The most important writing in my portfolio is my research paper. It's important to me because I worked very hard and gave it lots of thought and time. I believe it demonstrates the best writing I've ever done in terms of effectiveness and sentence structures.

Tim highlighted other reasons for the paper's inportance.

> The research paper was the most important project of the term. I had to use all of my knowledge of writing (citing sources, using proper grammar, revising, writing abstracts, planning, and formatting) to achieve a quality paper. The research notebook aided in the clarification of my ideas and in the planning of my essay format.

Sharon and Deb also saw the major project as their best work this term.

> The research paper represents my best work, as I spent a great deal of time researching, organizing, and writing it. It demonstrates the thoroughness I try to employ in order to adequately cover all the important data relating to the topic.

Deb wrote, "I am really proud of my research paper and I consider it to be one of my best examples of my writing."

Some students were aware that their collections represented more than just writing skills. Rachel succinctly noted, "As I gather my projects together for this presentation portfolio, I am reminded of the battles I've faced in my writing." Sharon saw that her writing skills could be used most effectively when she was also using effective personal management skills:

> In many ways this course has been rewarding for me. It has given me the opportunity to hone certain literacy skills as well as making me aware that I must try to employ more efficient time management strategies so that my best work may be represented. It has also made me aware of my need to address the manner in which I view the expectations made of me. I realize that my inter-personal skills need to be improved.

Opening Windows into Student Learning

Most assessment practices typically give a picture of students' knowledge but not how instructional practices are affecting it (Cerbin, 1994). Holistically scored essay tests, for example, are "a closed system, offering no windows through which teachers can look in and no access points through which researchers can enter" (Hamp-Lyons, 1995, p. 760). On the other hand, portfolios create

> a situation in which learning becomes a real process rather than an artificial ritual of simply "taking" courses and accumulating grades and credit hours until one collects enough credit to finally graduate. Instead, teaching and learning . . . become genuinely interactive, as they are almost everywhere else in society except in schools. (Courts & McInerney, 1993, p. 90)

Heightened awareness of the students' perceptions of learning processes and outcomes can help instructors focus more on student understanding than on getting through the curriculum; this knowledge can stimulate re-examination of practices.

However, such "learner-centered assessment, . . . concerned with the interplay between teaching and learning," (Cerbin, 1994, p. 96) is not integrated into our practices in the same way as summative evaluation. If portfolios are going to make a difference in the instructional process, we must do more than just collect writing regularly.

During the course, I used the students' first working portfolios to help me determine the focus of some of our subsequent classes together. Because main project at that time was their research papers, this meant a bit of resequencing, for example, to give students an earlier overview of the format details of the paper than I had originally planned. Also, when students expressed concern about their word processing knowledge, I arranged for two special computer lab sessions and invited a colleague to walk the students through the steps to set up a template for their research papers. This was something I had never offered before. It worked well for students who saved the file; however, many who did not save the template actually handed in papers with more formatting errors than I had ever encountered in previous classes because for some reason they did also did not consult the format guidelines handout I had provided.

Another entry point into students' learning processes was in the focus groups we arranged several weeks before their research papers were due. By meeting with all the students in groups of three or four, I was able to hear how their research was progressing and facilitate discussion among the students about their plans for their papers. This took

me the better part of a week, but it gave the students an opportunity to think out loud about their papers, ask questions, and engage in substantive dialogue with each other about their projects. It also forced students to be accountable to others, as they felt some pressure to have something to say about their own progress and about their group members' research questions as well.

Tim commented specifically on the value of these processes:

> The scientific research report was my favorite project. The process work for this project was great. The small group meeting and peer revision gave me a better look at my ideas and also gave me some valuable advice. Keeping a research notebook and the post-it note exercise was very good to keep track of information and help organize information better. Without keeping all my information in one place, I tend to lose it or it gets mixed up. I appreciate the computer tutorials because it gave me the information on how to do specific things for this paper. Even if you are good with computers the information given to us was useful to properly format our papers. My term paper was by far my best work. I was very interested in the topic and I also wanted to find the information for personal use as well as for the paper. I also learned a lot from the process work.

Even though he had written many academic papers before this, Tim benefited from these processes.

One of the objectives of this project is to identify implications for instruction revealed by the students' portfolios. Examining evidence of students' rhetorical

awareness, the connections they make between thinking and writing, and their insights into skill development

Rhetorical awareness

One of the keys to preparing effective written communication is to consider the relationship between audience, purpose, and message. Students need to be aware of the contexts in which they write, as these contexts guide their decisions. This kind of awareness is evident in many of the students' reflections.

The strongest writers revealed this awareness directly. Sharon tied her writing skills specifically to her ability to adapt to various audiences, "I am strongly confident in my writing skills. Over-all, [sic] I feel that I can appropriately target any audience that may be required of me within a variety of applications." She used this criterion to select and interpret her three optional documents.

> The other three pieces submitted are off-shoots from the research paper and they portray how I targeted different audiences. The abstract for Stan Clements in the conservation class demonstrates after several attempts, my ability to submit work that is representative of his expectations. The E-Mail correspondence exhibits my ability to request information from various parties and to ask appropriate questions with regards to the information I am trying to obtain. The fifth piece was largely satirical; I wanted to get the attention of certain groups to convey my concern that I could not represent their views adequately in my paper due to their inability to supply the reliable information that would support their claims.

Her personal engagement with her various audiences and messages is clear. Rachel also made these links.

> I found the audience analysis useful in that I was better able to assess and article once I really understood the focus of the publication. This awareness has enabled me to streamline my own writing. I think more about who I'm writing for, and this helps me to set the objectives that my project must address. This goal-setting helps me to stay focused rather than going off on a tangent, which has been a recurring issue I've faced throughout this course, especially with my research paper.

Amy expressed this awareness with in the context of her resume preparation, where, she says, "I was able to reflect about myself and about my strengths then displaying them in a way to attract attention by a potential employer."

Sue's awareness of audience increased through her correspondence with professionals as part of her research process. This was a significant learning experience, which she represented with a letter to one expert. She wrote,

> I chose to include the letter to [topic expert] because I learned quite a bit from it. I originally thought I had good questions, but realized after talking to you that I needed to put more thought into them. It was also important to hold off awhile until you have time to review the information you have gathered before asking him anything. These are busy people and you don't want to miss an important question.

Her last assignment was another experience in which the rhetorical purpose became a focal point in her composing process.

> The letter to the editor was interesting. I know some people found this to be an easy assignment, but I did not! Emotions are a difficult thing to keep out of topics like this. When you feel that strongly about something and you see someone in a position of power and influence who chooses to ignore science and knowledge and instead go for emotion and tradition, it can be hard not to fire back in the same manner.

It's interesting that rhetorical awareness was expressed by students who were less confident writers as well. Deb, for example, revealed the connections between her documents and their audiences, but the way she expressed these ideas in her reflective letter indicates that she is less conscious of these connections in the context of this writing.

> I am really proud of my research paper and I consider it to be one of my best examples of my writing. I did not include the graphics because it takes too much ink and it's not my printer. The cover letter and resume are going to be used when I go home and meet the local game warden. Because of this I am using my permament [sic] address and phone number. I will also find the addresses and phone number of the people on my references that I didn't know. The short story was one that I wrote after going on a trip and climbing the very same mountain that the men in the story did. I think that it refects [sic] what I am interested in and also my personal experiences (though my trip was not as successful). Lastly I

> included and ambstact [sic] I did for Stan on the "Sea of Slaughts by Faley Mowat".[sic] This was not an easy assignment because you had to get every animal that he talked about in class and put in their numbers and how they have declined. This was also the first abstract that I have ever written.

She seems aware of the audience factor, but some of her content and editing choices reveal that she is still uncertain as she makes decisions in writing. Tony's lack of detail in his reflective letter indicates either very little awareness of his audience and purpose or a choice to provide only minimal information. His entire letter consists of two paragraphs:

> I believe my writing has come a long way since the beginning of the semester. However I know I have a ways to go yet. I've learnt that my style of revision needs work, and that I have to be more involved in the research portion of my writing. I have benefited greatly from some of the things taught, like the post-it note exercise, for example. The most difficult part of the course would have to be the paper. It is also the most beneficial. In future I plan to start earlier and devote more time to it, and back up my files. My best example of writing is the abstract for Stan on modern ammunition. Everything that I have been taught as well came together for that abstract. In reflection I an [sic] glad I have taken this course and I know it will serve me well in future writings.
>
> The order of my writings is in reverse chronological order. It starts with an essay I wrote in High School on Hamlet, and ends with my resume and cover letter. It is meant to show how my writing has improved over the span of this course.

Finding ways to help students frame their writing in these terms seems to be an important goal of instructional preparation.

Perceptions of Thinking and Writing

Assessing the ways students perceive the correlation between thinking and writing is a more difficult exercise. Some of the students, like Amy, seem to tie in the personal level of the document.

> I enjoy writing from a personal perspective and drawing my point of view into my pieces of writing. I find those types of writing quite easy to carry out. The literacy experiences assignment was a direct personal autobiography which I enjoy writing as it includes reflecting and thinking back to the past.

Barb considered the personal element at an attribute of creative writing.

> I am very fond of creative writing because it is the only time when I feel like I am putting what I have to say on paper. This is because my writing skills are not a strong as I wish they would be, otherwise I would use my research papers and other essays as more expressive demonstrations of what I have to say. I know with practice comes perfection.

She then used an analogy to illustrate the creative process and her perception of making meaning in writing.

> My opinion article is a reflection of what a lot of my creative writing is made of. When I look at my article I see it as ideas on a paper, with meaning. I see it the same way I would look at one of my drawings or painting. I don't see a structure of rules about how to write. This is why I have a problem with writing that isn't

> what I would call creative writing. As soon as I start I am stressed, I think of all these rules, commas, double negatives, my head spins. That explains my sort of shaky starts in all my work.

For Barb, focusing on the rules inhibits thinking. When she is not worried about rules, her words take shape and communicate meaning. She spent considerable time this term wrestling with her "non-creative" documents; in her letter she voiced an analysis of her process in expressing her thoughts on paper.

> The second abstract I wrote for "Ecotourism's support of biodiversity conservation" had a little more informative input in it's [sic] content and this time I cite the article. My writing is more informative but it is also more confusing. This abstract is a prime example of what happens to my thought patterns when I have so much to say. My introductions or opening sentences become muttled [sic] with some sort of statements as I try to introduce my subject. As soon as I get an introduction of the paper, I'm set; I then carry on with my discussion. The hardest thing for me to write is my opening sentence; in all my work this has been the most difficult task. I just need to plant something on the paper and then I am free to create whatever my mind can collaborate. However it is my introduction what usually leaves the reader with a half understanding of where I am going to go with my paper. I then pull my reader through my writing, when I should be just telling how it is.

Barb's perception that getting the words on the paper could free her mind to "collaborate" is echoed in a slightly different way by Sue, who saw that the act of writing helps to clarify thinking.

> Picking out the important information and conveying it in a clear manner forces you to have it crystal clear in your own mind. It also allows you to pick out inconsistencies in the author's work that often go unnoticed.

Preparing the research paper required a great deal of critical thinking for Sharon.

> The paper was significant when I became aware of my need to be more objective in how I dealt with the information I had gathered. Critical thinking on my part was of great importance when analyzing the reliability of the arguments presented to me from both sides of the issue.

Sharon explained the significance of another document in terms of its effectiveness in revealing her thoughts.

> I have also included an unrevised copy of a piece I undertook in as [sic] a student in a University Transfer English course. I particularly like this work as it shows my ability to respond to an over-generalized statement, allowing me to draw upon analytical skills dependent wholly on my own intellect in how I perceive the world around me. It demonstrates my ability to think clearly and furthermore, my ability to effectively reflect this process through the written word.

For some students, at least, the reflective letters provided an opportunity to articulate the connections between thinking and writing.

Sentence Skill Development

Writing instructors often struggle to mediate the ongoing between focusing on composing processes and practicing specific skills. In English 155, I review sentence concerns and grammar/mechanics in the context of style and editing decisions. Although I give students feedback on their errors, I spend minimal class time on these topics.

Several students commented on their uncertainty in this area, though, so it may be necessary to explore other ways to enhance their learning in this area. Three of the students saw a need to "improve my spelling and punctuation" (Cam), "work on the minor grammatical errors" (Dave), and "overcoming the weaknesses in my writing by practice and drilling into my head the basic grammar skill's [sic] necessary to be a good writer" (Sue).

Perhaps because I did not ask students to address this topic, specifically, little else was said about these specific skills.

Implications for Future Possibilities

Expanded Power Distribution

The layers of role redefinition in a portfolio classroom are certainly complex. Developing learning communities, where interaction mediates experience and expression, and class members become colleagues not competitors, is a necessary condition of reflection (Eaton & Pougiales, 1993). Peer response groups, collaborative writing, and informal conferencing help build community and work with reflection to encourage substantive dialogue. But this is not all. The teacher's role in this community can be

further reshaped by portfolio assessment as the focus shifts from grading to learning, and the instructor's dual role of evaluator and helper is more clearly perceived. Portfolios help "teachers negotiate the conflict between the role of supportive, welcoming helper and the role of critical, sceptical evaluator" (Elbow & Belanoff, 1997, p. 29).

Deliberately changing power relationships was one objective when Fayne and Woodson (1994) introduced portfolios in an interdisciplinary effort involving composition and psychology students. As students worked in peer groups to develop portfolios throughout the term, they became less dependent on instructors for emotional support. However, their study does not negate the fact that because these processes shift power to include students in shared meaning-making, some students resist; they don't want the responsibility they feel is the instructor's.

Eaton and Pougiales (1993) point out that this discomfort can be shared by faculty, who must also adapt to new relationships. Wiske (1994) discusses the loss of privacy teachers may experience when they share authority with students: In the act of clarifying expert knowledge openly, of "articulating goals and assessment criteria with students up front," they may feel they are "giving everyone a key that should perhaps not be distributed" (p. 20). Collaborative learning activities

> violate the paradigm that sanctifies knowledge as something the teachers possesses at the beginning, which students acquire during the course, and then demonstrate as their own private possession on a test. To credit students' knowledge, and their capacity to construct and critique knowledge, is to empower students in a way that violates the unspoken norms of most classrooms. Unless

> this change in the rules of the game is explicitly named and negotiated, students are quite likely to be confused and resistant. (p. 21)

The teacher's knowledge is not the only thing that is more exposed in a portfolio classroom. Student writing is also made public, and although "this pedagogy claims that, when teachers and students identify efforts as *both* successes and failures, writers improve" (Yancey, 1992b, p. 17), the levels of vulnerability this entails must be respected.

Similarly, even as one benefit of reflection is that it fosters personal communication between teachers and students and gives teachers insight into students' thinking processes (Horning, 1997), the corresponding vulnerability can be challenging for students and faculty. Instructors are obligated to practice self-reflection and demonstrate meaningful inquiry. And through students' reflections, faculty can hear students' voices, which may be disquieting, and may place teachers in new territory as they learn how to deal with students' disclosures. Courts and McInerney (1993) agree that portfolios have the potential to "encourage and facilitate a psychological/intellectual interaction among students *and* teachers that schools, in the past, have almost seemed purposely to avoid" (p. 92).

I maintained much of the power in English 155. Although I shared ownership with the students in the course by including them in many of the instructional processes and encouraged them to use their voices in their reflections, they had no choice over the types of assignments they prepared throughout the term or the evaluation framework. Because the learning outcomes are part of the environmental science program's

curriculum, certain elements of the course are not negotiable. Because I am responsible for submitting a grade for each student, I was careful to maintain enough control over evaluation to feel confident that the marks they received accurately reflected their achievement of the learning outcomes.

But that is only part of the story. Although portfolio assessment has allowed me to move out of my role as evaluator at least part of the time, I will need to do more work on this to more fully realize the potential.

My classroom is still predominantly teacher-directed. Students' comments at the end of the term indicated a desire for more time in class to write as well as to revise. Many felt the workload was quite heavy, and devoting more class time to preparing their documents would be helpful. Of course, creating more of a workshop framework will require further thinking and planning, and this would be congruent with portfolio assessment.

Changing the way class time is used could further validate the significance of the writing process and may even encourage students who are not really interested in writing to appreciate its recursive nature as Sue does.

> What can I say about my resume! Do you think we can call it a work in progress and leave it at that! Seriously, I'm glad to have a basis to work from. I think it's worth more than its obvious value though. It gives you a look at what they are going to see without knowing you personally, which gives me an objective glance at myself. I feel like it has given me something to work toward. The best thing is

> if I have a well-rounded resume I will have had a lot of fun and learned a lot to get there. I can't wait!

For Sue, writing a resume led to further thinking about many career-related decisions that go well beyond the document itself. Rachel went so far as to consider pursuing writing as a possible career enrichment.

> The insights I have gained in this course will help me should I continue to pursue interpretation as a career. I am considering taking a creative writing course to further develop my skills. I am also considering submitting some articles to the local rags around Golden and the Bow Valley. It's a good forum for raising public awareness about the environments, and could be a lot of fun if it also entails some travelling! I'm looking forward to writing future papers and articles, and may consider a job with National geographic the next time they ask!

It's not likely that many students will develop Rachel's strong sense of identity as a writer, but that's not really the goal of the course anyway. Perhaps Tim's perspective exemplifies better this goal for all students:

> The skills that I have built and reinforce focus on content, revision, and brevity/conciseness. I am more adept at determining audiences, revising my work using concise wording, and planning writing projects.

Cam conveys a similar sense of competence: "From this semester I have learned how to write more competently, not just sit down and complete the guidelines of an assignment like length and content."

Increased Communal Assessment

In English 155, I was responsible for determining the students' final grades on the their portfolios and in the course. In most places, however, portfolios are assessed by multiple readers who, to varying degrees, establish their learning outcomes and interpret students' writing in their local context. The credibility of portfolio grades is often strengthened by combining them with other performance assessments; by having them read by more than one person such as composition instructors, interdisciplinary committees, external panels of teachers (receiving institutions); or by having samples read by an external audit committee (community members) (Wolf et al. 1992).

Huot and Williamson (1997) and Davis (1997) advocate adopting a paradigm of negotiation in assessment. To those who argue that negotiating evaluation or including the student is abdicating our responsibility, Belanoff (1996) counters: "Evaluation is never objective" (p. 354); there is no such thing as a disinterested observer, and much evaluation is more about getting statistics than about students.

Portfolios are often assessed communally, particularly in high-stakes situations like entrance or exit assessments. Ideally, such grading processes maintain the integrity of the portfolio's instructional purposes, "for if assessment remains out of alignment with curriculum, it is curriculum, not assessment, that will suffer" (Applebee, 1994, p. 42). What we value in our evaluation will become the students' focus in learning. For this reason, collaborative assessors need to create and study their own processes. Such collegial dialogue goes beyond the justifying of scores that typically happens in structured holistic scoring sessions (Belanoff, 1996). In fact, portfolio pedagogy is

contaminated by the instrumental values of standardization if assessors attempt to follow the norming practices of large-scale essay evaluation (Elbow, 1994; Hamp-Lyons & Condon, 1993; Paulson & Paulson, 1990). Studies of Kentucky's large-scale portfolio assessment disclose the tensions and negative effects on teaching and learning that result from such disparity; the learning benefits can be severely weakened if cross-purposes are not reconciled (Callahan, 1997; Huot & Williamson, 1997; Mincey, 1996; Spalding & Cummins, 1998).

On the other hand, collaborative assessment has significant benefits. At the University of Cincinnati, assessment is negotiated through professional dialogue anchored in the local context. Norming sessions help teachers clarify for themselves and for one another how they are approaching their students' texts. This experience is both intellectual and emotional. As Durst, Roemer, and Schultz (1997) found, teachers can also take this conversation back to their students, who can then benefit from seeing into the complex world of writing assessment through multiple teachers' eyes.

Portfolio evaluation itself is understood as interpretive (Schultz, Durst, & Roemer, 1997). Broad (1997) investigated the ways instructors at another university achieved grade consensus through dialogue; their process honoured the messiness of portfolio assessment as they worked out how to deal with their differences. Rather than approaching assessment as isolated reading to discover the text's value, they were "collaboratively constructing the value of student's texts and the corresponding pass/fail decision for each student's performance" (p. 134). As Yancey (1999) writes, a new

construct "of writing assessment itself: as rhetorical act that is both humane and ethical" (p. 485) is emerging.

One of the often-celebrated benefits of portfolio assessment is that it usually generates teacher collaboration. As colleagues explore and express their understandings, theories, and evaluations, their negotiation moves beyond discussions of portfolios to include all kinds of dialogue about teaching and learning (Elbow & Belanoff, 1997). Murphy (1997) says that as teachers work together to articulate the dimensions for learning they expect their students to demonstrate through their portfolios, they are empowered to take ownership of assessment as they engage in this authentic and meaningful professional development with other professionals. Portfolio assessment also often creates opportunities for writing instructors to work with other faculty as they explore ways to help students improve their writing (Ause & Nicastro, 1997). Shay (1997) initiated such a project as a way for the Writing Centre to help chemistry faculty "enabled staff to critically reflect on the extent to which the curriculum (including the writing assignments) was enabling students to gain conceptual, methodological, and epistemological access to the discipline" (p. 33). This led to significant curriculum restructuring. In institutions where writing-across-the-disciplines is already in place, portfolio assessment is one more intersecting point for instructors to develop interdisciplinary instruction (Blair, 1994; Clemens, 1999; Watson, 1996).

Sometimes departments developing their own course requirements or exit criteria through portfolios look closely at their writing goals and curricula (Daniels & Reed, 1992; Dillon, 1997; Lieber, 1997; MacDonald, 1996; Olds & Miller, 1997; Wolf, et al.,

1992). Portfolios can also be a connecting point with community members when they become partners in assessment (Dillon). Pursuing the possibilities of collaborative assessment with other writing instructors at LCC would be a worthwhile next step in implementing portfolio assessment in my own classes.

Interdisciplinary assessment could be another future direction. Although English 155 provides students with program-specific writing experiences, the course is more about writing than it is about learning science or management or enforcement. However, other instructors in the program could build on this beginning portfolio with other projects. In a writing-to-learn approach to science, for example, writing would be used to enhance students' awareness of how they are constructing knowledge in their program (see Daniels & Reed, 1992; Olds & Miller, 1997; Slater, 1996; and Slater, 1997, for examples of portfolios in science and engineering). This application of portfolios would likely benefit the students in their content-area studies.

Shay (1997) offers insights on the value of this approach to writing across the curriculum at the University of Cape Town. Because faculties offer no English courses in their programs, both language literacy and academic literacy must be addressed in the content area curriculum. She envisions a dual apprenticeship that aims "beyond simply getting students to write, even getting students to write in genres appropriate to the discipline. The aim should be that, through writing, students are taken into the conceptual, analytical, and epistemological heart of the discipline" (p. 46). This means that instructors must intentionally and explicitly convey to students the writing expectations in their discipline; this means going beyond language and format

conventions to the kinds of understanding–scientists' ways of thinking and ways of presenting that thinking. These are important objectives for students in any program, and, although my course does not pursue environmental science content in such depth, an expanded use of portfolio assessment through the program could facilitate this kind of learning.

Implementing portfolio assessment in English 155 has been simply one step in a much larger journey. Because a portfolio classroom can be a place where integrity of instruction and assessment is pursued and valued, exploring the possibilities of expanded communal assessment and program-wide applications also has merit in this context. Portfolio assessment-as-pedagogy creates space for the kind of thinking, collaborating, and responding that characterize postsecondary learning communities.

References

Agnew, E. (1995). Rigorous grading does not raise standards: It only lowers grades. Assessing Writing, 2(1), 91-103.

Allen, J. (1992). Bridge over troubled waters? Connecting research and pedagogy in composition and business/technical communication. Technical Communication, 1(4), 5-26. Applebee, A. N. (1994). English Language Arts assessment: Lessons from the past. English Journal, 83(4), 40-46.

Atwood, J. W. (1992). Collaborative writing: The "other" game in town. The Writing Instructor, 12(1), 13-26.

Ause, C. E., & Nicastro, G. (1997). Establishing sound portfolio practice: Reflections on faculty development. In K. B. Yancey & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 89-100). Logan, UT: Utah State University Press.

Beale, W. H. (1990). Richard M. Weaver: Philosophical rhetoric, cultural criticism, and the First Rhetorical Awakening. College English, 52(6), 626-640.

Belanoff, P. (1994). Portfolios and literacy: Why? In L. Black, D. A. Daiker, J. Sommers, & G. Stygall (Eds.), New directions in portfolio assessment (pp. 13-24). Portsmouth, NH: Heinemann-Boynton/Cook.

Belanoff, P. (1996). Portfolios: The good, the bad, and the beautiful. In R. C. Calfee & P. Perfumo (Eds.), Writing portfolios in the classroom: Policy and practice, promise and peril. Evaluating writing through portfolios (Final Report) (pp. 349-358). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED398 588).

Berthoff, A. (1981). The making of meaning. Upper Montclair, NJ: Boynton/Cook.

Bishop, W. (1989). Revising the technical writing class: Peer critiques, self-evaluation, and portfolio grading. The Technical Writing Teacher, 16(1), 13-25.

Black, L., Helton, E., & Sommers, J. (1994). Connecting current research on authentic and performance assessment through portfolios. Assessing Writing, 1(2), 247-266.

Blair, R. (1994, Mar.) The Westminster writing assessment program: A model for small colleges. Paper presented at the Annual Meeting of the College Composition and Communication, Nashville, TN. (ERIC Document Reproduction Service No. ED374 449).

Bolender, R. K. (1996). The development of a portfolio assessment process for the Bachelor of Business Administration program at Mount Vernon Nazarene College (Report). Mount Vernon Nazarene College, OH. (ERIC Document Reproduction Service No. ED406 914).

Broad, B. (1997). Reciprocal authorities in communal writing assessment: Constructing textual value within a "new politics of inquiry." Assessing Writing, 4(2), 133-167.

Brophy, J. (1992). Probing the subtleties of subject-matter teaching. Educational Leadership, 49(7), 4-8.

Bruffee, K. A. (1993). Collaborative learning: Higher education, interdependence, and the authority of knowledge. Baltimore, MY: Johns Hopkins University Press.

Bujan, J., Havlin, J., Hendzell, P., Lokes, M., & Pries, M. (1996). Increasing students' responsibility for their own learning. M. A. Teaching and Leadership Action Research Project, Saint Xavier University and IRI/Skylight, IL. (ERIC Document Reproduction Service No. ED400 072).

CCCC Committee on Assessment. (1995). Writing assessment: A position statement. College Composition and Communication, 46, 430-437.

Callahan, S. (1997). Kentucky's state-mandated writing portfolios and teacher accountability. In K. B. Yancey, & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 57-71). Logan, UT: Utah State University Press.

Cerbin, W. (1994). The course portfolio as a tool for continuous improvement of teaching and learning. Journal on Excellence in College Teaching, 5(1), 95-105.

Clark, I. L. (1993). Portfolio evaluation, collaboration, and writing centers. College Composition and Communication, 44, 515-524.

Clemens, T. E. (1999, March). It takes a college: Making writing assessment visible. Paper presented at the 50th Conference on College Composition and Communication, Atlanta, GA, March 26. Unpublished.

Conley, D. T. (1997). Roadmap to restucturing: Charting the course of change in American education (2nd ed.). Eugene, OR: University of Oregon/ERIC Clearinghouse on Educational Management.

Connors, R. J., Ede, L. S., & Lunsford, A. A. (1984). The revival of rhetoric in America. In R. J. Connors, L. S. Ede, & A.A. Lunsford (Eds.), Essays on classical rhetoric and modern discourse (pp. 1-15). Carbondale, IL: Southern Illinois University Press.

Connors, R. J., & Glenn, C. (1995). The St. Martin's guide to teaching writing (3rd edition). New York: St. Martin's.

Connors, R. J., & Lunsford, A. A. (1993). Teachers' rhetorical comments on student papers. College Composition and Communication, 44, 200-223.

Corbett, E. P. J. (1963). The usefulness of classical rhetoric. College Composition and Communication, 14, 162-164.

Courts, P. L., & McInerney, K. H. (1993). Assessment in higher education: Politics, pedagogy, and portfolios. Westport, CN: Praeger.

Cox, K. B. (1993, April). Portfolios in action: A study of two classrooms with implications for reform. Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta, GA. (ERIC Document Reproduction Service No. ED359 204).

Daniels, S., & Reed, M. (1992, March). Enhancing forestry education through writing. Journal of Forestry, 27-32.

Davis, R. L. (1997). The lunar light of student writing: Portfolios and literary theory. In K. B. Yancey, & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 43-56). Logan, UT: Utah State University Press.

Dillon, W. T. (1997). Corporate advisor boards, portfolio assessment, and business and technical writing program development. Business Communication Quarterly, 60(1), 41-58.

Durst, R. K., Roemer, M., & Schultz, L. M. (1994). Portfolio negotiations: Acts in speech. In L. Black, D. A. Daiker, J. Sommers, & G. Stygall (Eds.), New Directions in Portfolio Assessment (pp. 286-300). Portsmouth, NH: Boynton/Cook.

Eaton, M., & Pougiales, R. (1993, Winter). Work, reflection, and community: Conditions that support writing self-evaluations. New Directions for Teaching and Learning, 56, 47-63.

Elbow, P. (1993). Ranking, evaluating, and liking: Sorting out three forms of judgment. College English, 55(2), 187-206.

Elbow, P. (1994). Will the virtues of portfolios blind us to their potential dangers? In L. Black, D. A. Daiker, J. Sommers, & G. Stygall (Eds.), New Directions in Portfolio Assessment (pp. 40-55). Portsmouth, NH: Heinemann-Boynton/Cook.

Elbow, P. (1997). Taking time out from grading and evaluating while working in a conventional system. Assessing Writing, 4(1), 5-27.

Elbow, P., & Belanoff, P. (1997). Reflections on an explosion: Portfolios in the '90s and beyond. In K. B. Yancey & I. Weiser (Eds.), Situating portfolios: Four perspectives, pp. 21-33. Logan, UT: Utah State University Press.

Elliot, N., Kilduff, M., & Lynch, R. (1994). The assessment of technical writing: A case study. Journal of Technical Writing and Communication, 24(1), 19-36.

Emig, J. (1971). Composing processes of twelfth graders. (Research Report No. 13) Urbana, NY: NCTE.

Fayne, H., & Woodson, N. (1994). Portfolios: Emerging voices. In R. Kelder (Ed.), Theories of learning: Teaching for understanding and creativity (pp. 125-134). New Paltz, NY: The Institute for the Study of Postsecondary Pedagogy, State University of New York.

Fontaine, S. I. (1995). Finding consistency and speculating change: What we can learn about portfolio assessment from the Writing Center. The Writing Center Journal, 16(1), 46-58.

Gere, A. R. (1987). Writing groups: History, theory, and implications. Carbondale, IL: Southern Illinois University Press.

Grimm, N. (1986). Improving students' responses to their peers' essays. College Composition and Communication, 37, 91-94.

Gold, S. E. (1992). Increasing student autonomy through portfolios. In K. B. Yancey (Ed.), Portfolios in the writing classroom: An introduction (pp. 21-30). Urbana, IL: National Council of Teachers of English.

Graves, D. H. (1992a). Help students learn to read their portfolios. In D. H. Graves & B. S. Sunstein. (Eds.), Portfolio portraits (pp. 85-95). Portsmouth, NH: Heinemann.

Graves, D. H. (1992b). Portfolios: Keep a good idea growing. In D. H. Graves & B. S. Sunstein. (Eds.), Portfolio portraits (pp. 1-12). Portsmouth, NH: Heinemann.

Hairston, M. (1992). The winds of change: Thomas Kuhn and the revolution in the teaching of writing. College Composition and Communication, 33, 76-88.

Hamilton, S. J. (1994). Portfolio pedagogy: Is a theoretical construct good enough? In L. Black, D. A. Daiker, J. Sommers, & G. Stygall (Eds.), New Directions in Portfolio Assessment (pp. 157-167). Portsmouth, NH: Heinemann-Boynton/Cook.

Hamp-Lyons, L. (1995). Uncovering possibilities for a constructivist paradigm for writing assessment. College Composition and Communication, 46, 446-455.

Hamp-Lyons, L., & Condon, W. (1993). Questioning assumptions about portfolio-based assessment. College Composition and Communication, 44, 176-190.

Harris, M. (1992). Collaboration is not collaboration is not collaboration: Writing center tutorials vs. peer-response groups. College Composition and Communication, 43, 369-383.

Harrison, S. (1991, March). Valuing writing: Students and their portfolios. Paper presented at the 42nd Annual Meeting of the Conference on College Composition and Communication, Boston, MA. (ERIC Document Reproduction Service No. ED334 574).

Herrington, A. J., & Cadman, D. (1991). Peer review and revising in an anthropology course: Lessons for learning. College Composition and Communication, 42, 184-199.

Herter, R. J. (1991, January). Writing portfolios: Alternatives to testing. English Journal, 90-91.

Holt, M. (1992). The value of written peer criticism. College Composition and Communication, 43, 384-92.

Horning, A. S. (1997). Reflection and revision: Intimacy in college writing. Composition Chronicle: Newsletter for Writing Teachers, 9(9), 4-7. (ERIC Document Reproduction Service No. ED403 564).

Huot, B. (1996). Toward a new theory of writing assessment. College Composition and Communication, 47, 549-566.

Huot, B., & Willamson, M. M. (1997). Rethinking portfolios for evaluating writing: Issues of assessment and power. In K. B. Yancey & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 43-56). Logan, UT: Utah State University Press.

Huse, H. (1999). Students as teachers: Students write to us about teacher-written response. Paper presented at the 50th Conference on College Composition and Communication, Atlanta, GA., March 25. Unpublished.

Huyett, P. (Ed.). (1994). Portfolio practices in the composition classroom: A study conducted at University of Missouri-Kansas City. (ERIC Document Reproduction Service No. ED379 215).

Kinchloe, J. L., & Steinberg, S. R. (1993). A tentative description of post-formal thinking: The critical confrontation with cognitive theory. Harvard Educational Review, 63(3), 296-320.

Knoblauch, C. H., & Brannon, L. (1984). Rhetorical Traditions and the Teaching of Writing. Upper Montclair, NJ: Boynton/Cook Publishers, Inc.

Leinhardt, G. (1992). What research on learning tells us about teaching. Educational Leadership, 49(7), 26-33.

Lieber, T. (1997). Portfolio-based exit assessment: A progress report. ADE Bulletin, 119, 23-32.

Lucas, C. (1992). Introduction: Writing portfolios–changes and challenges. In K. B. Yancey (Ed.), Portfolios in the writing classroom: An introduction (pp. 1-11). Urbana, IL:National Council of Teachers of English.

Luce-Kapler, R. (1996). Narrating the portfolio landscape. English Journal, 85(1), 46-9.

MacDonald, R. L. (1996, Mar.). The writing portfolio and English program assessment: Of bumps, bruises, and lessons learned. Paper presented at the Annual Meeting of the Conference on College Composition and Communication, Milwaukee, WI. (ERIC Document Reproduction Service No. ED398 585).

Manoa Writing Program. (1999a). Helping students make connections: A self-assessment approach. Writing Matters, 5. The University of Hawai'i Manoa. Retrieved July 22, 1999 from the World Wide Web: http://www.hawaii.edu/uhmwrite/wi/writmat5.htm

Manoa Writing Program. (1999b). Responding to student writing. Writing Matters, 2. The University of Hawai'i Manoa. Retrieved July 22, 1999 from the World Wide Web: http://www.hawaii.edu/uhmwrite/wi/writmat2.htm

Martin, E. V. (1997, March). More than *just* assessing: A discussion of questions, concerns, and complications related to portfolio evaluation. Paper presented at the Annual Meeting of the College Composition and Communication, Phoenix, AZ. (ERIC Document Reproduction Service No. ED414 597).

Meyer, C. A. (1992). What's the difference between *authentic* and *performance* assessment? Educational Leadership, 49(8), 39-40.

Milliken, M. (1992). A fifth-grade class uses portfolios. In D. H. Graves & B. S. Sunstein (Eds.), Portfolio portraits (pp. 34-44). Portsmouth, NH: Heinemann.

Mincey, K. (1996, Mar.). The impact of KERA writing portfolios on first-year college writers. Paper presented at the Annual Meeting of the College Composition and Communication, Milwaukee, WI. (ERIC Document Reproduction Service No. ED403 576).

Minot, W. S. (1994, March). Composition and rhetoric: A natural alliance. Paper presented at the 45th Annual Meeting of the National Council of Teachers of English Conference on College Composition and Communication, Nashville, TN (ERIC Document Reproduction Service No. ED369 080).

Murphy, S. (1994). Portfolios and curriculum reform: Patterns in practice. Assessing Writing, 1(2), 175-206.

Murphy, S. (1997). Teachers and students: Reclaiming assessment via portfolios. In K. Yancey & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 72-88). Logan, UT: Utah State University Press.

Newkirk, T. (1995). The writing conference as performance. Research in the Teaching of English, 29(2), 193-215.

Newmann, F. M., & Wehlage, G. G. (1993, spring). Standards of authentic achievement. Issues in Restructuring Schools (Issue Report No. 4). Retrieved July 9, 1999 from the World Wide Web:
http://www.wcer.wisc.edu/completed/cors/Issues_in_Restructuring_Schools/ISSUES_No_4_Spring_1995

Newmann, F. M., Secada, W. G., & Welage, G. G. (1995). A guide to authentic instruction and assessment: Vision, standards and scoring. Madison: Wisconsin Center for Education Research.

O'Banion, T. (1997). Creating more learning-centered community colleges. Mission Viego, CA: League for Innovation in the Community College.

Olds, B. M., & Miller, R. L. (1997). Portfolio assessment: Measuring moving targets at an engineering school. NCA Quarterly, 71(4), 462-467.

O'Neill, P. (1998). From the writing process to the responding sequence: Incorporating self-assessment and reflection in the classroom. Teaching English in the Two-Year College, 26(1), 61- 70.

Paulson, L. F., & Paulson, P. R. (1990, August 2-4). How do portfolios measure up? A cognitive model for assessing portfolios. (Revised.) Paper presented at the Annual Meeting of the Northwest Evaluation Association, Union, WA. (ERIC Document Reproduction Service No. ED324 329).

Paulson, F. L., Paulson, P. R., & Meyer, C. A. (1991). What makes a portfolio a portfolio? Educational Leadership, 48(5), 60-63.

Perl, Sondra (Ed.). (1994). Landmark Essays on Writing Process. Davis, CA: Hermagoras Press.

Prawat, R. (1992a). From individual differences to learning communities - our changing focus. Educational Leadership, 49(7), 9-13.

Prawat, R. S. (1992b). Teachers' beliefs about teaching and learning: A constructivist perspective. American Journal of Education, 100(3), 354-395.

Rief, L. (1992). Eighth grade: Finding the value in education. In D. H. Graves & B. S. Sunstein (Eds.), Portfolio portraits (pp. 45-60). Portsmouth, NH: Heinemann.

Roemer, M., Schultz, L. M., & Durst, R. K. (1991). Portfolios and the process of change. College Composition and Communication, 42, 455-469.

Romano, T. (1992). Multigenre research: One college senior. In D. H. Graves & B. S. Sunstein (Eds.), Portfolio portraits (pp. 146-157). Portsmouth, NH: Heinemann.

Saunders, P. I. (1996). A pilot program: Portfolio-based instruction in developmental or pre-college writing courses. Report. Saint Louis Community College at Forest Park, MO. (ERIC Document Reproduction Service No. ED398 590).

Schön, D. A. (1987). Educating the reflective practitioner. San Fransisco, CA: Jossey-Bass.

Schultz, L. M., Durst, R. K., & Roemer, M. (1997). Stories of reading: Inside and outside the texts of portfolios. Assessing Writing, 4(2), 121-132.

Shay, S. (1997). Portfolio assessment: A catalyst for staff and curricular reform. Assessing Writing, 4(1), 29-51.

Simmons, R. (1994). The horse before the cart: Assessing for understanding. Educational Leadership, 51(5), 22-23.

Slater, T. F. (1996). Portfolio assessment strategies for grading first-year physics students in the USA. Physics Education, 31(5), 329-333.

Slater, T. F. (1997). The effectiveness of portfolio assessments in science. Journal of College Science Teaching, 26(5), 315-318.

Smith, C. A. (1991). Writing without testing. In P. Belanoff & M. Dickson (Eds.), Portfolios: Process and product (pp 279-291). Portsmouth, NH: Boynton/Cook.

Space Science Institute. (1996). SSI philosophy and principles of curriculum development. Colorado. Retrieved October 30, 1998 from the World Wide Web: http://www.spacescience.org/Education/CurriculumDevelopment/Philosophy/1.html

Spalding, E., & Cummins, G. (1998). It was the best of times. It was a waste of time: University of Kentucky students' views of writing under KERA. Assessing Writing, 5(2), 167-199.

Spear, K. (1988). Sharing writing: Peer response groups in English classes. Portmouth, NH: Boynton/Cook.

Sperling, M. (1994). Constructing the perspective of teacher-as-reader: A framework for studying response to student writing. Research in the Teaching of English, 28(2), 175-207.

Spilka, R. (1998). The teaching of technical writing: Recent evolutions and future challenges (Abstract). Paper presented at the 25th Meeting of Association of Teachers of Technical Writing, Chicago, IL. Retrieved July 30, 1999 from the World Wide Web: http://www.nmsu.edu/techprof/conference/sessiona/spilka.html

Stage, F. K., Muller, P. A., Kinzie, J., & Simmons, A. (1998). Creating learning centered classrooms; What does learning theory have to say? ASHE-ERIC Higher Education Report Volume 26, No. 4. Washington, DC: The George Washington University, Graduate School of Education and Human Development.

Stewart, D. C. (1981). Composition textbooks and the assault on tradition. In G. Tate & E. P. J. Corbett (Eds.), The Writing Teacher's Sourcebook (pp. 180-186). New York: Oxford University Press.

Sunstein, B. (1992). Portfolio portraits (Introduction). In D. H. Graves & B. S. Sunstein (Eds.), Portfolio portraits (pp. xi-xvii). Portsmouth, NH: Heinemann.

Thelin, W. H. (1994). The connection between response styles and portfolio assessment: Three case studies of student revision. In L. Black, D. A. Daiker, J. Sommers, & G. Stygall (Eds.), New Directions in Portfolio Assessment (pp. 113-125). Portsmouth, NH: Heinemann-Boynton/Cook.

Voss, M. M. (1992). Portfolios in first grade: A teacher's discoveries. In D. H. Graves & B. S. Sunstein (Eds.), Portfolio portraits (pp. 23-33). Portsmouth, NH: Heinemann.

Watson, M. (1996, Mar.). Teaching to learn: WAC, composition, and engineering classrooms. Paper presented at the Annual Meeting of the College Composition and Communication, Milwaukee, WI. (ERIC Document Reproduction Service No. ED398 585).

Weiser, I., (1992.) Portfolio practice and assessment for collegiate basic writers. In K. B. Yancey (Ed.), Portfolios in the writing classroom: An introduction (pp. 89-101). Urbana, IL: National Council of Teachers of English.

White, E. M. (1990). Language and reality in writing assessment. College Composition and Communication, 41, 197-200.

White, E. M. (1994). Teaching and assessing writing: Recent advances in understanding, evaluating, and improving student performance (2nd ed.). San Francisco, CA: Jossey-Bass.

Wiggins, G. (1992). Creating tests worth taking. Educational Leadership, 49(8), 26-33.

Wiggins, G. (1993) Assessment: Authenticity, context, and validity. Phi Delta Kappan, 75(3), 200-214.

Wilkinson, A. M. (1985). A freshman writing course in parallel with a science course. College Composition and Communication, 36, 160-165.

Wilson, B. (1993). Constructivism and instructional design: Some personal reflections. Proceedings of Selected Research and Development Presentations at the 15th Convention of the Association for Educational Communications and Technology, New Orleans, LA. (ERIC Document Reproduction Service No. ED403 576).

Wisconsin Education Association Council, WEAC. (1996). Teaching for understanding: Educating students for performance. Retrieved June 20, 1999 from the World Wide Web: http://www.weac.org/resource/june96/under.htm

Write Environment, Inc. (1998). Portfolios and Writing Folders. Retrieved July 20, 1999 from the World Wide Web: http://www.writeenvironment.com/Portfolios.htm

Wolcott, W., & Legg, S. M. (1998). An overview of writing assessment. Urbana, IL: National Council of Teachers of English.

Wolf, D. P., LeMahieu, P. G., & Eresh, J. (1992). Good measure: Assessment as a tool for educational reform. Educational Leadership, 49(8), 8-13.

Yagelski, R. P. (1995) The role of the classroom context in the revision strategies of student writers. Research in the Teaching of English, 29(2), 216-238.

Yancey, K. B. (Ed.). (1992a). Portfolios in the writing classroom: An introduction. Urbana, IL:National Council of Teachers of English.

Yancey, K. B. (1992b). Teachers' stories: Notes toward a portfolio pedagogy. In K. B. Yancey (Ed.), Portfolios in the writing classroom: An introduction (pp. 12-19). Urbana, IL: National Council of Teachers of English.

Yancey, K. B. (1998). Reflection in the writing classroom. Logan: Utah State University Press.

Yancey, K. B. (1999). Looking back as we look forward: Historicizing writing assessment. College Composition and Communication, 50, 483-503.

Yancey, K. B., & Weiser, I. (1997). Situating portfolios: An introduction. In K. B.Yancey & I. Weiser (Eds.), Situating portfolios: Four perspectives (pp. 1-17). Logan: Utah State University Press.

Appendix A: Course Outline

LETHBRIDGE COMMUNITY COLLEGE
CENTRE FOR INTERDISCIPLINARY STUDIES

ENG 155 - SCIENTIFIC/TECHNICAL WRITING
Course Outline (Fall 1999)

Program: Environmental Science, Year 1

Instructor

Carolyn Speakman Office: TE 1252 Office Phone: 329-7257
E-mail: cmspeakm@raptor.lethbridgec.ab.ca
Assignment box: second floor of TE wing, main hallway

Website and Shared Classlist

website: http://www.lethbridgec.ab.ca/~cmspeakm
classlist: scitech0-@raptor.lethbridgec.ab.ca

Required Materials

Two formatted IBM disks, a binder, a writing notebook (inexpensive looseleaf size please), a two-pocket writing folder.

Course Design

This course is an introduction to the types of written communication used by renewable resource technicians, officers, and managers in both academic and workplace settings.

Writing, like all communicating, involves making choices about what to say and how to say it. My goal for this semester is to help you learn to recognize these choices and to make informed decisions that will result in effective written communication. In-class activities, workshops, and lengthier major projects will familiarize you with the organizations, styles, and formats of various documents. Self-assessment activities will guide you to reflect on your thinking and writing processes.

As in the workplace, you'll be expected to work with others on various projects, including reviewing drafts of one another's work. Peer revision can be effective only in an environment of trust. This means treating each other's work with respect, making constructive comments that will help writers revise their documents. Also, because the content and style of all student writing are the intellectual property of the writer, students should not discuss classmates' drafts outside of class without the writers' permission.

Learning Outcomes

Students who complete this course will be able to

- locate and assess appropriate scientific indexes, abstracts, and publications in both print and electronic resources
- identify the key points of articles and summarize their content in descriptive and informative abstracts
- sift and integrate information from multiple sources to prepare scientific research reports following the Council of Biology Editors' (CBE) style guidelines
- compose e-mail messages, memos, business letters, and informal reports that demonstrate a clear sense of audience, purpose, format, and style
- construct targeted personal resumes and letters of application
- edit writing effectively

Evaluation

You will demonstrate your mastery of the learning outcomes in several ways. Weekly writing projects will be drafted, reviewed by yourself and/or your peers, and revised. These will receive feedback according to criteria established by me or by the class. All these documents will make up your working portfolio. At the end of the term, you will select pieces to create a presentation portfolio to document your writing development. Further portfolio assessment details will be provided in subsequent handouts.

Working Portfolio - First submission	15%
Scientific Research Report*	35%*
Resume and Cover Letter	10%
Working Portfolio - Second submission	15%
Presentation Portfolio	25%
	100%

Note:* ***The scientific research report will be accepted for grading only if the assigned research and process projects have also been submitted within the deadlines specified on the course map.*

All work submitted for grading must be word processed unless otherwise noted.

Assignments are expected to be in on time; 10% will be deducted each day they are late. Once the assignments are graded and returned to students, late submissions will not be accepted. For the scientific research reports handed in late, 10% per day will be deducted for a period of five days; after this, no mark will be given.

Students who need additional work on their writing development will be directed to work with the Learning Centre staff.

Attendance (see also LCC Calendar, p. 29)

Because of the hands-on nature of this course, attendance is important. **In the approved attendance policy for ENG 155, any student who misses more than three class periods may be assigned an "AF" grade at the discretion of the instructor.** Once an"AF" grade has been assigned, a student may not voluntarily withdraw or obtain a "W" on his or her academic record.

Consequently, if you have to miss class, please notify me. I recognize that things happen, and I am willing to consider requests for excused absences as long as you communicate with me in advance.

Intellectual Honesty

Plagiarism, which is dishonest and illegal, will cause you to fail this course. Always turn in original work and be careful to cite sources for information derived from other writers. Even paraphrased text must credit the original author.

You are accountable for furnishing upon request all sources and preliminary work (such as notes and rough drafts) as well as a list of all individuals you consulted in preparing assignments. If you can't produce these written materials upon request, you can't receive a satisfactory evaluation on the assignment.

As a member of the academic community, you have the ethical obligation to understand plagiarism and to be as honest as you can about using another person's writing or ideas. Consult the LCC Calendar (pp. 38-39) for the college policy on intellectual honesty, and if you have any questions, please ask.

Supplemental Examination

This course is not subject to supplemental examination.

Date amendment(s) were discussed with students

________________________________ ______

Instructor's Signature Date

________________________________ ______

Team Leader's Signature Date

Appendix B: Consent Form Provided to Subjects

Dear Students:

As part of my Master of Education studies at the University of Lethbridge, I am studying portfolio implementation in post-secondary technical writing classes. My purpose is to explore the process of change in implementing portfolio assessment and to identify its outcomes. I anticipate that the increased attention to both writing processes and products inherent in portfolio assessment will benefit students who participate and that my increased understanding of student learning will benefit future students as well. I would like permission to use samples from your writing portfolios in this study.

To participate in this research, you will need to loan me your working portfolio and your presentation portfolio so that I can examine their contents and make observations about your writing development. Your written reflections from the two working portfolios and your final reflective letter may also be used to illustrate how students describe their learning processes. All information will be handled confidentially and professionally. When samples of your work are used, your name and other identifying information will **not** be included. Your participation in this study in no way affects your standing in any course or in the program. You also have the right to withdraw from the study without prejudice at any time.

If you choose to participate, please indicate your willingness by signing this letter in the space below and return the letter to me.

I sincerely appreciate your assistance in this project. If you have any questions, please call me at 329-7257 (work) or 327-5257 (home). Also, feel free to contact the supervisor of my study, Dr. Pamela Winsor, at the University of Lethbridge (329-2444). You can obtain additional information from the chair of the Faculty of Education Human Subject Research Committee, Dr. Richard Butt (329-2434).

When the final copy of my project is completed, you are welcome to read it.

Sincerely,

Carolyn Speakman
Lethbridge Community College

Name of Project: Portfolio Implementation in Post-secondary Technical Writing Classes

I agree to participate in this study.

Name ______________________________

Signature ______________________________ Date ________________

Appendix C: Portfolio Details

Writing Portfolios

What is a portfolio?

"A portfolio is a record of learning that focuses on the student's work and the student's reflection on that work" (National Education Association 1993:41).

"A portfolio is more than just a container full of stuff. It's a systematic and organized collection of evidence used by the teacher and student to monitor growth of the student's knowledge, skills, and attitudes in a specific subject area" (Vavrus 1990:48).

Why are we using this method of assessment in ENG155?

Because writing development is a complex learning process, it makes sense to assess writing not through single "snapshots," but through a comprehensive collection of pieces written for various purposes in different contexts. It is a record of

- your texts themselves which respond to a range of assignments;
- your processes and progress, including the amount of prewriting, drafting, revision, and effort that has gone into your writing;
- your attention to suggestions from readers; and
- the degree of your overall improvement.

The portfolio also encourages you to see your documents as works in progress because they are open to ongoing revision throughout the term. This frees you to experiment with your approaches and learn from your experiences. It reinforces that writing is a multi-tasked process that extends beyond one "all nighter" and a "final" evaluated paper. A writing portfolio leads you to become more conscious of your own processes of composing; you can see the importance and interdependence of all parts of your writing, from prewriting through drafts and revisions.

Consulting with others is one way to support this learning. Also, as you build your portfolio, you are continually asked to self-assess your processes and products. By reexamining your writing, you can come to a greater sense of your accomplishments and a greater sense of where you might focus your energies to improve. Such self-reflection enhances learning as you become a more independent evaluator of writing processes and products.

What will be included in my working portfolio?

Your working portfolio will be an "archive" containing all the documents you prepare in the course. You may also include other pieces you have written in other contexts this semester. Include all your process work, from initial planning through all drafts, plus feedback from all your readers. Date your work for future reference. If you have collaborated with others on projects, include a photocopy of the group's documents for your own portfolio if someone else has the originals. You can and should revise these documents throughout the term.

What will my presentation portfolio contain?

As a "capstone" writing experience for this course, you will select representative pieces of your writing from this term and present them in a portfolio. Your research report, resume, and cover letter must be part of this collection; the other pieces you will select toward the end of the term. Before you submit this presentation portfolio, you will revise the assignments, assemble them in a coherent order, write introductory sheets to accompany each document, and prepare a reflective letter to me about the contents of your portfolio.

What is our time frame for this?

Working portfolios will be submitted twice in the semester, once in early October, and again in December. Your presentation portfolio is the culminating course project and will be submitted in our last week together.

Portfolio Assessment Guide

Score	Description
10	This portfolio reflects work that is consistently high in quality. Process work is included, and the contents are complete. Evidence of effective peer collaboration in writing and revising is also provided. There is depth of content, as the pieces are well-developed, and the organization for most selections is effective. The documents provide strong evidence of the writer's ability to analyze the audience and make appropriate format and style decisions to convey the message. The overall writing is fluent and displays varied, precise word choice appropriate to the audience and assignments. Consistent care in revising is evident. The writer displays a solid command of grammar and mechanics. The collection shows a real engagement on the part of the writer.
8	This portfolio reflects work that is generally high in quality. Process work is included, but it may be brief in places. Evidence of peer collaboration in writing and revising is provided but may be sketchy at times. There is some depth of content throughout, and the development and organization are satisfactory. The documents provide some evidence of the writer's ability to analyze the audience and make appropriate format and/or style decisions to convey the message. The writing style is varied and displays precise word choice appropriate to the audience and assignments. The work generally shows care in revising. Few errors in grammar and mechanics are found. The writer is engaged with most tasks.
6	This portfolio reflects work that is usually solid in quality. Some, but not all, process work is included, and it may be brief. Some evidence of peer collaboration in writing and revising is provided. The documents demonstrate that the writer is aware of audience and format factors but may be uncertain about the accompanying decisions in preparing a document. There is some content, as well as some development, and the organization is usually adequate. The writing style is largely appropriate to the audience and assignments but is lacking in precision. Although some revision has been done, the documents may display a level of error in grammar and mechanics that interferes somewhat with the reading process. The portfolio reflects some involvement on the part of the writer.
4	This portfolio reflects work that is uneven in quality. Limited process work is included. Peer collaboration in writing and revising may be unproductive or not evident. The content may be shallow, and the organization and development still appear weak. Although the writer may have revised, the style and format are sometimes awkward or inappropriate for the audience and assignments. Revision, if attempted, has been insufficient, and the documents may display a level of error in grammar and mechanics that seriously interferes with the reading process. The writer's involvement with the tasks often seems mechanical.
2	This portfolio reflects work that is generally weak. Process work is almost non-existent, and evidence of peer collaboration in writing and revising, if present, is extremely limited.. The content is often shallow, and the development is often weak. The writing indicates minimal or sporadic attention to audience and format needs. Errors in grammar and mechanics impede reading. The writer's involvement with the tasks is negligible; the writer seems disengaged from the task.

Appendix D: Project 1: Literacy Autobiography

MEMO

To: ENG155 students

From: Carolyn Speakman, instructor

Subject: First writing assignment: literacy autobiographies

Date: September 1, 1999

Write me a one- to two-page memo introducing yourself in a literacy autobiography. Your observations will help us begin discussing writing at our next class meeting.

There is no correct answer to any of these questions. Start by thinking through your responses to all of them; try to answer freely. Then decide how you can most effectively present your insights in memo format (header, paragraphs, and, if you wish, headings). Length depends on what you have to say, but you should spend at least an hour or two doing this.

- What kinds of experiences with writing in general and with technical writing in particular have you had as a student? Have you done any writing for a job? Consider your audiences and purposes for writing, the types of writing you did, the subjects you wrote about, assignments you liked and disliked, and how you felt about it all.

- What kinds of things do you now write or have you enjoyed writing outside of school? Why? Who reads them? Do you like to share your writing with others? Why/why not?

- Think about your writing process:
  - How do you get ideas or inspiration for writing? What do you do to get started (take a walk, avoid it, stare into space, talk it over with someone, make lists, draw mind maps . . .)?
  - What conditions (time, place, atmosphere, etc.) for writing seem best for you?
  - How much do you revise *as* you write? *after* a first draft?
  - Do you prefer to write drafts by hand or on the computer?
  - How do you revise?
  - Do you need deadlines for inspiration?

- What do you think makes writing good? What does a person need to become an effective writer? Can anyone be a good writer?

- Who are your favourite writers? (Any writer counts.) What do you like about their writing? What teachers or mentors have helped you most with your reading and writing? In what ways?

- How do you anticipate using writing in your classes at LCC? in your career?

- What would you like to learn this semester about writing?

English 155 Students
September 1, 1999
Page 2

- Rank yourself by putting these descriptors in order from *1* to *5*: give the item you are most comfortable about a *1*, and use each number only once.

knowledge of grammar, punctuation, and spelling ________

skill in working with others to ensure productive team efforts ________

honesty and tact in critiquing others' work ________

awareness of my own strengths, abilities, and challenges as a writer ________

recognition of decisions involved in rethinking a written document's content and organization to achieve a desired effect ________

This assignment will allow you to show me how you express yourself in writing and enable me to see you as an individual. Specific details will make your writing vivid. Write in a conversational tone, and take time to achieve the effect you want and to edit for mechanical and grammatical correctness.

DUE DATE:

Appendix E: Project 2, Audience Analysis

MEMO

To: English 155 students

From: Carolyn Speakman

Subject: Project 2: Audience analysis, part 1

Date: September 7, 1999

In this project, you will work independently in the library and then join with a partner to prepare one memo about two periodical publications relevant to environmental science. In addition to drawing your attention to the writer-audience-purpose relationship, this assignment should increase your awareness of print resources available on campus and their potential as information sources for your research this term. You may also find great ideas for research topics!

Choose your resources

Browse through the current periodicals displayed on the shelves in the LCC periodicals room. Choose a publication that targets a technical or non-technical audience as determined in class. Choose one that is new to you.

Analyze your publication

Jot down a few notes summarizing the characteristics of the journal, including

- Where is it published?
- Who publishes it? Who contributes?
- What is the review policy for submissions? (anonymous? editor-controlled? peer reviewed?)
- What kinds of subjects have been covered by the journal in the past three years? Do you see any trends or changes?
- In what areas of research would this publication be useful to students?

Take a closer look at one article

Make a copy of a representative article from each journal. Read the article, paying attention especially to how it meets the needs of its particular audience. Here are some possibilities:

- How does the format (use of headings, layout, references, graphics, etc.) suggest the intended audience?
- How does the use and definition (or lack) of technical terminology suggest the audience?
- How does the tone (scientific, objective, formal, business-like, argumentative, reassuring, witty, contemplative, etc.) help suggest the audience? What writing style features reinforce this tone?

Bring your copy of the article and your notes to our next class. Be prepared to discuss your observations.

Audience Analysis, Part 2

Consult

Work with a partner to prepare one memo about the two periodical publications you reviewed. Start by discussing your individual observations about the ways audiences are targeted. Then look for points of comparison and contrast in your two selections.

Write a memo

Begin directly with a statement of your *purpose*. Follow that with a sentence or two *summarizing your findings* by explaining what your analysis of the two articles reveals about the ways their authors have adapted their writing to their target audiences.

Write a paragraph or two explaining in greater detail how these two publications compare. Give specific examples of your points by referring to the representative articles you've copied.

Include the complete bibliographic information for each article and attach the articles to your memo. Here's how to format the citation:

> Author(s). Year. Title of article. Journal Title. volume (issue): pages.
>
> Efford, I. E., C. M. Garcia, and J. D. Williams. 1997. Facing the challenges of invasive alien species in North America. Global Diversity 7(1):25-30.

Share your insights

Prepare to share a two-minute summary of your observations with the class.

DUE DATE:

Appendix F: Presentation Portfolio Instructions

MEMO

To: English 155 Students
From: Carolyn Speakman
Date: November 25, 1999
Subject: Your presentation portfolio and reflective letter

As you complete English 155, it's time for you to review and evaluate your writing development this semester. Your presentation portfolio and reflective letter are the vehicles through which this happens. This assignment is worth 25 % of your final course grade and is due at the beginning of our last regularly scheduled class period. Evaluation will be based on presentation, thoughtfulness of comments, thoroughness of revision, and overall quality of written work.

The purpose of the presentation portfolio is to *showcase* your best writing and most valuable learning this semester. Through your reflective letter to me, you will also demonstrate your *evaluation* of your own writing, both process and product.

Presentation Portfolio

Contents. Your presentation portfolio includes five projects. The two compulsory ones are your scientific research report and your targeted cover letter and resume. Choose the other three from projects in your working portfolio that you believe best demonstrate your writing abilities. Think about various criteria for selection and choose what will be most meaningful for you. For example, the projects may represent your best work, or they may demonstrate your range of literacies or your range of processes.

Organization. Place the revised copies of each of these five projects in the right pocket of your presentation portfolio. Insert your reflective letter to me in front of this collection. In the left pocket of your presentation portfolio, place the last version of each document that I would have seen, the one which includes all the feedback you received at that time. Do not include your process work.

Reflective Letter

Contents. Remember that all writing has a beginning, middle, and end, so organize your content logically. One thing you must include is an explanation of your criteria for choosing these projects and what you believe each of the five demonstrates about your writing.

Beyond that, use the following questions as a guide to help you think about what to say, but please do not present your letter as a series of answers to these questions. Also, feel free to go beyond the questions.

- Using your first writing assignment, the literacy autobiography, as a reference point, what new literacies have you developed this semester and how?
- What are the most important things you have learned about your writing process this semester? Have you developed any different approaches to preparing, researching, planning, drafting, revising, . . . ?
- Of all your projects this semester, which one do you consider your best? Why? What is the greatest strength of this project? Do you think it still needs improvement? If so, in what areas?
- What project gave you the most difficulty this term? Why do you think this was so? If you had to do something similar again, what would you do differently?
- In what areas do you think you need to improve? What weaknesses do you need to be aware of and work on in future writing situations?
- How have you benefited from giving and receiving peer reviews of writing this semester?
- In what ways are you progressing as a writer? How will you continue this development?

Your letter is an important component of the portfolio. Take time to ensure that it, too, demonstrates your best thinking and writing.

Format. Use full block letter format (return address, date line, inside address, salutation, and so on). My address for this letter is

Carolyn Speakman
TE1252
Lethbridge Community College
3000 College Drive South
Lethbridge, AB T1K 1L6

You will likely go onto two pages, so include a second page header (your reader's name, date, and page number).

Have fun–and learn lots–as you think about the writing you have done this term.

Appendix G: Peer Response Forms

Scientific Research Report - Peer Response, Part 1

Author ______________________________

Title/Research Question

____

Reviewer______________________________ Date _______________________

PURPOSE

Two goals of this initial stage of peer review are

- to help improve the writer's paper by pointing out strengths and weaknesses in the overall organization and content that may not be apparent to the author, and
- to improve your editing skills as a reader of both your own and other people's writing.

INSTRUCTIONS

Read the paper(s) twice, once to get an overview of the paper, and a second time to provide constructive criticism for the author to use when revising his/her paper. Answer the questions below.

GLOBAL ORGANIZATION

1. Can you see a logical connection between the controlling research question and the paper's headings? If not, what bothers you?

2. Are the headings in a clear, logical order that makes sense to you? If not, what changes would you suggest?

3. Can you see a difference in levels of importance between first- and second-level headings? Again, is there a logical connection between the subcategories and the main category? If not, . . .

4. Is there any place where a heading is followed by only one subheading? If so, this is a logical error? Should the two be combined, or should another subheading be created?

5. Do the headings at each level use parallel grammatical structure? For example, if a first-level heading is a topic expressed in a phrase (e.g. "Factors Contributing to Habitat Loss"), then other first-level headings must also be topics expressed in phrases, rather than sentences questions, or single words. Identify any discrepancies and suggest strategies for improvement.

CONTENT

1. Does each major topic and its development receive enough attention?

2. Is the supporting material persuasive? (consider relevance, strength, and credibility of details, literature/sources used)

3. Are sufficient references provided from a variety of sources?

If you could recommend three specific changes in the writing, what would they be?

1.

2.

3.

Scientific Research Report - Peer Response, Part 2

Author ____________________________

Title/Research Question

____

Reviewer___________________________ Date ______________________

PARAGRAPH DEVELOPMENT

INSTRUCTIONS: *Work through only one section of the paper at a time. Before you begin, look at the overall organization to understand where this topic fits in to the entire discussion. Answer the questions to give the writer some idea of the paper's coherence. Repeat the process for at lease two sections.*

1. **Read the first paragraph. Then read only the first sentence of each additional paragraph.**

- Does the first paragraph set up the discussion meaningfully?
- Are key words/synonyms repeated throughout the section?
- Is there logical flow from one paragraph topic to another? Does this organization make sense?

2. **Read the entire section, this time watching for details and coherence.**

- Are the paragraphs sufficiently developed, or are more explanatory details needed?
- Are the paragraphs coherent, or are more meaningful transitions needed?
- Is any of the content unnecessary to the purpose or audience?

3. **Check one-sentence paragraphs**. Usually they express a poorly developed idea or one that really belongs in a neighbouring paragraph.

4. **Check very long paragraphs**. They can be confusing. Usually such passages contain more than one idea and can be divided. If you decide there's a problem, what solution would you recommend?

SENTENCE CONSTRUCTION: STYLE, GRAMMAR, AND MECHANICS

1. Is the level of formality suitable for the audience? Point out specific discrepancies wherever possible.

2. Is the writing style specific and clear? If not, what needs to change?

3. Where should the language or grammar be improved? Note on the paper any confusing or incorrect sentences or punctuation marks.

If you could recommend three specific changes in the writing, what would they be?

1.

2.

3.

BEFORE YOU PRINT YOUR PAPER . . .

_____ Is the title satisfactory? (informative, precise, not more than 10 words)

_____ Are the basic sections (Title page, Abstract, Contents, List of Figures, Introduction, Discussion, Literature Cited) adequate? If not, what is missing?

_____ Is the layout/spacing consistent and visually appealing? (Look at spacing on above and below headings, page numbering, page breaks, heading numbers, and special features.)

_____ Does the abstract adequately summarize the paper, or could it be more complete or concise? Indicate specific suggestions.

_____ Did you provide scientific names for all organisms?

_____ Do the figures and/or tables serve a meaningful purpose?

_____ Are the figures and/or tables clearly labelled and professional looking?

_____ Are all the in-text citations listed in the Literature Cited section and vice versa?

_____ Are optional sections handled correctly (acknowledgements page, appendix)?

Do not staple your paper together
when you submit it for grading in English155 please.
A large clip that can be easily removed works great instead.
Thanks!

At the back of your paper, attach the completed peer response forms
to verify that your paper has gone through at least two stages of peer review.

Appendix H: Working Portfolio 1 - Student Forms

ENG155 Working Portfolio
First Submission

Project Description	Prewriting or Process Notes	Peer Review	Revisions	Comments
P1 literacy Autobiography				
P2 audience analysis				
P3 abstract #1				
P4 Internet referrals				
P5 abstract #2				
P6 research proposal				

Reflections

As you look over the writing processes and documents represented so far in your portfolio, what observations can you make about yourself as a writer? Complete the following leads to describe your perceptions.

Here's what I've done that's significant:

It's significant because . . .

Here's how I see my writing process as evident in this collection:

Here's what I've learned from that process . . .

These are the things I'd like to strengthen in the next six weeks:

You can support me in achieving this by . . .

Appendix I: Student Reflections on Literacy Autobiography

Literacy Autobiography: Author's analysis

1. How was this assignment similar to previous writing you've done? How was it different?

2. What strategies worked well for you in preparing this memo?

3. How do you know these strategies worked well (what's the evidence)?

4. What "rules of writing" or standards from past writing situations did you incorporate as you prepared this memo?

5. What questions about your memo do you have?

Appendix J: Sample of Feedback
As Given to Individual Students in Response to Working Portfolio 1

ENG155

Working Portfolio Assessment (First Submission)

Writer: Dave
Date Submitted: Oct. 15, 1999

Your working portfolio is a complete, well-organized record of your strong thinking, writing, and revising skills, Dave. Your reading comprehension abilities are an asset when preparing abstracts, and you also have a solid foundation in writing coherent, accurate sentences. I'm curious about your reflections on your literacy autobiography: What would you change when you read it now? What is unsatisfying to you? Also, when you mention you'd like to touch up your grammar skills, what do you have in mind specifically? My impression is that the basics are not in question, but are there some more subtle things you'd like to address? Please let me know if you have questions. You are taking advantage of the potential of portfolio assessment as you look again at your writing and think through revision. Great!

These are the descriptors that apply to your current working portfolio:

1. This portfolio reflects work that is consistently high in quality.
2. Process work is included, and the contents are complete.
3. Evidence of effective peer collaboration in writing and revising is also provided.
4. There is depth of content, as the pieces are well-developed, and the organization for most selections is effective.
5. The documents provide evidence of the writer's ability to analyze the audience and make appropriate format and style decisions to convey the message.
6. The overall writing is fluent and displays varied, precise word choice appropriate to the audience and assignments.
7. Consistent care in revising is evident. The writer displays a solid command of grammar and mechanics.
8. The collection shows a real engagement on the part of the writer.

Grade 14.5/15

ENG155

Working Portfolio Assessment (First Submission)

Writer: Tony
Date Submitted: Oct. 15, 1999

Tony, your portfolio contains almost all the initial submissions, but little in the way of process and revision. As you've noted in your reflections, taking time with these things would benefit your learning. This does mean some things about how you organize your time. Having stated this now, are you making any different choices?
The strengths evident in your portfolio are your ability to create readable, interesting documents and your apparent comfort level with expressing things in writing.

These are the descriptors that apply to your current working portfolio:

1. This portfolio reflects work that is usually solid in quality.
2. Some, but not all, process work is included, and it may be brief.
3. Some evidence of peer collaboration in writing and revising is mentioned but not included.
4. There is some depth of content throughout, and the development and organization are satisfactory.
5. The documents demonstrate that the writer is aware of audience and format factors but may be uncertain about the accompanying decisions in preparing a document.
6. The writing style is largely appropriate to the audience and assignments but is lacking in precision.
7. Although some revision has been done, the documents may display a level of error in grammar and mechanics that interferes somewhat with the reading process.
8. The portfolio reflects some involvement on the part of the writer.

Grade 10.5/15

Appendix K: Working Portfolio 2, Self-Assessment Forms

Overall Quality

_____ This portfolio reflects work that is consistently high in quality.
_____ This portfolio reflects work that is generally high in quality.
_____ This portfolio reflects work that is usually solid in quality.
_____ This portfolio reflects work that is uneven in quality.
_____ This portfolio reflects work that is generally weak.

Portfolio Completeness, Including Process Work

_____ Process work is included, and the contents are complete.
_____ Process work is included, but it may be brief in places.
_____ Some, but not all, process work is included, and it may be brief.
_____ Limited process work is included.
_____ Process work is almost non-existent.

Peer Collaboration

_____ Evidence of effective peer collaboration in writing and revising is provided.
_____ Evidence of peer collaboration in writing and revising is provided but may be sketchy at times.
_____ Some evidence of peer collaboration in writing and revising is provided.
_____ Peer collaboration in writing and revising may be unproductive or not evident.
_____ Evidence of peer collaboration in writing and revising, if present, is extremely limited.

Content and Organization within Individual Documents

_____ There is depth of content, as the pieces are well-developed, and the organization for most selections is effective.
_____ There is some depth of content throughout, and the development and organization are satisfactory.
_____ There is some content, as well as some development, and the organization is usually adequate.
_____ The content may be shallow, and the organization and development still appear weak.
_____ The content is often shallow, and the development is often weak.

Audience Awareness

_____ The documents provide strong evidence of the writer's ability to analyze the audience and make appropriate format and style decisions to convey the message.
_____ The documents provide some evidence of the writer's ability to analyze the audience and make appropriate format and style decisions to convey the message.
_____ The documents demonstrate that the writer is aware of audience and format factors but may be uncertain about the accompanying decisions in preparing a document.
_____ The writing indicates minimal or sporadic attention to audience and format needs.

Writing Style

_____ The overall writing is fluent and displays varied, precise word choice appropriate to the audience and assignments.
_____ The writing style is varied and displays precise work choice appropriate to the audience and assignments.
_____ The writing style is largely appropriate to the audience and assignments but is lacking in precision.
_____ Although the writer may have revised, the style and format are sometimes awkward or inappropriate for the audience and assignments.

Revision and Sentence Control

_____ Consistent care in revising is evident. The writer displays a solid command of grammar and mechanics.
_____ The work generally shows care in revising. Few errors in grammar and mechanics are found.
_____ Although some revision has been done, the documents may display a level of error in grammar and mechanics that interferes somewhat with the reading process.
_____ Revision, if attempted, has been insufficient, and the documents may display a level of error in grammar and mechanics that seriously interferes with the reading process.
_____ Errors in grammar and mechanics impede reading.

Engagement

_____ The collection shows a real engagement on the part of the writer.
_____ The writer is engaged with most tasks.
_____ The portfolio reflects some involvement on the part of the writer.
_____ The writer's involvement with the tasks often seems mechanical.
_____ The writer's involvement with the tasks is negligible; the writer seems disengaged.

Grade ____ / 15

____
Student's signature

Be prepared to tell me what you believe this collection reveals about your writing.

1. As I look at what I've added to my working portfolio since October 13, what seems most significant to me is . . .

2. As I examine the evidence of my process of writing the research paper, I see these strengths . . .

3. and these weaknesses . . .

4. The most meaningful item in this collection is . . .

5. The item in this collection that shows my best writing this semester is . . .

6. The things I plan to include in my Presentation Portfolio are
   - research paper (graded copy and revised paper)
   - cover letter and resume (accompanied by detailed job posting/description)
   -
   -
   -