TILLING THE SOIL:

MAKING PORTFOLIO ASSESSMENT WORK IN AN INTEGRATED HIGH SCHOOL HUMANITIES SETTING

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Tilling oil: Making Portfolio Assessment Work in an Integrated High School Setting

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ABSTRACT

The purpose of this action research study was to chronicle students' experiences of creating portfolios in an integrated Grade 11 Humanities Co-op program. The aim was to use deeper understanding gained about the portfolio process to improve the process in the future and to consider general implications for educators.

Students from two of the principal researcher's classes comprised the studies 26 participants. Eight of these participants were purposefully selected for in-depth interviews. Data from portfolios, interviews, and anonymous questionnaires were analyzed and coded according to emerging themes.

The majority of participants completed quality portfolios and derived significant benefits from the portfolio process, which proved to require deep understanding of the program's goals and content while helping students gain deeper understanding of themselves. Those participants who experienced the portfolio process positively were left with a sense of accomplishment, increased confidence, increased ownership of the learning process and greater motivation for future learning.

A small minority of participants struggled with the process and either failed to complete their portfolios or completed portfolios of poor quality. In these cases, while portfolios generally provided an accurate assessment of student learning, they left students feeling discouraged, with decreased self-esteem and ownership and a lack of motivation for future learning.

This variation in outcomes of the portfolio process seems to be explained by differences in students' preconditions going into the portfolio process and conditions displayed by students during the process. Students with high levels of buy-in into the

program, its goals and the portfolio process were far more successful than students just going through the motions. Furthermore, students who lacked requisite skills to complete quality portfolios struggled with the process. Moreover, it was found that students who managed their time effectively, worked hard during the semester and experienced little emotional or physical stress were more likely to succeed with the process and thus derived commensurate benefits from it.

The findings of this study support the notion that good instruction and good assessment are inextricably linked. The study suggests that teachers need to focus on laying appropriate groundwork for portfolio assessment to reach its full potential.

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CHAPTER 1 EXPLORING PORTFOLIO ASSESSMENT

Assessment is the engine and odometer of reform. (Mabry, 1999).

My Journey

It was my growing understanding of this statement that led me on a journey towards portfolio assessment. Since I first became a teacher in 1994, I have felt that the education we provide students, particularly at the high school level is often superficial, frequently meaningless and that it promotes passivity and poor habits of mind. As a high school Social Studies teacher. I have tried to develop curriculum that is meaningful for students, values depth over breadth, actively engages students, and promotes critical thought. Initially, I frequently relied on traditional tests to assess student progress, but these undermined my efforts. More recently I found myself repeatedly frustrated by various forms of external assessment that seemed to directly contradict my attempts. I have since realized that unless changes made in instruction are mirrored by corresponding changes in assessment, no meaningful change will occur. Students, parents, politicians and educators are interested in the bottom line, meaning that which is assessed and graded. Instruction that focuses on critical thought, depth and engagement will not be taken seriously if only rote learning and the regurgitation of facts are assessed. This seems painfully obvious in hindsight, and is supported by ample research (see for example Willis, 1993), but the external pressures created by voluminous content and standardized tests continually push educators back towards traditional types of assessment which tend to assess basic skills and knowledge.

My initial response to a growing understanding of this dilemma, was to rail against standardized testing of any kind; to tell anyone who would listen how provincial and other cross-grade examinations and an overly full curriculum were dumbing down our education system. This approach proved extremely ineffective and I was seen by some as trying to escape accountability. I now think that a better strategy is to work towards authentic assessments, which hold teachers and students accountable in meaningful ways. I now believe that one fundamental precondition to meaningful educational change is assessment that furthers student learning and satisfies politicians' and the public's thirst for accountability.

The development of an integrated portfolio assessment for the Humanities Co-op program in which I teach was a step in that direction. My attempt was to discover how students experience the process of creating their portfolios. Does portfolio assessment in fact improve student ownership of learning, increase engagement and show meaningful evidence of growth over time?

Background

I teach in an integrated Humanities Co-op Program in a rural/ suburban British Columbia High School. During this semester long program, two classes of 23 students are taught by my teaching partner and me. Students also spend six weeks of the semester on two exploratory work placements. Upon successful completion of the program, they get credit for Social Studies 11, English 11, Career and Personal Planning (CAPP) 11/12, Work Experience (WE) 12 A and 12 B. Although my partner and I try to integrate the curricula of these courses wherever possible, she is mostly responsible for teaching the

English curriculum to both classes, while I teach the Social Studies component. We split up the CAPP and WE portions.

The program has many strengths including generally high levels of engagement among students and a very positive family like atmosphere in the classroom. However, the traditional means of final assessment (exams) have proven inadequate for a number of reasons: a) they are unable to adequately reflect the complex, difficult and contextualized learning that takes place in the program; b) they assess each subject individually rather than assessing learning across the curriculum c) students lack ownership over the assessment process; d) traditional final assessments do not include mechanisms to assess students' growth over time.

In an attempt to improve on these shortcomings, I created goals for Co-op, which transcend the subject boundaries (see Appendix E) and a comprehensive portfolio assessment in which students reflect on and provide evidence for their learning with respect to the goals (see Appendix F). This has since evolved into a set of goals co-constructed with students. The goals co-constructed with the participants of this study can be found in Appendix E.

I used similar portfolio assessments twice with previous classes but have improved the assignment since to include the following:

- 1. A revision of the portfolio process to focus more explicitly on the integration of the different courses within Co-op.
- 2. A revision of the portfolio assignment sheet which required students to reflect on their level of competence with respect to each of the Co-op goals three times during the semester: At the start, mid-term and at the end.

- Goals co-constructed with the students at the beginning of the semester to increase student engagement and ownership of the portfolio process (see Appendix E).
- 4. An option for students to negotiate parts or all of the assignment to improve student ownership.
- 5. A revision of the portfolio assessment rubric to bring it in line with the most current research in that field.

In the current action research study, I explored how students experienced the portfolio assessment and what the subsequent benefits and shortcomings of the process were.

Research Questions

The general questions guiding the research were: How do students experience the assessment of learning through portfolios? and What are the benefits and shortcomings of portfolio assessment?

Specifically I wanted to know:

- 1. To what extent does the portfolio approach to the assessment of learning enable students to own the process?
- 2. To what extent does the portfolio process encourage students to integrate their learning?
- 3. To what extent do students show evidence of complex, difficult and contextualized learning in their portfolios?
- 4. To what extent do students demonstrate growth over time through the portfolio process?

- 5. What other demonstrable benefits can be attributed to portfolio assessment?
- 6. What are the shortcomings of this type of portfolio assessment?

The overall goal of the study was to describe how the participants experienced the creation of portfolios and to discover implications for future practice.

CHAPTER 2

CONNECTING TO THE LITERATURE

Portfolios Defined

There is consensus in the literature that portfolios used in the classroom represent more than simply an assemblage of work (Cole, Ryan, Kick, & Mathies, 2000; Ediger, 1999; Fenwick & Parsons, 1999; Martin-Kniep, 2000; Paulson, Paulson, & Meyer, 1991). Instead a portfolio extends beyond this, becoming a purposeful collection of student work that exhibits the student's efforts, progress and achievements in one or more areas (Paulson et al., 1991). Wolf & Siu-Runyan (1996) provide an excellent comprehensive definition:

A portfolio is a selective collection of student work and records of progress gathered across diverse contexts over time, framed by reflection and enriched through collaboration that has as its aim the advancement of student learning.

Wolf & Siu-Runyan (1996) go on to provide a superb detailed description of each component of that definition. What follows is a paraphrased version:

Selective means that a portfolio is more than a collection of odds and ends; rather, it is selective information gathered for specific purposes which can range from promoting student self-assessment, documenting student learning, guiding teaching, communicating with parents about student progress, evaluating an instructional program or in some cases a combination thereof.

A collection of student work and records of progress refers to a variety of evidence that can be used to show student progress. This could include writing samples, reading journals, projects, tests, artistic creations, self-assessments, teacher-constructed checklists of student writing skills, or any number of items that can help students and teachers gain insights into the learning process.

Diverse information indicates that it is important that a portfolio contains a diverse set of information gathered across a variety of learning contexts, content areas, and forms of communication in an effort to get a more complete and accurate picture of student learning.

Development over time means that rather than just providing a snapshot of student performance like a standardized test, portfolios should provide a view of the student's learning that is more like a movie.

Reflective refers to students engaging in critical examination of their own work and of themselves as learners. It is the key to making portfolio assessment effective because it enables us to learn from our own experience and allows us to assess where we've been and where we want to go in the future.

Collaborative means that portfolio construction should include interactions with parents, peers, and teachers.

Advancement of student learning indicates that even though there are various purposes for portfolio assessment, all of them serve the ultimate goal of promoting student learning.

This comprehensive definition provides an excellent framework for the current study. A less precise but powerful way of thinking about portfolios comes from Fueyo

(1994) who believes that it is essential to stay committed to the spirit of portfolio which, "honors whole human beings, not parts; honors wholeness in language, not just pieces; honors intentions and processes, not just products; honors habits of mind, artistic vision, initiative, persistence, multiple media for communication, reflection, and self-evaluation" (p. 407).

In addition, Wolf & Sui-Runyan (1996) identify three portfolio models based on the purpose they are intended to serve: ownership, feedback and accountability portfolios.

1) Ownership portfolios emphasize student choice and self-assessment allowing students to "explore, extend, display and reflect on their own leaning" (p. 34). 2) Feedback portfolios are, "comprehensive collections of student work and teacher records, coconstructed by student and teacher, that provide ongoing documentation of student learning" (p. 34). Their main purpose is to help teachers and students in determining effective instructional strategies. 3) Accountability portfolios include more structured guidelines and usually consist of standardized assessments, teacher records and student work. They are, "designed to evaluate student achievement for accountability and program evaluation" (p. 34). Of course, in most classroom situations there is overlap of these three models. Furthermore, according to Wolf & Siu-Runyan (1996) it is the primary purpose of the portfolio that determines the portfolio's emphasis with respect to its authorship, audience, structure, content and process.

The Humanities Co-op portfolio contains the purposes of all three models striving for a relative balance between them. However, this leads to a tension between the various purposes that will be explored in more detail later.

Portfolio assessment is a kind of authentic assessment, which in turn can be defined as any assessment that directly examines student performance on worthy intellectual tasks (Wiggins, 1999). Authentic assessment also implies that students' understanding is contextual. Students need to be effective performers with acquired knowledge rather than just parroting back facts (Wiggins, 1999). My goals with portfolio assessment in the context of the current study fit in perfectly with the overall thrust of authentic assessment.

Why Portfolio Assessment in This Context?

The traditional means of final assessment (exams) have proven inadequate for the Humanities Co-op program for a number of reasons: a) they are unable to reflect adequately the complex, difficult and contextualized learning that takes place in the program; b) they assess each subject individually rather than assessing learning across the curriculum c) students lack ownership over the assessment process; d) traditional final assessments do not include mechanisms to assess students' growth over time.

Portfolio assessment is appropriate to address these issues for a number of reasons. First, there is a wide-ranging consensus that portfolio assessment can improve students' ownership of their learning (Adams & Hamm, 1992; Belanoff, & Elbow, 1991; Cole et al., 2000; Ediger, 1999; Herbert, 2001; Hiebert, 1989; Martin-Kniep, 2000; Stiggins, 1999; Tierrey et al. 1991; Tombari & Borich, 1999; Wolf & Sui-Runyan, 1996). Student ownership is not easily defined. It implies that students take responsibility for their learning by bringing themselves and their lives into the classroom (Dudley-Marling, 1995). However, student ownership does not mean that teachers withdraw their support

for students' learning; rather, it infers a balance between teachers taking the responsibility to teach and students taking responsibility to learn (Dudley-Marling, 1995).

Portfolios can help students develop a sense of ownership over their learning through the processes of selecting evidence and writing reflections. These processes help students become conscious of their own histories as learners, which in turn allow them to become directly involved in assessing their learning process (Adams & Hamm, 1992). As a result, the barrier between the assessment and the learner begins to disintegrate and the assessment potentially becomes a form of personal development and instruction (Adams & Hamm). Thus, rather than the teacher owning the assessment and with it the learning process, through portfolio assessment students begin to own their own learning (Cole et al., 2000).

Weinbaum's study with grade one and two students (1991) provides powerful evidence of portfolios leading to greater student empowerment and ownership. Her students created writing portfolios, which became the focal point of writing instruction in the classroom. At the conclusion of the portfolio process many students reported feeling more responsible for their own learning and that the learning process belonged to them.

Greater student ownership of the learning and assessment process is important because it can have a powerful effect on engagement (Cook, 1992). Because the portfolios are truly 'theirs' by the end of the process, students are likely to care about what goes into them. A study by Clark, Chow-Hoy, Herter, & Moss (2001), gauging the effects of portfolio assessment on motivation and engagement in 120 high school English students supports this claim. They found that, "motivation and engagement are both manifest in classrooms where portfolios are central," and that, "portfolios as material and

social sites of learning provide a space within which students can negotiate their constructions of self, talk and fit and a unique window through which we can view and understand these phenomena." (p. 234) Hence, their findings suggest that portfolios, particularly when used as formative assessments within a community of learners, increase student motivation and engagement in learning.

Second, portfolios can create an opportunity for increasingly integrated student learning (Cole et al., 2000; Fenwick and Parsons, 1999; Lockledge & Hayn, 2000; Louth & Young, 1992). They bind and integrate student learning while emphasizing contextual skills and knowledge developed by students (Brown, 1997). Thus a portfolio, which is focused on a set of goals that transcend the subject boundaries within the program and hence pulls together the strands of the entire program, seems ideally suited to integrating student learning.

Third, a major strength of using portfolio assessment in this context is its ability

to gauge growth over time (Adams & Hamm, 1992; Belanoff, & Elbow, 1991; Cole et al.,
2000; Feuer, 1993; Herbert, 2001; Hiebert, 1989; Martin-Kniep, 2000; Stiggins, 1999;
Tombari & Borich, 1999). For example, Stiggins (1999) argues that portfolios allow
students to accumulate evidence of their success over time. Because portfolios require
students to reflect on their learning, a clear pattern of growth becomes evident to the
student and the teacher. Stiggins sees portfolios, "as a mirror that permits students to
watch themselves grow" (p. 196). Adams & Hamm (1992) maintain that documenting
students' growth over time through portfolios can also help teachers gain a deeper level
of understanding of their students' learning needs which in turn will help teachers use
more effective instructional strategies. The degree to which portfolios document growth

over time is partially dependent on their primary purpose. A feedback portfolio is specifically focused on this end while an accountability portfolio may not necessarily require students to document growth over time. Nevertheless, most portfolios include a means of assessing growth during a course of study.

The Co-op portfolio is designed to function as both a formative and summative assessment. Formative assessment "is generally described as taking place during a course with the express purpose of improving pupil learning" (Torrance & Pryor, 1998). As students compile their portfolios throughout the semester, they will receive feedback from teachers and make individual determinations about their level of progress thus accomplishing the formative aspect of the assessment.

Conversely, summative assessment is usually conducted at the end of a course to determine and articulate student performance in an effort to decide if specified standards have been met (Torrance & Pryor, 1998). A major goal of the portfolio in Co-op is to provide a more effective means of measuring whether students have made significant progress with respect to the Co-op goals. An excellent example of an effective comprehensive exit portfolio, which enhances student ownership of the learning process, increases levels of student engagement and integrates numerous apparently disparate courses is provided by Central Park East Secondary School in New York City (chronicled in Darling-Hamond, Ancess, & Falk, 1995; and Meier, 1996). At CPESS students are required to complete a comprehensive exit portfolio, which serves as a reflection of their final two years of high school learning. Students publicly defend this portfolio to make a case for graduation. The CPESS portfolio system is based on the ideas of Theodore Sizer (1984, 1992). In fact CPESS employs the principles laid out in Sizer's Coalition for

Essential Schools, an organization that promotes school reform according to 10 principles (CES, 2003). In the model school laid out in Horace's School (1992), Sizer argues that students should keep portfolios of their work throughout their high school careers and that these portfolios should be open to perusal by the students' parents and teachers. Subsequently, the portfolios form the framework for a graduating presentation.

The Co-op portfolio is partially modeled after the CPESS graduation portfolio, albeit on a smaller scale. Co-op students were required to pull together learning from the four different courses in Co-op program and present it as a unified whole. Although, due to lack of time and other organizational challenges the Co-op portfolios were not presented publicly, students presented them to their peers, parents and teachers on different occasions. Hence they served as a culminating showcase of their learning, making the case for successful completion of the Co-op program.

There are numerous other documented benefits associated with portfolio assessment. Portfolios provide opportunities for self-assessment, enable teachers to systematically assess thinking, offer thick description of student learning, provide choice and individualization for students and create opportunities for conversations with different audiences (Martin-Kniep, G. 1998, 2000). Furthermore, portfolios can improve students' metacognitive abilities (Cole et al., 2000; Tombari & Borich, 1999), and provide powerful opportunities to enhance students' self esteem (Adams & Hamm, 1992).

There is ample research evidence to suggest that portfolio assessment could address some of the problems identified in the Humanities Co-op program while offering other benefits to students. However, deciding on portfolios was just the first step, which

left unanswered numerous questions about what kind of portfolio assessment system was appropriate for this specific situation.

Assessment Paradigms

One dilemma created by the use of portfolio assessment in the Humanities Co-op program relates to assessment paradigms. Mabry (1999) identifies three such paradigms: the psychometric paradigm, in which students are assessed through either standardized norm- referenced or standardized criterion-referenced tests; the contextual paradigm, in which students are assessed based on curriculum sensitive and authentic content in familiar settings in ways that try to gain a more complete picture of what the student has learned; and the personalized paradigm in which "teachers and others examine in detail an individual's accomplishments and shortcomings, his or her interests, progress over time, use of educational opportunities and in-school and out-of-school engagements as a means of understanding as fully as possible what he or she has learned and can do" (Marby, 1999).

Although portfolio assessment is useful in all three assessment paradigms, it is especially suitable within the personalized assessment paradigm since it focuses on individualized student growth over time. However, there is an inconsistency between the assessment paradigms called for in the British Columbia curriculum documents (IRP's) for Social Studies 11 and English 11 (two of the courses taught in Co-op) and the personalized assessment paradigm. Social Studies 11 and English 11 are clearly designed to be assessed within psychometric and contextual paradigms. Statements of Intended Learning Outcomes for these courses set a specific standard for each student to meet and although there is significant variation in the ways students' success with respect to these

standards is assessed, the defining aspect of the assessment is a predetermined standard of what students should know and be able to do ("English, Language Arts," 1996, "Social Studies 11," 1997).

Thus, in the Humanities Co-o portfolio, I attempted to strike a balance in the assessment of the portfolio between the three assessment paradigms.

Positivism, Constructivism and Assessing the Portfolios

A further tension inherent in using portfolio assessment in this context is created by having to reconcile a portfolio assessment based on constructivist philosophy with the positivistic nature of traditional assessments and means of accountability. Traditional assessment such as multiple choice and short answer examinations reflect a positivistic model of assessment which defines learning outcomes externally and assumes that meaning is constant across users, contexts and purposes (Paulson & Paulson, 1994). Conversely, a constructivist model of assessment, "assumes that meaning varies across individuals, over time, and with purpose" (Paulson & Paulson, 1994). Constructivism contends that learning takes place in contexts and learners form or construct much of what they learn and understand as a function of their experiences in situations (Larochelle & Bednarz, 1998).

The Humanities Co-op program and its assessment are firmly rooted in a constructivist paradigm. The Co-op portfolio is assessed using a rubric, which provides explicit criteria for quality reflections, evidence, conclusion and presentation (see Appendix F). A rubric is the written down version of performance criteria for a particular task, which defines and describes all levels of scoring (Artur & McTighe, 2001). Proponents argue that when rubrics are well designed, they create consistency in scoring,

lead to improved instruction and provide students with clear standards to work towards (Artur & McTighe, 2001; Goodrich, 2000; Montgomery, 2000). Popham (1997) argues that effective rubrics have three to five evaluative criteria each of which should represent a key attribute of the skill being assessed. Indeed, most researchers agree that the best rubrics are those that clearly and specifically convey the required standards to students (Goodrich, 2000; Jackson, 2002; Montgomery, 2000; Popham, 1997).

Conversely, some critics see the use of rubrics as contradictory to the spirit of personalized assessment (Mabry, 1999). The concern is that the assessment, which in the case of the Humanities Co-op portfolio is supposed to be sensitive to individual differences and leave room for creativity and individuality, becomes rigidly defined by the performance criteria of the rubric. This creates problems similar to those of the standardized assessment, which the performance assessment (in this case a portfolio) was designed to avoid. Overly rigid criteria in scoring take the focus from the student's actual performance and place it onto the criteria themselves (Mabry, 1999). This shifts the assessment towards a more positivistic model. Rigid criteria can also impose a ceiling on learning and counteract creativity. Thus, while rubrics try to make the assessment of portfolios as objective as possible, for the portfolios to remain meaningful a degree of judgment and subjectivity must be involved.

Different types of rubrics are appropriate in each of the three assessment paradigms. In the psychometric paradigm a rubric with very specific criteria is appropriate because the aim is to measure student performance precisely. In this paradigm it would make sense to have one rubric used across a district to assess all writing portfolios because one of its objectives is to standardize. In the contextualized

paradigm a rubric with somewhat flexible criteria rooted in the context of a particular classroom is more appropriate because the students' understanding of the curriculum within the context of that classroom situation is what is being assessed. Conversely, in the personalized paradigm, if criteria are used at all they should be individualized for each student since this paradigm is attempting to generate a fuller understanding of each student and an appreciation of his or her unique accomplishments (Mabry, 1999).

The Humanities Co-op portfolio rubric attempts to strike a balance in the assessment of the portfolio between the three assessment paradigms. The standards provided by the rubric (see Appendix F) are sufficiently vague to allow significant individuation within the reflection, evidence, conclusion and presentation components of the portfolio. The Co-op goals, towards which the reflections and evidence are geared, are contextual in that they are co-created by the class and teacher at the beginning of the semester. However, they are created within the framework of the curriculum documents of the four courses that make up the Co-op program relating them to an external standard. Furthermore, all of the evidence within the portfolios is based on work done or experiences had in the context of our classroom or community.

Because the Co-op program and its assessment follow a constructivist model of assessment, and it is partially rooted in the personalized assessment paradigm, it is appropriate that the rubric used to assess it does not define a specific standard for each of the Co-op goals. This is done deliberately to keep the process in the hands of the students. Creating a specific standard for goal statements such as, "students understand and think deeply and critically about some global issues," significantly reduces the possibility of students constructing their own understanding of that goal. Specific standards for each of

the goal statements would make it less meaningful to students because as with most traditional assessments they would be trying to please an external standard. By imposing specific standards, the individuality of the portfolio is undermined, thus subverting the very process that is promoted (Paulson & Paulson, 1994).

This is not to imply that there is no rigor in this assessment and that this approach is completely relativistic, legitimizing any student responses as long as they are individually constructed. Rather, the assessment rubric for the portfolio attempts to strike a balance by setting a standard for high quality reflections, evidence and conclusion while allowing students freedom to make meaning of the content individually. This middle of the road method is supported by Wiggins (1998) who argues that the best rubrics, "Are sufficiently generic to relate to general goals beyond an individual performance task, but specific enough to enable useful and sound inferences about the task" (184).

At this point it seems appropriate to clarify the distinction between standards and standardization. According to Wiggins (1991), standards are, "educative specific examples of excellence on the tasks we value' (19). Standardization on the other hand, compares students' level of performance to other students of a similar age and grade (Kubiszyn & Borich, 2000). A standardized test, therefore, measures students' achievement compared to an age and grade level norm while standards, "provide specific guiding pictures of worthy goals" (Wiggins, p. 19).

What is Missing From the Literature

While there is ample research to document the effectiveness of portfolio assessment, very little work has been done focusing on how students experience the portfolio process. Some studies at the college and university levels have documented

positive experiences with portfolio assessment for students. For example Burch (1999) found that first-year writing students using portfolios viewed the writing task more positively than did non-portfolio students. This seemed to be the case because students using portfolios perceived a greater degree of freedom to be creative than those who did not. Furthermore, Burch found that portfolios appeared to enhance students' confidence for future college writing tasks. Burch conjectures that this increased confidence resulted when by taking on the, "responsibility they must assume for selecting, reflecting, commenting on, and presenting their work; they are by necessity more involved in the hard work of text production and more deeply attuned to the metacognition of writing" (p. 40).

In another college study Smit (1990) surveyed 370 first and second year students about a portfolio program that served as the final evaluation for their writing composition courses. Students had to submit a portfolio of their work to an outside reader (an instructor other than their own at the college) who would determine whether they had earned a passing grade in their respective courses. The portfolios had to include examples of specified kinds of writing and the students submitted a trial-run portfolio at the midterm. Smit found that the vast majority of first-year composition students felt that portfolios encouraged them to revise and to consult with their instructors. Moreover, students surveyed felt that the portfolio process gave them a good sense of the program's minimum standards and helped them meet that standard.

Another study documented student perceptions of portfolio assessment in college science (Slater, 1997). These first year college students felt that portfolios reduced test

anxiety, positively affected their attitudes towards class meetings and helped them gain a better understanding of the course content.

In addition, the perceptions and experiences of student teachers using electronic portfolio assessment has been documented in a study by Wright, Stalworth & Joyce (2002), who examined pre-service teachers in a methods class. These teachers were required to create electronic portfolios, which consisted of websites, recorded teaching episodes, databases, concept maps and more. Students were surveyed about their perceptions of the value of an electronic portfolio before and after the completing their portfolios. The results of the study indicate an overwhelmingly positive perception of electronic portfolios in this setting and also left the student teachers with positive opinions about the usefulness of technology in teaching.

However, there is little work focusing on the experiences of high school students with portfolio assessment. Rafferty and Leinenbach (1996) looked at student reactions to grade eight Mathematics portfolios and found support from students. Sen (1998) received mixed reactions from students creating a portfolio for their high school Geometry classes. I could find no studies focusing on students' experiences with portfolios in integrated senior humanities settings.

Although this study fills a gap in the research, its major purpose was to improve the Humanities Co-op program. While its findings add to the knowledge about portfolio assessment, they are difficult to generalize beyond the context of the particular portfolio assessment used within the Humanities Co-op program.

CHAPTER 3 RESEARCH DESIGN

The Setting

I began my research on April 8, 2003. I explained the study to the 44 students in both Humanities Co-op classes in some detail and distributed the Information Sheet for Parents and Participants, the Informed Consent for Minors and the Informed Consent for Participants forms (see Appendixes D-F). I eventually received consent from 26 students and their parents to participate in the study.

The Participants

Franklin Secondary School¹ is located in a rural suburb of Vancouver in British Columbia. The community is mostly middle and working class. Students at our school tend to be complacent about their learning, with only a small minority striving for excellence. Over 85% of our student body is Caucasian with the majority of the remaining 15% distributed fairly evenly between students of Indo-Canadian and Chinese Canadian decent. There are only 20 ESL students at our school of a student body of over 1100.

My action research study on portfolio assessment was completed in the Humanities Co-op program at Franklin Secondary School. This program attracts approximately 40% of the grade 11 population at the school. The classes are usually representative of typical grade 11 classes with a wide range of aptitudes. However, in this particular semester there was a concentration of low achieving students. Of the 26 students who participated in the study only five received A's or B's in SS 10 and only

¹ Names and locations that compromise the anonymity of the studies participants have been changed to pseudonyms.

five received A's or B's in English 10. Their attendance records also foreshadowed problems. Nine of the 26 study participants accumulated over 30 absences in grade 10. During the semester, these two classes were the worst I have experienced in my eight year teaching career with respect to completing assignments on time or at all. Despite numerous previously successful strategies to remedy this situation it was not unusual for only 4-8 students to have their homework completed on any given day. The fact that only 26 of 44 participant consent forms were returned is further evidence of a group of students who struggle with the day to day tasks required of them at school. Students failed to return the forms not because they were not allowed to participate in the study but because they repeatedly lost forms and forgot to get them signed. Many of the students' troubles in the classroom extended to the school at large and many of our students' discipline records were alarming. In May our administrative team actually recognized my teaching partner and me with flowers for keeping so many of these students in school as they considered them a considerable risk for dropping out.

All of these problems were exacerbated by the horrific accident that claimed the lives of four fellow grade 11 boys at our school on March 26, 2003. The impact of this event is difficult to describe. From the moment all of our staff read prepared announcements at 9:00 AM the following day, our school, especially the grade 11 students began grieving over their lost friends. The effect on covering curricular content was overwhelming. The first three days after the accident attendance was less than 50% in grade 11 classes and very little curricular teaching or learning occurred. In the following weeks attendance improved but it was still difficult to get work done in class and we extended deadlines for major assignments as many students were unable to focus

on their work. About three weeks after the accident the classroom situation had mostly returned to normal but the effect of such a long period where very little work got done by a large number of students lingered for the rest of the semester.

I include all of this information as a caution that the results of this study reflect an atypical class in an atypical situation. Since this was my third attempt at using portfolios, I can say with some confidence that the overall quality of the portfolios and the students' level of engagement with them were somewhat lower than in previous attempts when the classes I was teaching were fairly average.

Relationships with the Participants

The relationships I created with the 26 participants of the study were the same as those I create with all my students. I aimed to form close relationships with students rooted in trust and care. I attempted to get to know my students as complete human beings, not just Cotop students. I tried to consider their lives beyond school, finding out about their pasts (through a personal history assignment) their present (through a biography assignment) and their futures (though a five year plan assignment).

Furthermore in day to day interactions with students I tried to be a good, empathetic listener, considering the student as a whole human being within the overall context of his or her life rather than just within my classroom. This was made easier by the integrated nature of the program and the fact that I only taught two classes (44 students) for an entire semester, meaning my hours of contact with these students was double the norm. Furthermore, we use the operating metaphor of a large family for the Co-op program in an attempt to create a safe and comfortable atmosphere for learning. Because of this

situation and my personable teaching style, I feel that I formed good relationships with the majority of the students in both classes.

These relationships benefited the interview process because the students already felt comfortable with me. I was able to use my knowledge of the students to ask appropriate probing questions during the interviews, thus enabling me to gather rich data. It was also essential in choosing the interview participants according to the set criteria. This will be further discussed below.

Gathering the Data

I chose qualitative methods of data collection because I was interested in gaining a deeper understanding of how students perceived the process of portfolio creation and how it affected them and their learning. I collected data from the portfolios, questionnaires and student interviews.

Using the tradition of action research, I gathered the necessary data by conducting my study in the regular context of the Humanities Co-op program. Action research was appropriate because part of the purpose for this research was to improve my practice as a teacher. Action research examines issues, which are deemed problematic by practitioners and are deemed solvable through a practical response (Elliot, 1978; McKernan, 1996). Action research supports the implementation of a plan based on a combination of relevant literature and practical considerations rooted in the local context (Macintyre, 2000; McKernan, 1996). Thus I was able to rigorously examine students' experiences with portfolio creation and establish the major benefits and challenges of the process.

The Portfolios

I carefully examined all of the participants' portfolios and evaluated them according to the assessment rubric (Appendix F). I focused particularly on the students' reflections and their conclusions. During this process some themes began to emerge which were modified based on data gathered later through questionnaires and interviews. I chose to focus on the portfolios of the eight interview subjects rather than the entire group of participants. Because the interviewees were reasonably representative of the portfolio experiences had by students, and because data from their portfolios was more easily contextualized due to the information provided about them, this approach made sense.

Student Questionnaires

All 26 study participants completed anonymous questionnaires that included 14 questions (see Appendix G). The questionnaire was designed to elicit open-ended responses about the students' experiences with the portfolio process and included the following questions:

- 1. What (if anything) did you like about creating your portfolio?
- 2. What (if anything) did you dislike about creating your portfolio?
- 3. If you had a choice between writing a final exam or creating a portfolio what would you prefer? Why?
- 4. Approximately how many hours did it take to complete your portfolio?
- 5. Was creating the portfolio useful to you? In what way? In what way wasn't it?
- 6. What (if anything) did you learn from creating your portfolio?
- 7. How genuinely did you write your reflections? How much of your reflections was writing what you thought I wanted to hear and how much was really you?
- 8. Does your portfolio paint an accurate picture of your learning this semester? Explain.
- 9. How did the portfolio affect your Co-op experience?
- 10. How did you feel after completing the portfolio?
- 11. What did you find difficult about creating your portfolio?
- 12. What did you find easy?
- 13. How did creating the portfolio affect your understanding of the goals?
- 14. If you were Mr. Stipp, what would you do to improve this project?

Students were provided five lines of space to answer all questions except number four for which only one line was provided.

Interviews

Each interview took 10-25 minutes to complete. I recorded and transcribed all of the interviews. I used a semi-structured interview technique to allow participants to provide detailed, rich accounts of their experiences with creating portfolios. I used a general interview schedule as a guide for each interview (see Appendix H). These questions were similar to those from the questionnaire I had given all the participants earlier but the interview setting allowed me to ask follow up questions to get students to go beyond the surface. I began most of the interviews by having the students talk about one of the reflections in their portfolios which ensured that the focus was on the their experience with the portfolios. I also prepared some specific questions for each student based on data I had gathered from his/ her portfolio. For example in one interview I asked the following question: "You said in your portfolio, 'These goals have made me think about myself and my decisions towards learning and other people.' Can you elaborate on that? Tell me more about that." This type of question generally elicited thoughtful responses of some depth.

Choosing the Interview Subjects

In choosing six interview subjects, I attempted to create a balance based on academic achievement this semester, overall attitude towards school and learning, attitude towards the portfolio and quality of the portfolio (see Table 3.1 below). After analyzing the data from the six interviews, I realized that I had inadvertently chosen only

students who enjoyed the portfolio and considered it worthwhile. This occurred because I had misunderstood the attitude of one of the initial interviewees towards the portfolio. Although the majority of students experienced the portfolios positively, a significant minority did not. This meant I was missing an important perspective and it led me to interview two more students who I knew had struggled with the process. Thus I was left with eight students who represented a reasonable diversity of my criteria (See Table 3.1). 18 of the 26 study participants were female, making a gender balance of six females and two males appropriate. The reason no "A" students were chosen as interview subjects was that only one "A" was given in Social Studies 11 and only one "A" was given in English 11.

Table 3.1 Participant Selection

	Academic		Quality of the	Attitude	Attitude
	Achievement		Portfolio ²	Towards	Towards the
	SS 11	Eng 11 ¹		School (1-5) ³	Portfolio (1-5) ⁴
Tina	В	C+	В	4	5
Linda	В	В	В	5	3
Andrea	В	C+	Α	4	5
Jim	C	С	C+	2	3
Sarah	C-	C-	В	3	4
Joan	С	C-	C+	3	4
Alice	C-	C-	F (not done)	2	2
Alan	C-	C-	C-	2	1

- 1. Based on actual grades received in these courses.
- ^{2.} Based on grade received on portfolio evaluated according to the assessment rubric without any points deducted for lateness.
- Indicates how much these students enjoyed school and saw a purpose in it. On a scale of 1-5 1 indicates very low level of enjoyment and sense of purpose; 5 indicates very high level of enjoyment and sense of purpose. Based on data gathered through my interactions with these students throughout the semester From informal conversations, written work, classroom comments and portfolio reflections and confirmed by my teaching partner. See Appendix I for more detail of how these numbers were derived.
- Indicates how much these students enjoyed the portfolio and saw a purpose in it. On a scale of 1-5 1 indicates very low level of enjoyment and sense of purpose; 5 indicates very high level of enjoyment and sense of purpose. Based on data gathered from the portfolios, some informal conversations and the interviews. See Appendix J for more detail of how these numbers were derived.

Methods of Data Analysis

Data from the 26 study participants was analyzed during and after it was gathered. I wrote annotations to record preliminary reflections as I read the portfolios and questionnaires and transcribed the interviews (Bassey, 1999). During this early stage of analysis a sense of possible categories emerged from the data and I completed some preliminary coding. Once all of the data was gathered I reviewed the entire body, as suggested by Agar (1980) and Creswell (1998), to ensure that I got a contextualized perspective. By this point my categories were fairly solid. They included the following twelve:

- A Sense of Accomplishment, Growth and Pride For most students completing
 the portfolios left them feeling accomplished and proud. The process led to
 recognition of how much they had learned during the semester.
- 2. Increased Confidence and Self-esteem Many students felt better about themselves as a result of completing the portfolio. In most cases this appeared to stem from their sense of accomplishment.
- 3. Meaningful Learning A number of participants felt that the portfolios made learning more meaningful for them. The act of reflecting and bringing together the various strands of the program seemed to help in this regard.
- 4. *Increased Student Ownership* Some students indicated that the portfolio process made them feel more in charge of the learning process.
- 5. *Motivation* A small number of students spoke of an increase in motivation for future learning. The portfolio process appeared to show them how much learning

- was possible and that it could be useful to them therefore motivating them to learn more.
- 6. Better Understanding of Self as a Learner and as a Human Being A majority of students displayed significant insights into themselves as people and learners.

 They showed greater understanding of their strengths and weaknesses and what they wanted their future to look like.
- 7. Deeper Understanding of the Co-op goals and Content Completing the portfolios pushed many students to deepen their understanding of the program's goals and its content. This was especially noticeable in their reflections where on numerous occasions new insights about the what they had learned emerged.
- 8. Difficult, Stressful and Repetitive Portfolios Most students found the portfolios challenging. However, some of them found them excessively stressful. Some also felt that the reflections became repetitive towards the end.
- 9. Assessment of Subjective and Individualized Goals The portfolios proved effective at assessing goals that are otherwise difficult to assess because of their subjective and personalized nature. This was especially true of goals in the "Actions and Attributes" section.(see Appendix E).
- 10. Assessment for a Wide Range of Abilities The portfolios offered opportunities for students to complete them at different levels and in different ways. Because students could focus on their strengths, even some who had struggled academically during the semester were able to benefit from the process.

- 11. Genuine Responses Most students responded genuinely and honestly within their portfolios. A very small minority tried to tailor their responses to the teacher's wishes.
- 12. Integration of Learning Across the Curriculum The portfolios effectively pulled together the various strands of the Co-op program. Many students ended up with a more holistic and integrated view of the semester's learning as a result of the process.

I developed only one set of codes for all six cases since the same context applied in each case. Coding, or linking all of the data fragments to the relevant particular concepts of my categories, was the next step in data analysis (Coffey & Atkinson, 1996). I carefully reread all of the interview transcripts, questionnaires and portfolios entering the relevant data under each of the twelve themes. During the process I began to notice the interdependence of the many of the themes but especially meaningful learning, ownership and motivation. Most students who spoke of one of these three themes also experienced the others. Furthermore, meaningful learning seemed to lead to greater ownership which in turn seemed to lead to increased motivation. This led me to group these three themes together leaving me with ten themes.

The data was validated using triangulation (Denzin, 1970) of methods by comparing the portfolios, the questionnaires and the interview transcripts.

During the process of creating this organizer of my data, I began to realize that all of the students I had interviewed generally spoke positively about their experiences with the portfolio process. However, the anonymous questionnaires indicated that a small number of students had found the process excessively stressful and useless. At this point I

realized that while my six interviewees were reasonably representative in terms of academic success, academic potential and their attitudes toward school, all six had completed the portfolio and four of the six had produced portfolios of higher quality than their semesters' classroom work, while the other two had roughly matched it. While this phenomenon described the experience of approximately 75% of the students, 25% either did not complete their portfolios or submitted work that was sub par with respect to their semester's work. Furthermore, all six reported that they found the portfolio process at least somewhat meaningful, again not representative of the entire participant group.

Because of this, I decided to interview two more students, both of whom fit this later category. After completing and transcribing these interviews their data was added to my already existing themes. Although no new themes emerged, the additional data provided me with a more complete picture.

During data analysis I also began to notice patterns about which students seemed to get the most out of the portfolio process. I developed a theory about which student preconditions and conditions are most likely to lead to portfolio success. From this list of attributes I developed a follow up questionnaire that I distributed via e-mail to my eight interview subjects (see Appendix K). I combined the data from these questionnaires with data gathered previously about these students to rate each student with respect to each of the attributes.

Validity Threats

Researcher Bias

The most serious validity threat to my study was researcher bias. Because I was the main person gathering data, and had some clear theories about what I expected and hoped to find, I needed to be very careful not to select my data to suit my desired conclusions. There were a number of ways I guarded against this threat:

- 1. *Triangulation:* As mentioned earlier, I employed a number of different data collection techniques: document analysis, questionnaires and interviews. However, as Maxwell (1996) points out, this is insufficient to prove validity. I could have the same biases inherent in all of my data collection techniques.
- 2. *Member Checks:* Student interviewees had the opportunity to read and provide feedback concerning the descriptions I wrote about them in Chapter 4. None objected to what I wrote about them.

Honesty of Student Responses

It seemed possible that students would say positive things about the whole process because they wanted to please me or because they thought it would positively impact their grades. This was a possible issue with the questionnaires and the interviews. It was addressed as follows:

I made explicitly and repeatedly clear that I was looking for honesty and that my
research would only be successful if that is what I received. Students who were
interested in pleasing me knew that honesty was the way to do it, while those who
were not concerned about me had no reason to sugar coat their responses in the first
place.

- 2. All questionnaires and interviews were conducted after the student's final grades were completed. This meant that students knew with certainty that their grades would not be affected by their responses.
- 3. Because some students may still have been weary about critiquing me to my face, all questionnaires were completed anonymously. This proved an effective strategy since it alerted me to the fact that some students had negative experiences with the portfolio process which led me to conduct additional interviews.

Ethical Issues

Students were given the option of not participating in the study. The students who chose to participate were not harmed in any way; in fact, the process was designed to improve their learning. Non-participants were still involved in the process of creating a portfolio so they did not miss out on any learning opportunities. Their work simply wasn't used as data and they were not candidates for interviews. I would have done this type of assessment regardless of my research. Thus, other than the in depth interviews, participants were subjected to nothing out of the ordinary.

Limitations

This study was conduced with two Humanities Co-op classes in a middle class

Vancouver suburb. Only 26 of the 44 students in these classes participated. The portfolio assessment used was specifically designed for the integrated context of the Humanities

Co-op program, which involves students in four different subjects over the course of one semester. Furthermore as mentioned above, this semester's classes were somewhat atypical and were subjected to the extreme trauma of a car accident that took the lives of

four fellow grade 11 students. Thus in one sense, the practical findings of this study apply only to this limited context. However, the framework derived from the themes about preconditions and conditions may in fact have transferability to larger contexts.

Therefore, many of the students' experiences with this specific portfolio assessment and the resulting benefits and shortcomings may be instructive to educators attempting this kind of assessment in their context.

CHAPTER 4 THE INTERVIEW SUBJECTS

What follows is some background information on each of the interview subjects in an effort to provide some context for their responses and my subsequent findings. Each student's name has been changed to protect his/her anonymity.

Jim

Jim was a "C" student in grade 10 English and Social Studies accumulating 18 absences. Academically he continued this level of achievement in the Co-op program obtaining "C's" in both Social Studies 11 and English 11. On his two work placements, building houses and installing car audio systems, Jim thrived. He was clearly happier out of school than in it. It was often a struggle for Jim to stay focused in class, as his attention would wander to other more interesting matters outside. Conversations with Jim left me with a picture of someone who doesn't really see the point of school and wishes he could be anywhere but in the classroom.

Nevertheless, Jim completed most of his work and missed very few classes. Jim is intelligent and possesses significant ability in the Humanities. By his own admission he is underachieving academically. His sense of humour was a welcome addition to our classroom.

Jim's portfolio was submitted three weeks late but was generally well done. At first I questioned the genuineness of his reflections, wondering whether he was just going though the motions, but after interviewing him, I became convinced that his work was an accurate reflection of his learning. His reflections showed deep understanding of the goals and a good sense of his own level of progress. Because he did not complete all of

the required assignments it is not surprising that Jim lacked sufficient supporting evidence for some of his goal statements.

Joan

Joan was a 'C' student in grade 10 English and Social Studies, while receiving full time Learning Assistance. Joan missed 25 days of school in grade 10. In Co-op she maintained this level of performance in English and Social Studies with similar attendance. She excelled on her work placements working in the kitchen at a golf and country club and in retail at a skate and snowboard shop. Academically, school has been difficult for Joan and earlier in the semester when telling me about her struggles she wrote, "I don't really have a lot of strengths [in school] ... I think I need a lot of improvement in many areas such as reading, spelling and understanding." Joan completed most of her assignments and often submitted her work late. She struggled with work that required higher levels of reasoning but did well on assignments that required personal reflection.

Joan's portfolio was generally well done, especially when compared to the overall quality of her work during the semester. Her reflections were thoughtful and showed improvement, especially on the personal growth goals, and she showed a high level of self-awareness. However, Joan's level of achievement in English and Social Studies was still below average at the conclusion of the program and her portfolio reflected this. Joan expressed significant pride in her portfolio, which was lovingly decorated and assembled with numerous appropriate pictures.

In class Joan was extremely quiet and shy although she continually increased her interactions with others in the class throughout the semester. She lacked the confidence to

frequently contribute her thoughts to class discussions but her reflective writing showed that she had valuable insights on a regular basis. Joan was cooperative and a pleasure to have in class.

Sarah

Sarah earned "C" grades in both Social Studies and English in grade 10 and missed 35 days of school. In Co-op she received "C-" grades in both English and Social Studies and continued to miss a lot of class. On her work placements Sarah worked as a teacher's assistant at an elementary school and as a nurse's assistant at a local hospital. Although she received excellent evaluations from both of her employers, absence from work led to a shortage of hours resulting in an incomplete grade for Work Experience.

In class Sarah was outspoken and generally engaged in lessons. She spoke effectively in front of the class and her opinions held considerable sway with her classmates. She also completed some excellent assignments. Unfortunately, Sarah failed to submit a number of major assignments in both English and Social Studies resulting in low grades. She had big problems keeping to deadlines and easily lost focus. By her own admission, Sarah underachieved significantly and she is aware that this needs to change if she is to fulfill her ambitions of going on to university. She struggles to stay consistently motivated in school and seems to be on a roller coaster ride, which generally allows her to barely scrape by with passing grades.

Sarah was extraordinarily affected by the tragic accident. Two of the deceased boys were extremely close friends to her and she spoke eloquently at both funerals. After starting the semester with excellent intentions, the accident undoubtedly threw her off track and is partly responsible for her relatively poor performance.

Sarah's portfolio was excellent. She wrote thoughtful, detailed reflections which showed evidence of learning far beyond that indicated by her grades especially in English and Social Studies. She reflected deeply on herself and her journey this term and came to numerous valuable conclusions. She expressed great pride in this assignment and it seemed to salvage her disappointing semester. The following statement from the conclusion of her portfolio nicely sums up Sarah's Co-op semester: "I feel that I could have done much better than I did with these goals. I know that I accomplished something but I wish it had been greater."

Tina

Tina was a "C+/B" student in grade 10 in English and Social Studies respectively, but was absent 31 days. Tina really enjoyed the Co-op program and creating her portfolio, which she described as the best project she's ever done. She seemed to thrive in the Co-op environment and she only missed five classes during the entire semester. She finished the program with a 'B' in Social Studies and a C+ English 11, both slight improvements over her grade 10 performances. She excelled on both of her work placements, assisting at an elementary school and working in a skate/snow board shop. Tina was relatively quiet in class and extremely co-operative. She completed her homework some of the time and handed some assignments in late but completed all of her work eventually. Tina seems to enjoy school and sees its overall purpose.

Tina's portfolio was complete and only slightly late. It was well done and obviously took significant care and effort to create. Her reflections showed good understanding of the goals and a good sense of her learning with respect to the goals. Her

portfolio included numerous pictures from throughout the semester and she wrote in her conclusion that she was extremely proud of her accomplishment in completing it.

Linda

Linda earned a "B" grade in English 10 and an "A" grade in Social Studies 10 and only missed five days in all of grade 10. She continued this academic performance in grade 11 with "B" grades in both English and Social Studies and an outstanding attendance record. She excelled on her work placements as an assistant at a Physiotherapy clinic and as receptionist at a car dealership.

Linda has an outstanding attitude towards school and she was very easy to teach in the Co-op program. Her assignments were always complete, virtually always on time, and generally of high quality. She got along well with all of her classmates and her infectious smile was a wonderful addition to our program.

Linda also really struggled with the accident, as one of the boys was her best friend. She went through an extremely difficult time in the weeks following the tragedy but except for some trouble staying focused in class, this did not adversely affect her attendance, work habits or performance.

Linda's portfolio was good but slightly below her standard of work. She acknowledged that it was sub-par in her interview and that disappointed her.

Nevertheless, it included all of the required components and had some quality reflections.

She didn't particularly enjoy doing the project.

Andrea

Andrea received "B" grades in both Social Studies and English 10 and missed only 6 classes during her grade 10 year. In Co-op she almost maintained this level of performance earning a "B" grade in Social Studies and a "C+" grade in English. She successfully completed both of her work placements at a Spa and a lingerie shop in a local mall.

Andrea was quiet in class rarely contributing to discussions. The quality of her assignments was often exceptional and she clearly demonstrated an excellent grasp of the courses' required skills and content. Unfortunately, she submitted the vast majority of her assignments late and generally had trouble meeting deadlines. This was often due to poor time-management but at times it also resulted from Andrea's genuine desire to produce quality work and to learn. For example her research essay on teen pregnancy was five weeks late but was extremely well done; almost a university level paper.

Andrea's portfolio was also of very high quality. Her reflections and evidence showed deep understanding of the goals and the content of the program. She enjoyed doing the portfolio and really felt that it was a beneficial project for her. Not surprisingly it was the last one I received, four weeks after the deadline.

Alice

Alice received "C" and "C-" grades in grade 10 English and Social Studies respectively while missing an alarming 59 days of school. Her performance dropped only slightly with "C-" grades in both English and Social Studies in Co-op. Her attendance, while still a major problem improved slightly. Alice successfully completed her work placements at a hair salon and a veterinary clinic.

Alice's in class performance was extremely inconsistent. At times she was focused, engaged and produced high quality work. At other times her attention seemed elsewhere, she missed class frequently, and did not submit assignments on time or at all. Alice is certainly capable of higher academic achievement and she is aware that she is underachieving. She was easily stressed out and overwhelmed and often reacted to these feelings by abandoning her work.

To make matters worse, Alice was strongly affected by the accident and both her attendance and performance worsened significantly after it. She also suffered other personal tragedies during the semester and spent many hours in our school's counseling office.

Alice did not complete her portfolio. Three weeks after the due date she e-mailed me, explaining the extreme levels of stress the portfolio was causing her and asking for my help. I made some suggestions which she said improved the situation significantly but in the end she was still unable to do her portfolio. This was despite trying to work on it numerous times but continually getting bogged down because of a lack of evidence and getting overwhelmed by the scope of the project. The portfolio ended Co-op on a very negative note for Alice.

Alan

Alan received "C-" grades in grade 10 Social Studies and English while accumulating 10 absences. He maintained this performance in Co-op. He successfully completed both of his work placements at a small engine repair shop and a landscaping company.

Alan's in class performance was consistently below average during the semester. He struggled with academic work partly because his basic skill level in reading and writing was below average for his grade level but also because he lacked the motivation to do well. He much preferred to be on his work placements and he loves to work with his hands. He has already arranged to graduate after his first semester of grade 12 to complete an apprenticeship in landscaping. While Alan enjoyed the social aspects of school and was well liked by his classmates, it was clear that he did not enjoy the day-to-day activities of most academic classes.

Alan completed half of his portfolio with significant pressure from me. He also emailed me to tell me of his struggles and I convinced him to come into school during one of his work placement days to work on the portfolio with my help. While he completed seven of the 12 required reflections, he did not write a conclusion and the project was clearly done in haste. He showed some understanding of the goals and content of the program but his reflections lacked depth and genuineness. During his interview he clearly expressed that he hated doing the portfolio and that he got very little out of the process.

CHAPTER 5 STUDENT EXPERIENCES WITH PORTFOLIO ASSESSMENT: BENEFITS AND SHORTCOMINGS

Overview of the Findings

The overall findings in this study suggest that portfolio assessment in the Humanities Co-op program is beneficial. Most students gained a sense of accomplishment and pride from completing their portfolios, which proved to be an accurate reflection of their semesters' learning. Most students showed better knowledge of the program's goals and content and many knew themselves better as learners and people after completing the portfolio process. In some cases the portfolios increased student ownership of the learning process and increased motivation for future learning. The portfolios also worked well as an individualized assessment that allowed students at various levels to reflect on and demonstrate their learning while experiencing success. Moreover, the portfolios provided an opportunity for students to get a big-picture, integrated view of their learning with respect to the Co-op goals.

There were, however, significant shortcomings in the portfolio process. Many students experienced undue levels of stress because of the size and scope of the project. A few students did not complete the reflections with genuine thought and as a result produced low quality portfolios. Furthermore, because there were 12 goals to reflect upon, and there was significant overlap between the goals, there was significant repetition in many reflections making the entire process less meaningful.

In reporting these findings I have attempted to let the students speak as much as possible, leaving my interpretations for the final chapter. The findings are organized thematically.

A Sense of Accomplishment, Growth and Pride

The strongest finding about the portfolio experience was that it left the vast majority of students with a sense of accomplishment and pride. Many were surprised by how much they had learned, how much they had grown, and how much they remembered. Most questionnaires had responses similar to the following:

It made me realize just how much I did accomplished (sic).² It was worthwhile to gain that understanding from the portfolio.

Like many of his/her classmates, this student gained a new awareness of how much he/she had achieved, which made his/her portfolio experience valuable.

It [the portfolio] proved that I did have growth towards the goals when before I was starting I thought I had no growth.

Similarly, this student felt that the portfolio showed progress towards the goals that he/ she had been previously unaware of.

Going over the goals and actually seeing that I accomplished something made me feel good.

The portfolios provided students with concrete evidence of their learning which in turn led to a sense of pride.

² To preserve the authenticity of the data, all written responses from the questionnaires and the portfolios appear exactly as the study participants wrote them including any spelling, grammar or punctuation errors.

It was useful because it showed me how much as a person and a student I have changed over 5 months. I didn't think I could do so much in a short period of time.

The portfolios also provided students a sense of accomplishment with respect to the big picture of their learning.

Seven of the eight interview subjects also made comments about their sense of accomplishment. The following interview responses show Linda, Tina and Jim's perceptions that they lacked this sense of pride and accomplishment before completing the portfolio.

Linda - I think it was just useful seeing my improvement on everything because it made me realize that I do change a lot over a certain amount of time. And it helped me to understand exactly how everything went together over the year and like I remembered a lot more information from doing this than when it came to the end of other courses ...I remember nothing from the beginning and it just feels like I learnt more.³

Stipp - Did you feel that way before you did the portfolio?

Linda - Not really. Everything went so fast it felt like I barely learnt anything. Then, when I did the portfolio, I realized I learnt a lot more.

The portfolio provided Linda with context for her learning. It also showed her that she retained a lot of what she had learned during the semester. Linda also alludes to the fact that she remembers little in other classes and that the portfolio is what helped her to remember.

³ All interview responses were transcribed verbatim and appear unaltered here.

Tina - Well, I think it was doing this portfolio, because after doing this, I realized that there's lots of goals I achieved and in other classes it felt like I achieved nothing.

Tina's response also gives credit to the portfolio for her sense of accomplishment.

Jim - I liked saying where I was before and where I was after. I don't know it just showed myself how much I learned. Probably happened every year and that but doing this thing [the portfolio] I noticed ... like I could see it so I was kinda proud of myself.

Jim's response is interesting because he believes he probably learned a lot in the past as well but he just was not as aware of it as this semester.

Some students expressed pride because they had completed such a large and significant project.

Questionnaire: I felt proud and confident that I had actually finished something important.

Questionnaire: I felt really good and proud of myself because I had completed everything.

In Sarah's case the portfolio was a way for her to salvage a disappointing semester.

Sarah: (interview) - Ahm, I was really proud of myself that I did it. I didn't know if I could do it. Because it was so long and I haven't been doing that well this semester, or this year. It's just been down hill really fast. So the fact that I completed something this large and just took the time think about everything. I didn't just write little one word answers and I don't think I did. I really put a lot of feeling into it. And I was just like, Yeah! To

finish it, even though it's not the best that it probably could be, I just put like so much. I feel I put so much effort into the reflections.

Sarah: (portfolio - reflecting on the goal finding and admitting weaknesses but striving to learn more). The last piece of evidence that I'm super proud of is what you're looking at! My portfolio! I feel that in here, I'm able to admit what I'm not that great at, show why and then go onto explain how I can improve myself. Also the fact that for two months of my semester, I've been really behind and to catch up my marks, and prove to myself that I can do it - I've overcome my biggest weakness - self doubt! Okay so I'm still lacking self-confidence, but that will come with time.

The pride associated with completion of the portfolio was a double-edged sword since three of the participants submitted incomplete portfolios, while three others did not submit anything. The following questionnaire responses show that for some students the portfolio was a bad way to end the semester.

It [the portfolio] made Co-op end on a horrible note.

[The portfolio made me feel] horrible because I didn't finish it all and I wish I could have.

The use of "horrible" in both of these responses shows how strongly these students felt about the effect of an unsuccessful portfolio. This seems analogous to failing a final exam. However, not handing in a portfolio at all is even worse since students and teachers perceive it as a complete failure.

The portfolio made me stressed out. It made me feel pretty crappy but that's the choice I made.

This comment is particularly interesting because while this student had a negative portfolio experience, he/she took responsibility for his/her actions. Informal conversations with two of the other students that did not complete the portfolio left me with similar impressions.

The following example is representative of a small number of students who were more specific as to how the portfolios showed their growth.

Questionnaire: It showed me how Co-op has increased my social abilities and thinking abilities.

For most students the portfolios led to a strong feeling of accomplishment and pride. A small minority were left feeling badly after the process because they had failed to complete quality portfolios or had not completed them at all.

Increased Confidence and Self Esteem

It seems logical that students who feel a sense of accomplishment and pride in their semesters' learning and the final portfolio which exemplifies it, would feel better about themselves as learners and as people. Some of the previous responses from students already alluded to improvements in confidence and self-esteem. A few of the respondents specifically mentioned feeling more confident after completing their portfolios:

Tina: (interview) - ...so it [accomplishing so many goals] just made me feel a lot better about myself. Like confident in like my future like knowing what I want to know. I feel more confident.

Tina very clearly expresses a new found level of confidence as a result of accomplishing so many goals.

Questionnaire: I definitely feel better about myself. I feel more secure like I can do more Like I can do more out there.

Questionnaire: I feel like I can do anything I put my mind to now.

These two questionnaire responses show student increases in self-esteem that have led to a stronger belief in themselves.

Jim: (portfolio - conclusion) - In general I think my Co-op experience has been very worthwhile; it showed me that I can actually succeed at school which I never thought I could before.

Jim was also left with a stronger sense of belief in his abilities, but he gives credit to Co-op experience as a whole rather than just the portfolio.

The following interview response by Andrea seems like an appropriate way to conclude this section. She clearly sees value in the metacognitive process involved in writing her reflections.

Andrea - The portfolio actually was a chance to get me to think about what I learned. And it made me realize that I learned a lot and it made me realize that I could learn more about certain things and if I didn't do the portfolio I wouldn't have really realized that and I would just keep going with not learning as much as I could possible be learning about everything and the portfolio was a good way for me to think about what I learned and how I learned them and how I grew in general about everything. I think it was definitely one of the better ways to evaluate how you did in the course.

Meaningful Learning, Increased Student Ownership and Motivation for Learning

The relationships between meaningful learning, student ownership and motivation for learning are complex and difficult to delineate and will be further explored in the next chapter. The data suggest that the portfolio process had a positive impact on all three factors. The tasks required for the completion of the portfolio required students to think about their thinking and to reflect on what they learned and how they learned it. These metacognitive skills helped students become more autonomous learners as the portfolios moved students in the direction of taking charge of their own learning. Because students had to select pieces for inclusion and to reflect on the progress in their learning, they were forced to think about the process of their learning. The portfolios appeared to work against the ethic of, "Once I've handed it in, I'm done with it," so prevalent in high schools. Instead, there seemed to be more of a process orientation. Students had the opportunity to see their work as part of the bigger picture of themselves as learners. This may be one step in the direction of developing a life-long learning paradigm.

The portfolio helped some students find greater meaning in their learning and this purpose increased their levels of motivation to learn more. This exchange with Jim, who dislikes school and often fails to see its purpose, provides one such example:

Jim: (interview) - ... Well it [the portfolio] kinda gave me like ... it proved to me that coming to school, obviously it sucks a lot but it showed you actually like ... I learned a whole lot this year, this semester. So it kinda built my confidence makes me wanna, like I didn't, I tried hard but I coulda tried harder so like if I would have tried harder I can only imagine how much other stuff I would have learned.

Stipp - Do you think that will change anything for you next year?

Jim - I think so.

Stipp - Like what?

Jim - I'll just take it more seriously, I think. Not procrastinate... Ahm, I don't know. Like I said I felt like well it showed me that I actually learned something. Like I said I go into school and oh this sucks, I'm not learning anything this is boring blah blah blah. Like even in past Socials years, I've always like Socials but like other classes like Science I'm sure if we did one of these in one of those classes I'd be like whoa I actually learned something. It kinda gave me the feeling that, it showed me that this isn't so bad.

Stipp - Like there's a bit of a point?

Jim - Laughs, Exactly like it can help you.

Andrea believes that the act of reflecting on learning, both academically and socially has increased her level of motivation to learn more. This exchange also illustrates that for Andrea the content of the Co-op program, its goals and the portfolio are all inextricably linked.

Andrea: (interview) - Because most people don't realize how much they've learned in a class until they actually sit there and think about it like my past high school years I knew I learned some stuff like Math or whatever but this is like a whole bunch of different things I learned not just about like school work but about myself and how I treat others ... and if I didn't sit there and think about what I've learned I wouldn't really be motivated to

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learn more because of it. And I think that's important because everyone keeps learning throughout their lifetime.

Stipp - I'm sorry you said you wouldn't be motivated to learn more because of what?

Andrea - If I didn't sit there and think about what I'd learned already and how much there is to learn I wouldn't really care about learning more about everything because I wouldn't sit there and think about how much I have learned and how much there is to learn and if I didn't think about it I wouldn't really care.

Stipp - So you're saying that thinking about it does make you care?

Andrea - Yeah.

Stipp - How so?

Andrea - It makes you think about how much there is in the world. People just...Everyone has to learn and if they aren't motivated to learn and then they won't be better people like they could be ... Just sitting there and thinking about it and what you have learned and looking at your work and how you've grown throughout the semester. It makes you just realize just how much... if you can learn that much in that small amount of time how much you could learn if you actually put yourself to do it and just learning whenever there's a chance and not just sit there and watch TV that won't make you learn although some TV shows can I guess but to actually go out and motivate yourself to learn more about the world and the things around us because there's so much to learn and some people just don't realize that.

Stipp - Are there... You said in your portfolio, "these goals have made me think about myself and my decisions towards learning and other people." Can you elaborate on that? Tell me more about that.

Andrea - Before I kinda just did the work to get the marks for it. In Co-op the stuff we learned actually made me want to learn about it like the research essay I wanted to learn more about teenage pregnancy and I found out a lot of stuff that I never knew before and it made me think that there's so much stuff that I can learn about that I never actually feel like doing but now that I realize that there's so much to know I'll actually try and learn more about everything and my decisions towards other people are that to always treat them with respect even if you don't know them and you never know cause me and Rene we never really talked or anything we just stereotyped or judged or whatever but we actually became like really good friends and if we didn't have Co-op we wouldn't have done that we still not talk to each other and judge each other and I think that really taught me not to judge people because like everyone has good things about them and if you just judge them and don't really pay attention to them then you could lose out on a good friend.

A number of students felt that the focus on specific goals, learning about which had to be proven in the portfolios, made Co-op more meaningful and served as motivation to learn.

Andrea: (interview) - Like I said if we didn't have goals then I would still be doing the work just to have it done and not to actually learn anything and the goals made me actually strive for them and see what I could push myself to do how I could change.

The goals seem to have helped Andrea develop some intrinsic motivation to learn.

Andrea: (portfolio - in the conclusion) - The goals of Co-op are great food for the brain. They make me think so much about where I am and what I could be doing. I have improved some during my time in Co-op but have mostly just become aware of so many issues that were very foreign to me. I think that I will continue to work on my goals over time and allow my brain to soak up things like government and the ups and downs of how it is run. By working on these goals little bits at a time, I will improve as a person and as a citizen.

Moreover, the goals, and the requirement to show progress towards them in the portfolio are helping Andrea see herself as a life-long-learner.

Sarah: (portfolio - reflecting on the goal, "Think deeply, logically and critically"). I've decided after writing this that I would really like to continue to use the tool of thinking deeply, logically and critically. It will be a great device for college, because I think it shows that I really understand what I'm learning. I figure what I need to work in, is actually taking the time and not rushing through my work, just to have it done. In part of that, it means I can't procrastinate on work, and then do it the night before, because then I'll never think deeply about the work. It won't be done as well and I'll be too stressed to even think properly.

The motivation to learn gained by Sarah is more practical and specific. She can see this particular goal being an important part of her academic journey.

A small number of students also indicated that the portfolio showed them that they had not worked hard enough this semester. These students felt that this experience would push them to work harder next year. Sarah provides a good example of this sentiment:

Sarah: (interview) - [I felt] kinda bad because it feels like I haven't done anything this semester. Like I really haven't achieved anything. Like I really haven't. Like I barely passed Socials, I didn't pass English and that bothers me because English is like my best subject, right. To know that this semester... like it wasn't a waste I don't think. It's just. It wasn't as good as it could have been and that made me feel really bad when I was writing this because I could have really and it could have really been a great semester. And it was but just not as great as it could have been.

Stipp - How do you think that's gonna affect you in the future?

Sarah - ...Like it could go either way. I could either continue that same pattern or else I will learn from it and I can learn that I can't goof around and I can't screw around and that I'm going into grade 12 next year and that I have to apply some of these things because I don't wanna write about it and then not prove that I am that person. So I think it could go either way. I'm hoping it will go the good way but you live and learn right?

One simple way the portfolio fostered a sense of ownership was that the final products were generally attractive and included pictures of the past semester. Thus the portfolio was something many students were proud to call their own and wanted to keep. Tina's response is representative of that sentiment.

Tina: (interview) - One other thing I really liked it about was that I could like keep it forever and like most projects you can't.

A few students felt that the portfolio was 'theirs' because they had significant freedom in deciding what to put in it and how to put it together. These choices gave them a sense of ownership.

Questionnaire: The thing that I like most about creating this portfolio is that we could do anything that we wanted to do on it and make it the way that we think that it looks good.

Questionnaire: I could prove that I learned in my own way.

The sense of student ownership of the portfolios was also enhanced because students had the opportunity to include evidence from learning that took place outside of the classroom. A number of students used the accident and their experience with it as evidence for one or more goals. For example, Linda used a letter she wrote to one of the deceased boys as a piece of evidence for the goal, "Express thoughts clearly and creatively." The letter expressed Linda's feelings towards the boy and is a very good piece of evidence towards the goal. Linda had an opportunity to use a "school" skill (writing) to help her get through an extremely difficult real life situation. The fact that she was able to include that writing in her portfolio blurs the normally clear line between 'real life' and school. In another similar example, Sarah used two eulogies she wrote and delivered as evidence for the goal, "Express your thoughts clearly and creatively through writing and speaking." Her reflection shows that, although painful, her learning with respect to this goal was deep and meaningful:

Sarah: (portfolio) - I was really lucky to have that opportunity [to share my feelings] in two of my friends' funerals this year. It took a lot for me to come up with the words to thank my friends for being in my life, even if it was a short period of time. When I read my speeches I was told at the end of the them that I did really well and even though I don't really agree, I know in my heart that I did an ok job... I also wrote a poem about Dave and Trevor a couple of weeks ago. It's been still really sad without them, and sometimes I feel a lot better when I wrote about them. I'm honestly pretty

proud of the poem, because it said a lot of things that I'm really feeling, but didn't know how else to express.

Although the portfolios seemed to increase some students' level of ownership and motivation for learning, a number of student responses indicate that there is room for improvement here. Andrea struggled to find evidence for some of the goals and she would have preferred more choice:

Andrea: (interview) - A few of the goals ... like I think it would have been better if we could pick the goals like not the goals from each section because some of the goals I didn't really have evidence for and I didn't really feel I grew as much and I couldn't really find evidence for that so it was kind of hard to think about and think of evidence for it.

Alice, who really struggled with the portfolio and in the end, submitted nothing, suggests that allowing students to develop some of the goals individually would make them care more about working towards them.

Alice - Ahm, I think that we should have made up our own goals at the beginning. Like our personal goals that we wanted to achieve and then at the end like write our reflection on how we achieved them and if we did and if we like slacked on one of them. I think it would be easier because some of them I couldn't reflect to, because some of the goals I didn't reach at all not necessarily like agreed with but I just didn't have an interest in the goals like reaching them so, yeah...

Alice raises an interesting point, which leads to the challenge of balancing goals that reflect the curriculum with those that students intrinsically value. I think allowing each student to develop 2-4 goals individually with in the framework of becoming a

better person and a better citizen would increase some students' level of engagement and level of ownership without compromising the prescribed learning outcomes of courses within the program.

After reading all of the portfolios, I am left with the impression that for close to half of the students, the Co-op program changed their view towards learning in a positive way. They seem more engaged and in charge of their learning and motivated to learn more. This final reflection from Jim's portfolio sums the best-case scenario:

Jim: (portfolio) - Before Co-op school was a place where I was forced to learn useless things about useless topics that held my interest for about one minute. Now that I have spent a semester in Co-op where the teachers seem to think deeply about what they are going to teach us, I have been much more open to learning and accepting information. To improve I need to look at the big picture so to speak. By doing this I am able to see the reasons for what I am learning and take advantage of it. It's hard to enjoy learning when all you're focused on is memorizing facts for a test and then forgetting it all the next week.

Better Understanding of Self as a Learner and as a Human Being

Writing in depth reflections describing their learning provided students with new insights into themselves as learners and as people. As mentioned in the previous section, learning about their learning proved motivational for some students; however, while it seemed to want to make students learn, it also gave them a new understanding that will make them more effective learners in the future. For example, Linda keyed in on two of her strengths in the following exchange:

Linda - It showed me that in individual activities I do better than in group activities because I have a thing about it being done my way and I seem to do a lot better on tests and stuff like that rather than just activities that you have a certain amount of stuff you have to just copy down or like colour and stuff like that but test I really like doing because they make you actually think and some activities don't.

Stipp - Anything else that it's made you notice about yourself as a learner?

Linda - That on the things I have an unlimited amount of time on I leave it to the last minute. Things that I have a short amount of time on I do and I do pretty well.

Others were less specific but nevertheless noticed that they had learned something about their learning:

Questionnaire: I learned a lot about myself (habits) doing this portfolio.

Questionnaire: It made me think about all the things I need to improve in.

This portion of Jim's conclusion gives the sense that his awareness of himself as a learner and as a person has improved significantly:

Jim: (portfolio) -This portfolio shows my strengths and struggles from before Co-op, this semester, as well as where I am now. It shows how I have expanded my mind, thought deeply and critically, and grew as a person. ... When I look at all the goals that I have accomplished it goes to show how much I have grown up as a student as well as a person.

While less than 30% of participants claimed that the portfolio increased their understanding of themselves as learners, a majority of students felt that they knew

themselves better as people after completing the portfolio. Many had deep insights into themselves as human beings throughout the program and the portfolio solidified these. For example, Joan's journey towards becoming a more confident individual around her peers was a major theme throughout her portfolio. In her interview, Joan said, "[The Portfolio] definitely makes you understand yourself a lot better." Tina's experience was similar:

Tina: (interview) - I think it helped me understand myself better. Like made me feel better about myself because I could accomplish more goals or get close to accomplishing more goals.

The following questionnaire response also has the same theme:

Questionnaire: I felt that I understood myself as well as this course more thoroughly.

Because a mumber of the goals were personal in nature it is not surprising that reflecting on them would lead to a better understanding of self for the writer. This worked especially well in the integrated setting of the Co-op Program, which includes Career and Personal Planning, English, Social Studies and Work Experience because there is a legitimate place in the curriculum for personal development. There were numerous examples of student reflections in this vein. Sarah's reflection on the goal *Enjoy life and find my own path to happiness and have fun*, is another example of the huge impact the accident had on all of us but it also gave Sarah another opportunity to think deeply about its effects on her:

Sarah: (portfolio) - I came to realize that I have so much to live for right now, and the fact that maybe I won't get everything I really want done in a

life time. I believe this horrible tragedy has made me grow in a large sense. The question at Trevor's funeral, which has had a lot of impact on me is, "What are you going to do with your dash?" This is such a powerful question, and the truth is, I don't know... The deaths also made me realize that there are so many people around me that I haven't taken the time to get to know. I think a very large part in being happy is loving yourself...

Andrea and Joan provide two further examples of developing a deeper understanding of self through the portfolio:

Andrea: (portfolio - reflecting on the goal Respect and love myself as well as others and become more confident). Now I've realized that I have to be open with other people, and can't just hide all the time. I trust people as much as I can, and if they betray that trust, I can learn to forgive them. I am now more confident in myself, because I don't pay as much attention to when people talk behind my back. I don't let it phase me, because if I don't then it just takes so much work to build up my confidence again.

Andrea seems to have increased her comfort level with her peers considerably.

She certainly has improved her cognitive understanding of her interactions with others.

Joan: (portfolio - reflecting on the goal, "To be a leader and work cooperatively with others.") - I think I might have to work on my people skills because it took me a while to go up to people because I was pretty shy. I think I could be more energetic and out going. I'm not saying I'm not better, but I think I could be even better with practice.

Joan is more timid about her growth. She is focused on how much farther she has to go to feel comfortable in certain situations.

The danger with these types of responses is that it's impossible to verify whether they are completely genuine. Anyone could write this type of reflection yet be completely insincere. However, this will always be a problem when assessing personal development. Furthermore, my interviews and questionnaires suggest that most students wrote genuine, honest reflections. This will be discussed further later in this chapter.

A small number of students felt that the whole portfolio process was not worthwhile and not surprisingly they gained few insights into themselves. Although more will be said about some students' struggles with this project, it seems appropriate to include them here.

Questionnaire: I didn't like finding the evidence. I didn't learn anything from doing my portfolio.

This response is discouraging from a teacher's perspective. However, since these feelings were limited to a small number of participants it is easier to swallow.

Questionnaire: No it wasn't useful [creating the portfolio]. It was stressful having to look through all of this crap.

More will be said later about the stress caused by the portfolio process for some students.

Questionnaire: It wasn't useful because I got bored doing the reflections over and over again.

The concern about repetitive reflections also warrants further discussion and will be addressed bellow.

Nevertheless, the majority of students gained insights into themselves through the portfolio process. Sarah expressed her thoughts about herself at length during the interview. As mentioned earlier, Sarah was extremely close to two of the boys who died in the accident and this semester provided all kinds of other upheaval for her as well. Reading her reflections and listing to her interview responses, I got the sense that creating her portfolio was therapeutic for Sarah, providing a positive sense of closure to a difficult time.

Sarah: (interview) - ... And ahm, because I don't know, like I've been totally moving away from everybody in the school. Like I'd never really written it down on paper it's just something I'd been thinking a lot and then I got to like write it out and I was like wow, this is really where I am right now and that felt really good because I could just like, blah, blah, blah and I could write it all down and I could just like hand it in for work.

Sarah - Ahmt, I think I found it really easy because it had to do with myself. Like it had to do with who I am and it kinda took me some time to figure out who I really am and I've never really thought about that. So I think it was easy. Well it was easy and hard at the same time. Like I had to think about it and I had to think about like how... like where I am right now as a person and that was kinda really cool because I've never really like taken the time to just like sit down and like think about it. I think it's always just kind of like oh yeah, I think I'm here or I'm there, whatever but it was easy and difficult in the same sense; difficult because I had to actually think about it and easy because I could just write what I was thinking. I can just like write what I've been feeling for the last semester. Is that kinda what you mean? It was really useful because I go to find out a lot more about myself that I though, like... I got to kinda like learn about myself when I was writing it. You know what I mean? It was kinda like I don't know. It was really good though even

though it took like a lot of time and stuff it just, I loved it, like things like this like, "enjoy life and find my own path to happiness." Or like, "respect and love yourself as well as others." Like that's something that you never think about. It's just common sense but I had to actually like think about and I had to actually evaluate myself while I was doing it and no one has ever asked me to do that before. It's always just like something you do by yourself but no one takes time to do it. So that's why it was really useful because I got to find out a lot more about myself. And I was like, Wow.

Sarah - Ahm. Not really. I just really like learning about myself. Like I don't know many people that evaluate themselves at the end of the semester, like their own personal life. I don't know many people that do that. Like actually take the time to sit there, "I really learned this." Or like trying to figure yourself out. It really helped me trying to figure myself out because I've been kinda lost lately and it was just like. And this was something I had to do and at the same time it was something really worth doing. I really really enjoyed the personal ones [reflections] because I know I could be honest with you. I got to actually like think and actually get marks for it. At the same time I could be brutally honest with you and honest with myself. And I really liked that. Like when I wrote that I've been drifting away from my friends and I don't have to be cool and I don't have to do the things that the cool girls do and like I never really thought about that before and I never really thought about happiness and what it was but after writing this and trying to make sense of I realized and I discovered that happiness is like a feeling it's not a thought. There's not criteria for happiness, there's no criteria for friends, there's no criteria for who you should be. It's just who you're supposed to be and I think that was really cool to try and figure myself out. Like, I had to. I couldn't just be like I'll just do this tonight. You know like it was something I really could apply my knowledge into and how I was feeling and I think it came from the heart or it came from the head even. It felt really good to get it all out and just like write about it and make

myself feel big ... I don't think it was just a project. I think it's really for yourself. I don't even see this as a school project, I see it as something I could use. Like some of the goals were really useful to me and I was just like, Wow, Like I wanna learn more about these goals and I wanna dig deeper into them like some of them like to think deeply, logically and critically, like some of those. No one has ever asked me to think like that ever before and then I can keep thinking like that, like next year and when I go into college and that was really good.

Deeper Understanding of the Co-op Goals and Content

Portfolios are only helpful if the sense of accomplishment, pride and growth mentioned earlier actually reflects reality. The data provides evidence of significant learning and reinforcement of that learning with respect to the goals. It also suggests that for some students this learning was deepened and enhanced by creating the portfolio while for others the portfolio led to little or no additional learning. Most reflections, when coupled with the supporting evidence showed that students had grown significantly with respect to the goals. There are many examples like the following from students' reflections:

Tina: (portfolio - reflecting on the goal understand and critically analyze how the government works) - Before learning about government I thought everyone voted for the leader of the party or the party itself. I also didn't think that any of the government issues concerned me but they do because I will need to know when I am able to vote.

This portion of Tina's reflection clearly shows that she has improved her understanding of Canadian government especially when considered in combination with

the evidence she included. This evidence consisted of the government unit test, a critique of our system of government and an assignment on a field trip to Provincial Court.

Through reflection and evidence a picture of progress and growth emerges.

Andrea's reflection on a different goal statement further illustrates this.

Andrea: (portfolio - reflecting on the goal be knowledgeable about and think deeply and critically about world issues). Now I understand how globalization is what our economic system is based around, and how because of that the whole world is affected when one tiny change is made... I still don't understand how the media can ignore these issues like they do.

However, it is Andrea's evidence and her description of it that substantiates her claims of growth:

I chose my world issues essay as one of my pieces of evidence. It shows how I understand that world issues are all intertwined with one another ... I also chose my world issues web as evidence, because it shows how I can connect the issues and display how they all lead to one another.... I included my "Bought and Sold" learning log entry as well, because it shows how I could take lyrics from a song and relate different lines to world issues and what it's doing to our society...

A closer look at the evidence shows that Andrea has indeed made significant strides in her understanding of global issues.

Linda's reflection on her evidence also shows substantial growth.

Linda: (portfolio - reflection on the goal be knowledgeable about and think deeply and critically about world issues). - As evidence I have included three pieces of my work: first I have included my global issues test. I have included this because I think it shows my ability to connect different ideas

together and use them logically to complete a test. I have also included my solution stations, which you can find in my learning log behind tab number 6. I think this shows my ability to take a serious topic and my ideas, then combine them to have an opinion that was well thought out and involved some critical thinking. As the last piece of evidence for this goal I have decided on my first nations essay. I think this shows my ability to think deeply about a serious topic without getting wrapped up in my own opinion.

In the following reflection, Jim draws on evidence from both Social Studies and English to show his progress.

Jim: (portfolio - reflecting on the goal understand information broadly and deeply through listening, reading and viewing). - My evidence for this goal includes video notes from war videos, listening answers to questions from the song "Bough and Sold" and quotes from the Lord of the Flies. I chose to use the video notes because I paid close attention to those movies and wrote notes down that helped me understand Canada's role in WWI and WWII. I chose to use "Bought and Sold" questions because listening to the song over and over helped me understand deeper than just what she was saying, but what she meant by saying normal things that eventually were related to world issues. My quotes from Lord of the Flies were helpful because they made me pick out sentences that were either character, setting, or symbol related.

These types of reflections were the norm in the portfolios. They show good understanding of the goals. Combined with the evidence provided in the portfolio they also show significant student growth with respect to the goals.

Many students wrote in their questionnaires that creating the portfolio was a challenging activity that required substantial thought about the goals and the content of the program.

Questionnaire: I liked the fact that I had to think deeply about each goal.

Questionnaire: I prefer the portfolio because it will demonstrate what we learned. In an exam we will just know what we know and guess on the rest.

This is an interesting response because it says something about this student's approach to traditional tests.

Questionnaire: I liked how I got to go back and look at my work. In other classes I would usually just throw away my book but not for Co-op. I think that by going over everything this way I was given the chance to clearly understand the things that I learned instead of a test where I would be tested on the things I wasn't clear on.

This student is very specific about how the process of gathering evidence helped him/her to gain a good understanding.

Writing the reflections also forced students to become clear on what the goals meant:

Questionnaire: I understood them [the goals] a lot better. I pretty much wrote explanations of them and had to know each one very well.

Some students also felt that the portfolio improved retention of the semesters content.

Questionnaire: It's [the portfolio] good for retaining the stuff we learned.

Tests don't really do that. So are tests really better in the long run?

Questionnaire: I learned I still know most things from throughout the year.

In some cases the process of looking for evidence led students to significantly deepen their understanding of the goals. For example, one student was looking for evidence to show that she could locate and assess information. While working on this in class, she was convinced that the only useful piece of evidence was the research project she had done. When I suggested she consider the history portion of the course she immediately thought of the family history assignment and asked if that could be used. Before I could even answer she said, "Yeah, I guess I can [use it] because I did have to find information and assess it but in a different way than in the research project." With her now expanded definition of the goal she was able to find other pieces of evidence towards this goal.

The following example suggests that not only did students show evidence of substantial learning in their portfolios; some deepened and enhanced that learning through rigorous reflections:

Sarah: (portfolio - reflecting on the goal to know our history and heritage so we can understand the present). - I feel that the beginning of my knowledge began on one of our first learning log assignments called the New People. We were asked to think deeply about a situation of new people coming to our land, bring more of their people and eventually taking over. We used ourselves as victims, and therefore got the chance to imagine what it was like for the First Nations when the Europeans invade them. Although I didn't finish my essay (FN), I did research on the topic, and tried to put what I know together. With just a little butt of knowledge, I feel that I had a better understanding ... on what the real issues were. It also made me appreciate why First Nations fight so hard for what they deserve (or don't deserve) today. All of that learning pushed my basic opinions away, and I started to form some educated opinions...

Writing her portfolio reflection seems to have given Sarah a better sense of the big picture with respect to First Nations issues in British Columbia.

Although few students availed themselves of the opportunity, they were encouraged to improve existing assignments for portfolio evidence. The instances where this was done are good examples of enhanced and deeper learning through engaging in the portfolio process. Sarah provides a good example of this:

Sarah: (portfolio - reflecting on the goal think deeply, logically and critically). - Last but not least, I decided to write a new version of my worldview scenarios. I thought it would be a good piece of evidence that I have learned new things this year, and that I've taken into learning them I feel like I've answered the questions to the best of my knowledge and I put some real thought into them.

Sarah commented specifically on how the portfolio reinforced and deepened her learning.

Sarah: (interview) - I found it useful because I could really look back on the year and the semester and I was like wow I didn't know I learned this and that was kinda cool. With like world issues and government that was like yeah ok I learned it and whatever but when I actually had to write about it and like think back on it I realized how much I learned. Like you don't do that in other subjects. Like in Math you like learn something and then you move on and you barely ever look back on it. But with like this I got to learn it and then I had to like relearn it when I had to write back to it because you have to kinda like think back to what you learned and you're like Oh yeah, I learned this and it just kinda like it all comes back in your mind.

Some reflections showed that students did not have as complex a level of understanding as I had hoped they would. However, this example provides a good sense

of Tina's level of understanding. It also allowed her to make a personal connection, which may not have been relevant on a more traditional type of assessment.

Tina: (portfolio - reflecting on the goal be knowledgeable about and think deeply and critically about world issues). - I have learnt a lot about my heritage. My background is first nation. I learnt what has happen to them in the past and I hope that it will never happen again. It was so cruel. They were taken advantage of and treated so poorly. They were told that they weren't aloud to live the way they were, in harmony with nature.

Like many others, Tina's reflection made me wish that I had more time with these students to help them develop more nuanced understandings of the complex topics we examined.

In some cases the portfolio reflections showed little evidence of learning. Students went through the motions of writing some kind of reflection but it was clear that their level of understanding was superficial at best. The following reflection exemplifies this:

Alan: (portfolio - reflecting on the goal think deeply, logically and critically). My evidence for this goal includes my big explanation. This shows a great understanding about the world issues and it shows that I thought deeply, logically and critically because I had to write it in my own words. I put this evidence in the portfolio because I got a good mark on it. My second evidence is my World View, which I got 17/20 on.

Alan's reflection provides little evidence of growth towards better thinking.

Examining his evidence did show some deep and logical thought but no evidence of critical thought.

A small number of students indicated in the questionnaires that their reflections did not require much thought which suggests that they did not show much evidence of learning. As in Alan's example above these students were just going through the motions, "filling in the blanks" of what they saw as the portfolio template.

Questionnaire: What I found easy was writing my reflections because I just wrote what came to my head.

Although this response does not necessarily mean that the student did not take the portfolio seriously, it is hard to imagine deep meaningful reflections resulting from this kind of process.

Questionnaire: No it wasn't really useful because I didn't really have to think about what I was going to use.

This response is clearer. This student did not complete his/ her reflections with deep thought and predictably got little out of the portfolio process.

A further possible problem with this kind of assessment is academic dishonesty. Alan used a plagiarized short story as evidence. When I was reading his reflection, the quality of the writing did not match up and I found the story word for word on the internet. In his reflection Alan wrote the following:

Alan: (portfolio - reflecting on the goal express thoughts clearly and creatively by writing and speaking). - My evidence to prove I have accomplished this goal includes my short story. This piece shows my creativity and the ending in it was quite clear. I chose this piece because I got such a great mark on it and it's my best work I have ever done.

Of course, this kind of blatant dishonesty is disheartening and it seems possible that other students are guilty of similar transgressions. However, cheating is a possibility with all kinds of assessment and what is most important is educator's awareness and vigilance of this continuing problem.

Overall, the reflections and their supporting evidence showed important growth in most students. Most thought deeply about the goals and their learning toward them.

Difficult, Stressful and Repetitive Portfolios

Many students found the creation of their portfolio difficult. Some found it challenging because they thought deeply about the goals and their learning and produced something that reflected significant growth. This is the kind of difficult I was hoping for:

Questionnaire: Way too much deep thinking. Aggh head... hurts!

Although somewhat humorous, this student's response suggests that he/she thought deeply about the reflections. The same can be said for the following response:

Questionnaire: The reflections were the most difficult part because they took the most time to do and required the most thought in completing them.

Linda, who did not find the overall portfolio process difficult, did find the reflections challenging because they required her to be clear about her growth.

Linda: (interview) - Some of the reflections [were difficult] I guess because it took a little bit more thinking to think about how I changed during the goal. That was the only part I found difficult.

Other students struggled with the portfolio because they had been struggling all semester for various reasons. Some simply had not done much of the work, and now they

were struggling to find sufficient evidence. Alice and Alan's interview responses represent this small group well:

Alan - Yeah, It was hard. For a lot of goals I didn't really have very much evidence.

Stipp - Why do you think that was?

Alan - Because I didn't do a lot of the work.

Alan was very willing to take responsibility for his struggles with the portfolio. His response still begs the question of how his situation could be improved.

Alice also struggled to find sufficient evidence.

Alice - I loved the reflections. I just didn't like the evidence. It was the evidence, definitely the evidence because whenever I sat down to do a reflection I could do it but as soon as it came down to the evidence I was like I don't have certain things. I could reflect upon it but I couldn't like show it...I felt really stupid because I felt like I didn't know anything from what we learned this semester so that was really hard to kind of reflect upon those things.

Interestingly, both students acknowledged their responsibility in their struggles. This is another example of students taking some ownership of the learning process. Alan missed a number of major assignments and was not especially engaged in class. He also lacks some of the foundational skills to excel in Social Studies and English. Alice missed a lot of classes and had failed to complete some major assignments. In Alan's case, his incomplete portfolio was an accurate reflection of his growth and achievement with respect to the goals. Conversely, Alice was completely paralyzed by this assignment.

Although she had her struggles during the semester, she had done some quality work and clearly had improved her knowledge and skills with respect to the goals. Unfortunately she felt so bad about her semester that she was unable to do the portfolio at all. This seemed to result from a combination of a lack of confidence, a predisposition to get stressed out and a perfectionist streak:

Alice: (interview) - Ahm, when it was first handed out I was totally confused. I'm never going to be able to do this. When the due date started to come up I was getting really stressed out because I was looking at it knowing I didn't have all the evidence that I needed and there was so many goals that I know that I hadn't reached or felt that I hadn't reached. So when I actually sat down to write the reflections I had a really hard time because I felt like I had nothing to reflect on so it just stressed me out really bad and then I ended up not doing it because I'd rather like have my sanity than totally stress out about this because a year from now I'm not gonna remember this project but I wish I would have done it because I know a lot of people learned from it and like noticed that there was goals that they reached but yeah...

Interestingly, even before she fell behind, Alice was stressed out about the portfolio. This is likely to always be the case with some students and I need to find ways to help students manage that stress better. Alice also seems afraid of failure, which paradoxically prevented her from completing the portfolio.

Alice: (interview) - I guess with me I wanna like make everything perfect. I don't wanna like fail at anything so if I feel like I'm gonna fail at something I just don't do it because I'd rather not see the outcome of it.

Alice - Some of them [goals] I just didn't understand, like I can't remember which ones. Some of them just were too confusing and I didn't know how to

explain it and reflect on it. Some of them were really confusing. Some of them I could do like right off the bat like skills and stuff but the knowledge ones were really difficult for me. Because I don't feel that knowledgeable.

Again, Alice's lack of confidence and her need to understand everything perfectly worked against her on this project.

Questionnaire: (Alice told me this was her comment) Writing genuine reflections was the hard part. The reason why I couldn't really reflect is because I feel I didn't even begin to reach the goals and I didn't want to make up b/s either.

This reflection actually contradicts a previous one where Alice states that she loved the reflections but struggled with the evidence. Alice's case is interesting because she did worse on the portfolio than during the semester. She in fact did have a significant amount of evidence to show growth on a number of the goals but couldn't get past feeling guilty about the overall lack of work she had completed. There were three other students that seemed to have similar experiences. The sheer amount of work required writing of finding relevant evidence, writing 12 reflections, writing a conclusion and putting it all together seemed to overwhelm these students. One student suggested that I "find a way to make small parts of it doable throughout the year." This would certainly be a way of reducing the stress level of all students.

In fact more than just the students who struggled in the program talked about the portfolio project causing a lot of stress at the end of the year. Five of the questionnaire respondents had responses that referred to stress when answering the question, "How did the portfolio affect your Co-op experience," similar to the following:

Questionnaire: There was a huge weight on my shoulders knowing I still had to complete it.

The following student clearly views the portfolio as an assignment with high stakes:

Questionnaire: The portfolio made my Co-op experience stressful. If I didn't hand it in I would have failed.

Some of the students who talked about stress acknowledged their own part in creating that anxiety:

Questionnaire: More stressful but that's my fault.

Questionnaire: The portfolio made me really stressed out because I actually wanted to do a good job on it but I didn't leave myself nearly enough time.

There was also a wide spread feeling that having to write on 12 different goals led to significant repetition in the reflections. This in turn made the process less meaningful for some students. Over one third of the respondents made some kind of comment about repetitive reflections or too many goals:

Sarah: (interview) - No, I felt like sometimes I just kinda like repeated myself and it bothered me because I was like blah, blah, blah the same thing over again but just because I didn't really know what else to write. This semester hasn't been that eventful for me because I haven't completed that much and I haven't like achieved either and that kind of bothered me but at the same time I feel like I have a achieved stuff. Like just like I was repeating myself a lot. I wish I had more experiences that I could write about but I don't.

This problem was exacerbated for students like Sarah who had not completed all of the assignments and were thus forced to draw from a much smaller pool of evidence.

Tina: (interview) - Well, at the, when I was writing all of them at the last few I found that I was saying the exact same thing over and over again, like there was so many reflections there was nothing left to say. Yeah like because most of the goals were basically pretty much close to the same so I was using the same evidence and I would say the same thing about each evidence sort of thing.

Tina felt repetitive for a different reason. She saw a lot of the "Actions and Attributes" goals as similar leading to redundancy in her reflections.

Other students felt like they generally ran out of things to say in the later half of their portfolio:

Questionnaire: It got boring after about six reflections because I had nothing left. to say.

Questionnaire: I didn't like the amount of goals we had to write about. I thought there were too many of them.

I see this as the most legitimate concern raised by students. Too many goals were similar, especially in the Actions and Attributes section. This meant evidence overlapped making the reflections and the evidence repetitive. It also seemed that because the structure of the reflections was provided in two sample responses on the assignment sheet (see Appendix B), the act of writing them, especially the later ones, became tedious for some students.

Another problem here was that the students' reflections were not always specific enough to each goal. For example, a student who used her research essay to show evidence of critical thinking needed to explain this specifically, perhaps by even pointing to a particular section of the essay and making a clear connection. Instead some students simply cited their essays as evidence but didn't specifically explain how it demonstrated a particular goal leaving the reader to make the connection. This led to repetition and reflections that failed to serve part of their purpose: to show deep understanding of the goal and specific evidence of learning towards it.

A number of students advised me to reduce the number of goals because they felt that it would improve the quality of the final product:

Questionnaire: To improve this project you should lessen the goals so people can elaborate on each goal.

This student may have written deeper and more detailed responses, had he/ she been required to write fewer.

Questionnaire: I would make it so there are less goals to be reflected on. By the time I got to the last goals I was so tired of writing that I didn't put as much effort that I had in some of the others.

This student simply felt worn down by the end of the process. It seems likely that this did not only affect his/her effort, but also his/her attitude towards the assignment.

The next response is similar:

Questionnaire: It took too long so by the end I slacked off, not purposely but because it got tiring.

Most students were challenged by the portfolio assignment. Not surprisingly, a small number struggled to find enough evidence to support their claims of growth because they had not been performing well all semester. A larger number found that writing 12 meaningful reflections was difficult and often became repetitive. A significant number also found the scope and size of the project stressful.

Assessment of Subjective and Individualized Goals

The portfolios proved to be a way to assess growth that is subjective, multifaceted, individual and therefore virtually impossible to standardize. I am talking here about the kind of learning that is messy and difficult to assess. For example, the Social Studies 11 IRP gives as its overarching goal, "to develop thoughtful, responsible, active citizens who are able to acquire the requisite information to consider multiple perspectives and to make reasoned judgments." This is extremely difficult to assess through traditional means. Most of the Co-op goals under Actions and Attributes are extremely subjective and difficult to assess (see Appendix E). Trying to pin them down to a specific standard would mean losing their essence. Having them as part of the portfolio as something to work towards meant that students could interpret them individually and progress in their own way. One of these goals was to "stand up and serve my community." Providing evidence of growth towards this goal is an excellent example of learning that may be overlooked and as a result not valued using traditional assessment. Sarah provided evidence of coaching ringette in the community and organizing a celebration of life for the deceased boys:

Sarah: (portfolio) - It's not like we did really well, beat every team and all the girls were all stars. It's more like the girls got to go out, play their

hearts out and come out of the game feeling like they did something positive. It was really nice to see that the team wasn't divided into cliques like teams usually are. I really felt like the girls looked up to me and I have a good feeling that I taught them something...After the OBCS accident, a few people took charge of the idea to do a community fundraiser called the Celebration of Life, to not only help remember the passing of the boys, but also in a way to make money to donate to the boys charities. I had brought the idea to Mr. Stipp and then Mr. Hignell (the acting principal), and the rest of the volunteer staff took over from there. It was a very successful event raising over \$9000.

The portfolio was an effective way for this contribution to be recognized and for the learning to 'count.' More importantly, it gave Sarah the opportunity to reflect on her volunteer experiences giving her a feeling of efficacy and perhaps increasing the likelihood of future involvement:

Sarah: (portfolio): During these two events in my life, I learned that I really like to see people happy. Whether I'm teaching kids to pass a ring, or coming up with ideas for outdoor games at the celebration, it's so important to me that I might just make a difference.

Using the portfolio to assess these subjective goals proved especially useful in the Co-op program since it contains Career and Personal Planning and Work Experience components. For example, Joan's reflection on the goal *think deeply about what line of work I want to pursue post secondary* shows that she has made progress on this goal.

Joan: (interview) - At the beginning of Co-op I really didn't have an idea of what I wanted to be. I found myself to be very confused of what direction I was heading in ... Now at the end of the semester I have realized what I'm interested in doing with the rest of my life, I want to be a chef. I totally

enjoy cooking and I'm really interested in what I'm doing. I love it, except for cutting my finger.

Joan goes on to talk in more detail about her process of thought and how she arrived at her current career plan. The portfolio proved to be an assessment tool that allowed for a completely individualized response to certain goals.

Assessment for a Wide Range of Abilities

A further advantage of the portfolios was that they allowed all students to work at their level to complete them effectively. Strong academic students were not stifled and some produced truly remarkable work. Some of their reflections far exceeded my samples in depth of thought and it was clear that this process was of tremendous benefit to them. They were able to go above and beyond the expectations. Most of Andrea's reflections were as in depth, specific and thoughtful as the following samples:

Andrea: (portfolio - reflecting on the goal understand information broadly and deeply through listening, reading and viewing). -

Before Co-op, I never thought really deeply about information that I'd observed. I just focused on writing down all the stuff I'd heard or seen, not about what the information meant. When I took notes, I wrote a bunch of stuff just to say I did the work, but a lot of the time it didn't help me in my learning because I didn't truly understand it. Now I've realized that I need to write efficient notes, and think of key points, not just whatever words I hear. I've learned to take useful notes that I can use for studying, and taking information that I actually need; not just random parts of the textbook or think I view just to say I did my work. There's no point of taking notes if you don't understand them, and I finally realized that this year. I also think more deeply about information I read....Overall, I have gotten much better at writing notes and understanding what I read or view. I've

learned to summarize what I see, not just picking random information and writing it down...

Andrea: (portfolio - reflecting on the goal know our history and heritage so we can understand the present). This goal means to take a look at the events of the past and analyze what effects that has made on our world today. It means to make sense of the present by looking at the past. Before Co-op I didn't realize how much the past has impacted our world and how it is today. I know that wars and other acts in the past would influence some peoples actions but I didn't know to what extent I have also included my history chart in my learning log, because it shows how I understood the progressing events and how the past affects the present by looking at how things progress over the years...

Less academically inclined students were also able to complete the portfolio process and reflect on their growth, which in some cases was quite significant. Some of these students especially benefited from the process because the focus was on what they had done well. Joan is an excellent example of this. Academically she struggled all semester and she narrowly passed English and Social Studies. However she showed significant personal growth in planning her career. Moreover, she developed a level of comfort in front of others that will prove invaluable throughout her life.

Joan: (portfolio - reflecting on the goal express thoughts clearly and creatively by writing and speaking). -At the beginning of the semester I was shy, quiet, and I didn't say a lot, because I didn't like being in front of the class, being the center of attention. It made me feel uncomfortable, and afraid, since I just hated presentations. Now I feel more comfortable and I enjoy it. I got to know the other people in my class, and I didn't care anymore that people were watching me... This was totally worthwhile for me

because I got to be more open. I got to become another person. I came out of my shell and it gave me practice making me not as afraid to made fun of by others...

Joan's learning experience was unique and the portfolio allowed for her to express it that way. Although she did get some credit during the semester for her improved presentations, her growth goes beyond the technical aspects for which she was recognized after a presentation. The portfolio allowed her to express the transformational change that took place inside. The process of expressing it likely solidified that transformation and left Joan with increased confidence moving forward.

As mentioned earlier, there were some students who excelled beyond expectations on the portfolios and a few who underachieved relative to their semester's performance. In many cases I felt that with better time management and greater commitment to quality, students could have done better work. However, I am satisfied that the opportunity to shine was present for the vast majority of students. This is a major strength of portfolio assessment. There are no surprises. The focus is on student learning; on their strengths.

Genuine Responses

A major concern with this type of assessment is the genuineness of student responses. It is possible for students to write reflections that go through the motions and tell the teacher what he wants to hear. I asked a question about this in the anonymous questionnaire and also asked most of the interview respondents about the honesty and sincerity of their responses. Most students claimed that their responses were sincere:

Jim: (interview) - Interrupting. I don't know. I didn't really look at it that way. I wasn't bullshitting or anything so everything in it is true.

Jim's response suggests that he may even have been slightly insulted at the question. The following response has a similar feel.

Questionnaire: My reflections were completely genuine. I've never done anything to please anybody.

The following two students also claim that their responses were completely genuine.

Questionnaire: The reflections I wrote were all me. I wrote what I thought and definitely not what you wanted to hear.

Questionnaire: I think that everything that I wrote for my reflections was genuinely me. I actually thought deeply about what I was writing before I wrote it down.

Joan also felt that her responses were completely genuine and that they helped her gain a better understanding of herself.

Joan: (interview) - Everything I said in my portfolio was the truth. My reflections explained how I changed and through them, I got to notice more about me.

A small minority of students said that their reflections were not entirely genuine.

They indicated that part of what they wrote was what I wanted to hear.

Questionnaire: I think about a half of the reflections was what you wanted to hear.

These ranged from a response like the previous one that indicate a substantial amount of insincere reflection to the following, which suggest that a small portion of the reflections was tailored to please me.

Questionnaire: I think I did write my reflections pretty genuinely but I do think that a small bit of it was written for what you wanted to hear.

Questionnaire: I think my reflections were quite genuine. I may have possibly embellished a small bit, but mostly I tried to be honest!

Tina observed that her reflections were genuine unless the goal was not of importance to her. She also again alludes to her difficulty in keeping her responses varied.

Tina: (interview) - Most of it was me, unless I had no interest in the goal and I just wanted to finish. It was hard coming up with new things to say.

I think that these last three comments are probably indicative of most students' experiences. The majority, I feel, likely approached this assignment as a hoop to jump through but found actual value in it. They may have gotten something out of it without deliberately meaning to. They may even have felt at times that they were just saying what I wanted to hear but actual reflection and deepening of learning was happening regardless of their intentions. I have observed this phenomenon frequently in my own learning. On one level, writing this thesis is a hoop I have to jump through. However, in the process of writing this thesis, even though on one level I just want to get it done, a deeper level of understanding and new ideas have developed. I think many students' experiences with the portfolios were similar.

Integration of Learning across the Curriculum

One of the initial goals of developing a portfolio assessment for the Humanities Co-op was to better integrate the subjects within the program. While some of the goals were fairly specific to some of the disciplines within the program, there were many that could include learning from all the courses. No student talked about integration in the interview or in the questionnaire. At first I thought that meant that the portfolio did not help to integrate the students' learning. However, upon re-reading some portfolios I noticed that there were numerous examples of integrated learning and that this was so natural that neither the students nor I noticed. For example, Andrea used evidence from English and Social Studies seamlessly as evidence for the goal *understand information broadly and deeply though listening, reading and viewing*.

Andrea: (portfolio - reflecting on the goal understand information broadly and deeply through listening, reading and viewing). As evidence, I've included my Painted Door Quiz from English, because it shows how I took information from the book and made sense of it. To do well on that quiz you had to understand the book and the meaning of the symbols involved, and I've shown I can do that. Also I've included my Character Development Essay because it displays how I understood the novel and the theme in it. It showed that I could take quotes and other information about the character and put into an essay, showing that I understood how the character changed and how the author portrayed it. My other piece of evidence is my notes on the video we saw of the Philippines. It shows how I watched the video, took the key points from it and though about what all the information meant that I had written down. I thought deeply about the country and how horrible it must be to be treated the way they are, and I wouldn't have been able to do that without writing down efficient notes and then thought about them.

This type of integration was most noticeable on the *Skills* and *Actions and Attributes* goals. The following reflection from Linda is not very specific but it shows her using evidence from Social Studies, Career and Personal Planning and English for the same goal.

Linda: (portfolio - reflecting on the goal Find and admit weakness but always strive to learn more). As evidence of this goal I have included an assignment from Socials that is titled "About Me". In the first few sentences I admit to both my weaknesses listening and public speaking. This assignment shows that I am able to admit my weaknesses. I have also included a listening comprehension quiz, which show my lack of listening skills. And finally included in this section is my reflective journal form my seven habits project, which shows of my learning about my weakness.

The goals and the portfolio did serve to help integrate student learning. Because the subjects within Co-op are mostly taught individually, further integration seems unlikely.

CHAPTER 6 WHAT LEADS TO SUCCESSFUL PORTFOLIOS?

Ideal Preconditions and Conditions to Portfolio Success

A close look at the findings clearly shows that while the majority of students had positive experiences with the portfolio process, these experiences varied significantly from each other and especially from the small number of students whose portfolio experience was largely negative. This raised the following questions: "Why do some students complete better portfolios than others? Why do some students benefit more from the portfolio process than others? What are the necessary preconditions and conditions in students for portfolio success?" To answer these questions, I took another look at the data to ascertain what differentiated the students from each other. I supplemented this data with a follow-up e-mail questionnaire to my eight interview subjects to substantiate my assessments (Appendix K). I found that a combination of the following three preconditions and three conditions contributed to portfolio success for students:

Three Preconditions for Portfolio Success

- 1. Buy-in to the Program and its Goals
 This refers to how much the students genuinely cared about progressing on the Co-op goals. How worthwhile did they see these goals in the context of their own lives? How worthwhile did they find what they had learned within the Co-op program?
- 2. Buy-in to the Portfolio Process

This refers to how much the students believed that the portfolio process was worthwhile. How useful did they consider the process in the context of their own lives?

3. Requisite Skills

This refers to the foundational skills necessary to create a portfolio. These include: writing skills, organizational skills, reading comprehension skills and reflective skill. Of course, one of the benefits of the portfolio is that it helps students develop these skills but without some level of competence in these areas, they can form a barrier to successful portfolio completion.

Three Conditions for Portfolio Success

1. Good Time Management

This refers to how well students managed their time in creating their portfolio.

Was the portfolio submitted on-time?

2. Hard Work During the Semester

This refers to the effort put into completing assignments and other tasks emanating from the courses within the Co-op program. Were homework assignments completed on a regular basis? Do most assignments represent quality work for that student?

3. Lack of Emotional and Physical Stress

This refers to the students' emotional and physical situation during the semester.

Were there any traumatic events? How did they affect the students? Where

students physically unwell? Were there any other outside issues causing problems for the students?

The pattern that evolved seems to suggest that a higher level of proficiency with respect to these factors increases the likelihood of portfolio success for the student. Table 6.1 shows that in general, students with high levels of the six factors identified above scored higher on their portfolios and felt more positive towards the portfolio process.

Thus the closer to a best case of preconditions and conditions a student possesses, the greater the chance for that student to reap maximal benefits from the portfolio process.

I developed these preconditions and conditions by examining each of the interview subjects' cases individually searching for patterns to emerge. I asked myself the questions: "Why did student 'x' succeed?" "Why did student 'y' not succeed?" I began the process of answering these questions by guessing based on what I knew about the students. I then tried to confirm or disconfirm these guesses by looking at the data. I also created a follow-up questionnaire for the interview subjects to help with the process of confirming my hunches (see Appendix K). In this manner I slowly developed the preconditions and conditions for portfolio success.

For example, I asked myself, "Why did Alice fail to complete the portfolio?" I was somewhat surprised that she had not completed it because the kinds of tasks required in portfolio creation played towards her strengths and were things she had enjoyed doing up to this point like introspection and reflective writing. My initial guess about her lack of success with portfolio got me thinking about emotional stress because she seemed under a lot of strain much of the time. When I re-examined Alice's interview responses,

there were numerous statements relating to emotional stress created by factors other than the portfolio like the accident and the anniversary of the death of a friend. Alice also stated that she was not able to cope well with stress. Hence I began to postulate that in Alice's case, her level of emotional stress played a role in her inability to complete the portfolio.

When I subsequently looked at Sarah's case it also surprised me. Her portfolio was outstanding yet she had missed many assignments and considerable amounts of class time. She seemed very distracted much of the semester and was also frequently quite stressed. I considered what was different between her and Alice. It seemed to me that Sarah had really bought into the goals and the portfolio in general and again the data confirmed this. I went through this same process with all eight of my interview participants comparing and contrasting their attributes and eventually arriving at table 6.1.

Table 6.1 Study Participants' Levels of Portfolio Preconditions and Conditions

(See Appendix L)

(See Appendix L)											
	Buy-in to Program and its Goals ¹	Buy-in to the Portfolio Process ²	Requisite Skills ³	Hard Work During the Semester ⁴	Time Manage- ment ⁵	Emotional and Physical Stress ⁶	Quality of the Portfolio ⁷				
Tina	4	5	3	4	4	3	В				
Linda	4	3	4	5	3	3	В				
Andrea	4	4	5	4	2	3	Α				
Jim	3	3	4	3	2	3	C+				
Sarah	3	4	5	2	3	2	В				
Joan	4	4	2	3	4	3	C+				
Alice	3	2	3	2	1	1	F				
Alan	2	1	2	2	1	1	C-				

While these numbers are subjective and are not meant to portray a precise form of measurement, but rather give a sense of the level of the students' preconditions, they are based on a variety of data.

- Buy-in to the Program and its Goals was measured as follows: On a scale of 1-5 (1= none, 2= a little, 3= some, 4= quite a bit, 5= a lot). This was determined through data from the follow-up questionnaire (see Appendix L), interview responses, portfolio reflections and informal data gathered throughout the semester.
- Buy-in to the portfolio process was measured as follows: On a scale of 1-5 (1= none, 2= a little, 3= some, 4= quite a bit, 5= a lot). This was determined through data from the follow-up questionnaire, interview responses, portfolio reflections and informal data gathered during the portfolio process. This is a similar measure to "Attitude towards the Portfolio" in Table 3.1 and further explained in Appendix L, but with additional data from the interview and the follow-up questionnaire.
- Requisite skills were measured as follows: On a scale of 1-5 (1= severely lacking, 2= low, 3= adequate, 4= strong, 5= exceptional). This was determined by looking at written work from the student throughout the semester, the portfolio reflections, interview responses and other informal evidence gathered throughout the semester.
- 4. Hard work during the semester was measured as follows: On a scale of 1-5 (1= none, 2= a little 3= some 4= quite a bit, 5= a lot). This was determined through data from the follow-up questionnaire, interview responses, portfolio reflections and informal data gathered throughout the semester.
- Time management was measured as follows: On a scale of 1-5 (1= very poor, 2= poor, 3= adequate, 4= good, 5= excellent). This was determined through data from the follow-up questionnaire, interview responses and the date the portfolio was submitted.
- 6. Emotional and physical situation was measured as follows: On a scale of 1-5 (1= extreme amounts of stress, 2= significant amounts of stress, 3= some stress, 4= a little stress, 5= no stress. This was determined through data from the follow-up questionnaire, interview responses, and informal data gathered throughout the semester.
- Quality of the portfolio is based on grade received on portfolio evaluated according to the assessment rubric without any points deducted for lateness.

Interdependence of Portfolio Benefits and Shortcomings

Not only did students with high levels of the preconditions and conditions for portfolio success produce better portfolios, but also the benefits gained by these students reinforced each other through a variety of positive feedback mechanisms. Figure 6.2 shows that sense of accomplishment, pride and growth, increased motivation for future learning, increased confidence and self-esteem, increased student ownership and integration of leaning across the curriculum all function interdependently with each other. For example, if a portfolio has left a student with a sense of accomplishment it seems likely for that student to feel a greater level of confidence which in turn will increase his/her motivation for future learning. Thus, the closer to an ideal set of necessary preconditions a student possesses, the greater the chance for that student to reap maximal benefits from the portfolio process. Figure 6.2 represents an ideal scenario unlikely to be found in practice. *

At the opposite extreme, a student with none of the optimal preconditions and conditions is likely to produce a poor portfolio or no portfolio at all and is unlikely to benefit from the process. Figure 6.3 illustrates this scenario. Whether or not a student at this end of the spectrum completes a portfolio, the experience is likely to be negative. The aspects of portfolio assessment that made it benefit a student at the positive end of the spectrum, now work to do the opposite. They still function interdependently but now they continually reinforce the negative. For example, a student who failed to complete her portfolio is likely to gain a sense of failure rather than accomplishment from the whole experience. This in turn may decrease the students' confidence and motivation for future learning and so on.

The model functions as a continuum. Virtually all students fall somewhere between the two extremes in terms of the preconditions and conditions and therefore in terms of the benefits they gain from this type of assessment. Because the positive and negative outcomes reinforce each other, most students have either a predominantly positive or a mostly negative experience. In this study the vast majority of students seemed to have primarily positive experiences while reaping a number of interdependent benefits from the portfolio process.

However, the relationship between the preconditions, the conditions and portfolio success is not a simply linear one and cannot be easily quantified. Figures 6.2 and 6.3 are not designed to predict accurately which combination of preconditions and conditions at which levels will lead to which levels of success. Rather, they aim to show that in most cases better levels of the preconditions and conditions lead to better portfolio success and greater benefits for the students and that these benefits are interdependent. To better illustrate this relationship I will take three of my study participants, Alice, Andrea and Jim "through" Figures 6.2 or 6.3, outlining their preconditions and conditions, the subsequent quality of their portfolios, and the benefits each student gained from the process. I chose Alice because she did not submit a portfolio and thus represents one side of the spectrum. Conversely, Andrea's portfolio was excellent and therefore she comes closest to the other side of the spectrum. Jim falls somewhere in the middle and is reasonably representative the majority of participants.

Figure 6.2

Best Case Preconditions, Conditions and Outcomes of Portfolio Assessment

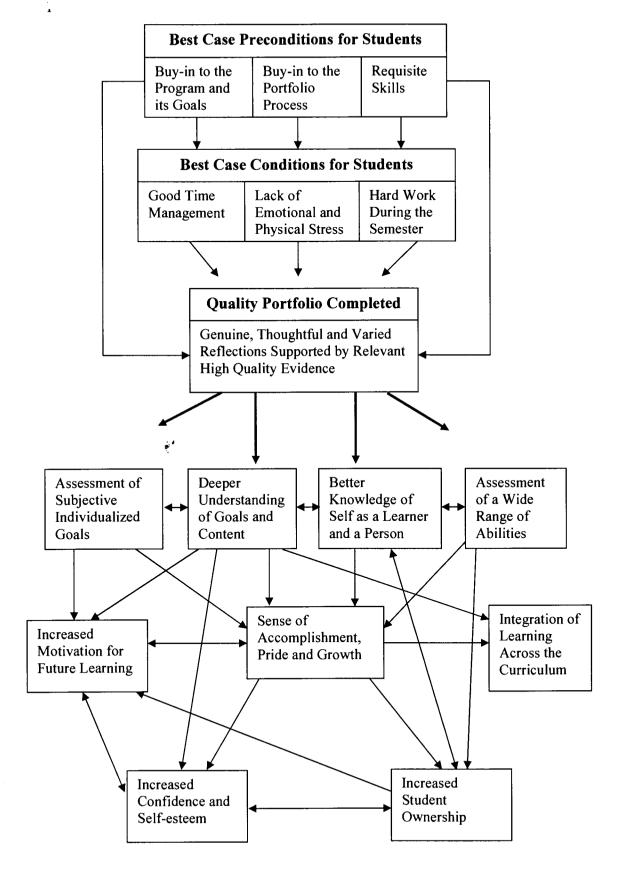
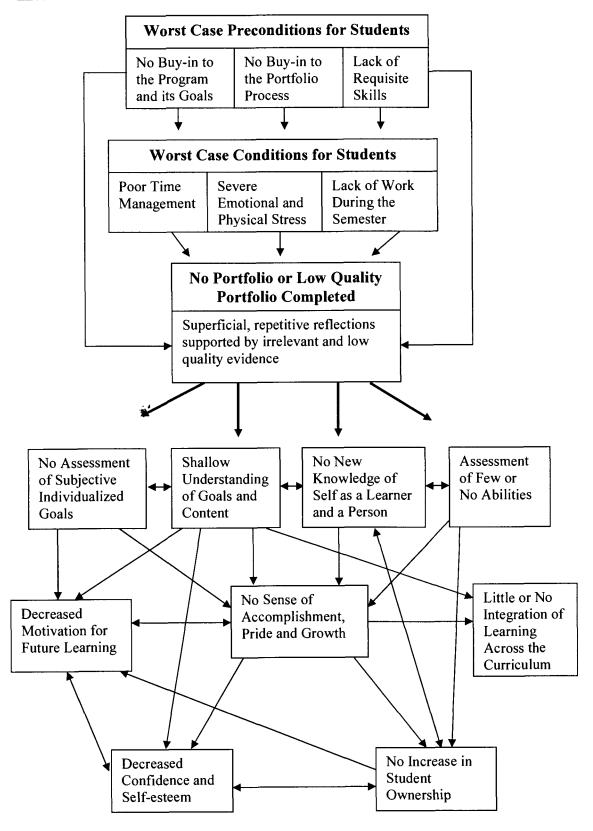


Figure 6.3

Worst Case Preconditions, Conditions and Outcomes of Portfolio Assessment



From Table 6.1

Andrea

	Buy-in to Program and its Goals ¹	Buy-in to the Portfolio Process ²	Requisite Skills ³	Hard Work During the Semester ⁴	Time Manage- ment ⁵	Emotional and Physical Stress ⁶	Quality of the Portfolio ⁷
Andrea	4	4	5	4	2	3	l A

Andrea's portfolio was one of the best in the class and not surprisingly she benefited more than most other students from the process. Andrea's experience fits nicely into figure 6.2. Andrea's level of buy-in to the program and the goals were fairly strong at the beginning of the semester and seemed to increase steadily until the end. She spoke and wrote very positively about the portfolio process, indicating a strong level of buy-in. Her level of requisite skills is exceptional. Andrea is an extremely strong writer and reader. Moreover, she possesses excellent metacognitive and organizational skills.

Although her time management was dreadful and she submitted many assignments late, she worked hard all semester and produced excellent quality work.

Moreover, while the accident impacted Andrea, and one of the boys was her friend, she was able to cope with the stress it created well. In her portfolio she wrote:

It [the accident] struck me so hard, and I thought I would never be the same... I became a much stronger person, and realized that no one should ever take life or anything for granted." Andrea did not report any other major stressors during the semester.

Andrea's level of the preconditions and conditions led her to create an excellent portfolio from which she gained a lot. Andrea's interview responses suggest that her level of buy-in to the program, its goals and the portfolio process were major factors in her

successful completion of the portfolio and in her reaping so many benefits from it. The following excerpt from the interview with Andrea illustrates this point:

Andrea: Yeah, I realized that by the first part of the semester when we made up the goals, ok we have to work towards these now and like setting those goals was good because if we didn't have goals to work towards we wouldn't have changed very much and I think that I changed guite a bit... Before I kinda just did the work to get the marks for it. In Co-op the stuff we learned actually made me want to learn about it like the research essay. I wanted to learn more about teenage pregnancy and I found out a lot of stuff that I never knew before and it made me think that there's so much stuff that I can learn about... Like I said if we didn't have goals then I would still be doing the work just to have it done and not to actually learn anything and the goals made me actually strive for them and see what I could push myself to do how I could change...The portfolio actually was a chance to get me to think about what I learned. And it made me realize that I learned a lot and it made me realize that I could learn more about certain things and if I didn't do the portfolio I wouldn't have really realized that... I think it was definitely one of the better ways to evaluate how you did in the course.

Because she had already bought into the goals and the program, buying into the portfolio was not a big stretch. As she was creating her portfolio, Andrea noticed the benefits of the process, which in turn pushed her to do better work. The fact that she had significant amounts of high quality work to use as evidence (resulting from her hard work) and a high level the necessary skills, undoubtedly made the process easier for her but it seems that her genuine belief that the process was meaningful was the major factor leading to high quality and beneficial portfolio.

Andrea did reap numerous benefits from the portfolio process and she is closest among the participants to the end of the spectrum represented by figure 6.2 in terms of her level of the preconditions and conditions, the quality of her portfolio and the subsequent benefits she gained. Andrea's reflections and evidence show that she had a deeper understanding of the program goals and content and herself after completing the portfolio. These words from her portfolio conclusion provide an example of this growth:

Andrea: (portfolio conclusion) - I know so much more about the world we live in; some information was disturbing, some was fun to learn, but all of the information opened my eyes.

Moreover, the portfolio clearly left Andrea with a great sense of accomplishment.

The following statement from Andrea's interview and the subsequent statement from her portfolio conclusion support this:

Andrea: (interview) - I just think it was worthwhile because if I didn't do the portfolio I wouldn't have thought about how much I actually did learn...And it made me realize that I learned a lot.

Andrea: (portfolio) - I definitely think I am a stronger, better, more confident and happy individual.

Andrea's better understanding of herself and the content from the program, coupled with her pride and sense of accomplishment led to increased confidence and self-esteem, increased motivation for future learning and increased ownership. The following interview responses show these benefits:

Andrea: (interview) - Just sitting there and thinking about it and what you have learned and looking at your work and how you've grown throughout the semester. It makes you just realize just how much... if you can learn that much in that small amount of time how much you could learn if you actually put yourself to do it and just learning whenever there's a chance and not just sit there and watch TV that won't make you learn although some TV shows can I guess but to actually go out and motivate yourself to learn more about the world and the things around us because there's so much to learn and some people just don't realize that.

Although Andrea's response is a bit jumbled, it shows that the process of reflecting about all she had learned proved powerful in motivating her to learn more. The following excerpt about her research essay shows increased ownership of the leaning process:

Andrea: (interview): ...but this year the research essay I actually really wanted to learn about it so I did more research than I probably had to and it made it all better in the end because it's more worthwhile and more information and not like information that I don't need that I had to add in there because I had to add enough or anything so I got more than I needed to do it and that made it a whole lot better.

Although this example is not specifically about the portfolio, it does suggest a paradigm shift towards learning for its own sake, which was part of Andrea's Co-op experience. The goals, the portfolio and substantiating growth towards them are all part of that experience. The following statement also shows that the goals pushed Andrea to learn more for her:

Andrea: (interview) - Like I said if we didn't have goals then I would still be doing the work just to have it done and not to actually learn anything and the

goals made me actually strive for them and see what I could push myself to do and how I could change.

In her portfolio Andrea states, "I am now much more confident about myself." Thus, Andrea's genuine focus on the portfolio goals combined with the deep meaningful reflections on her new level of understanding of herself and the curriculum benefited her by increasing her sense of ownership over the learning process, increasing her selfesteem and her motivation to learn. Moreover, the portfolio quite naturally led Andrea to integrate her learning from the four courses within the Co-op program. Another look at figure 6.2 illustrates Andrea's portfolio experience in a more visual form. Although Andrea's portfolio was by no means perfect; she represents the wonderful possibilities this process offers to students.

Alice
From Table 6.1

	Buy-in to Program and its Goals ¹	Buy-in to the Portfolio Process ²	Requisite Skills ³	Hard Work During the Semester ⁴	Time Manage- ment ⁵	Emotional and Physical Stress ⁶	Quality of the Portfolio ⁷
Alice	3	2	3	2	1	1	F

Alice's experience was markedly different from Andrea's. She did not submit a portfolio and got very little out of the experience. Figure 6.3 provides a better sense of Alice's experience than 6.2. Alice's level of buy-in was fairly strong at the beginning of the semester but tailed off by the end. She worked hard at times, again mostly at the beginning but did very little at the end. She managed her time poorly. She did possess the necessary skills to complete the portfolio. Her writing, reading and metacognitive skills are solid and she is extremely organized. Unfortunately, Alice had an extremely traumatic

semester. The accident was exceptionally hard on her and shortly thereafter, the anniversary of a close friend's death proved difficult. Alice also suffered from a number of physical ailments during the semester, which caused her to miss school. She sums all of this up nicely in her response to the follow up questionnaire:

Alice: Again to tell you the truth I worked my BUTT (emphasis in the original) off at the beginning...For the first little bit I didn't skip I did my homework. I was into it. I loved being there, then stuff kept happening and I am not one to deal with stress and tragedy very good cause I've been through so much of it. So when so many awful things are going on in your life you don't have time to think about school because your just trying to stay somewhat happy.

Although it is impossible to pinpoint exactly what caused Alice not to complete her portfolio, it seems that too much emotional stress was a major factor. In fact these stressors were partially responsible for her decreased amount of buy-in to the program and her decreased level of work. Alice also struggled with time management as she admits in this comment from her follow-up questionnaire:

Alice: To tell you the truth I didn't manage my time at all. I would like to plan it out when I was gonna work on it then I'd end up going out with my friends or playing on the computer and just being lazy...

Alice's combination of deficient preconditions and conditions was so problematic that she did not complete her portfolio. This made the entire experience negative for her and rather than reaping benefits from the process, Alice was probably worse off at its conclusion. As the following comment shows, she felt that she did not understand many

of the goals or the content of the program (when in fact some of her assignments and tests indicate otherwise).

Like I learned stuff, but I just felt like I didn't have that much to say about it because I slacked this semester so I just didn't feel as smart as I thought I was.

Again, figure 6.3 provides a better sense of Alice's experience than figure 6.2. Rather than leaving with a sense of accomplishment, Alice felt like she had failed which in turn decreased her level of self-esteem and her motivation for future learning. In her questionnaire she wrote, "The portfolio made me feel bad about myself, like I can't do it." Of course, having failed to complete the portfolio, Alice did not integrate her learning across the curriculum, nor did her sense of ownership improve. Perhaps the only positive part of the experience was that she did leave with better knowledge of her self as a learner and as a person.

Alice's example illustrates the interdependence of the shortcomings of the portfolio process (see figure 6.3). It shows the possibility of this kind of assessment actually leading to negative consequences students.

JimFrom Table 6.1

	Buy-in to Program and its Goals ¹	Buy-in to the Portfolio Process ²	Requisite Skills ³	Hard Work During the Semester ⁴	Time Manage- ment ⁵	Emotional and Physical Stress ⁶	Quality of the Portfolio ⁷
Jim	3	3	4	3	2	3	C+

Andrea and Alice represent fairly extreme examples of portfolio outcomes. Jim's case shows a middle of the road experience and one shared, although with different

particulars, by a majority of students. By that I mean many students completed portfolios of good quality and derived significant benefits.

Jim's portfolio was of good quality and his overall experience was positive. His level of buy-in to the program and its goals was low at the beginning of the year but increased significantly when he was working on his portfolio. In his follow-up questionnaire he put it this way:

I wasn't into it at the start of the semester but when I was doing my project [portfolio] it all kinda came together.

Similarly, his buy-in to the portfolio process was low until he began to complete some reflections at which time he began to find the process meaningful. Jim's work ethic during the semester was sporadic. At times he worked very hard and was genuinely engaged. While he did get most of his work done, at times he lost focus and went through the motions. He explained this in his follow up questionnaire stating:

I worked hard on stuff I cared about which was about half the stuff and I lost interest in the other stuff and did less work on it.

Like so many of his classmates, Jim managed his time poorly, submitting his portfolio three weeks late. Jim's skill level in writing and reading are both quite high, and he is also able to reflect deeply. He is a reasonably organized individual. The accident impacted Jim strongly as one of the boys was a good friend to him. However, like Andrea, he seemed to cope well with this trauma and neither his attendance nor his academic performance slipped after the accident.

Jim's increased buy-in during the portfolio process and his high level of the requisite skills were key factors in the creation of his portfolio. Once he was actually

working on his portfolio, the process became meaningful to Jim. This seemed to result from the sense of accomplishment the process was giving him like the following interview response illustrates:

Jim - I liked saying where I was before and where I was after. I don't know it just showed myself how much I learned. Probably happened every year and that but I just like doing this thing I noticed like I could see it so I was kinda proud of myself.

This sense of pride increased Jim's engagement in and ownership of the learning process. That in turn boosted his confidence and his desire to learn. The following comments from his interview sum this up nicely:

Jim - It kinda gave me the feeling that, it showed me that this isn't so bad.

Stipp - Like there's a bit of a point?

Jim - Laughs. Exactly like it can help you... Well it kinda gave me like (pause) it proved to me that coming to school, obviously it sucks a lot but it showed you actually like I learned a whole lot this year, this semester. So it kinda built my confidence and makes me wanna learn, like I didn't, I tried hard but I could a tried harder so like if I would have tried harder I can only imagine how much other stuff I would have learned.

Given Jim's overall attitude towards school, this shift in perception is remarkable. His portfolio conclusion echoes this change and again emphases his newfound confidence.

In general my Co-op experience has been very worthwhile. It showed me that I can actually succeed at school, which I never thought I could before.

When I look at all the goals that I have accomplished it goes to show how much I have grown up as a student as well as a person. I was surprised when I started filling my goals out and realized that I had done it.

A quick look at Figure 6.2 reveals that Jim's experience follows the pattern. Jim's example shows that even students with average levels of the preconditions and conditions were able to succeed on the portfolio. In this sense he is representative of the rest of the participants.

It seems that as long as students have a reasonable level of the preconditions and conditions they are likely to succeed in the portfolio process and reap some of its benefits. Sarah, Tina, Linda, Jim and Joan all had similarly positive experiences even though their preconditions varied significantly. Only an extremely low level of one or more of the preconditions appeared to lead to portfolio failure. In Alice's case it was likely her inability to deal with all of the emotional stressors in her life. Alan also had a difficult emotional time and his weak requisite skill level compounded this. At the same time it seems that an extremely high level buy-in can negate lower levels of the other preconditions and still lead to portfolio success. Sarah serves as an excellent example of this. It must be re-emphasized here that because these conclusions are based on only eight case studies they are tenuous and further research is required to refine them.

The findings presented in Chapter 5 suggest that portfolio assessment in the integrated setting of the Humanities Co-op program is an effective means of assessing a wide range of learning outcomes and hence to determine students' achievement with respect to the program's goals. It also helped students improve their understanding of themselves and the program's goals and content. The process of creating and completing a quality portfolio showed students how much they had learned, leaving them with a

sense of accomplishment. This in turn had positive effects on some students' self-esteem, motivation to learn, and sense of ownership over the learning process.

Unfortunately there is a caveat. Not all students experienced the portfolio assessment so positively. In fact, a small number actually experienced detrimental effects. They not only learned little about themselves or the program goals, they in fact were left feeling badly about themselves, with a low sense of ownership and less motivation for future learning than when they began the process. In some cases this appeared to be an accurate reflection of their progress during the semester and hence an unfortunate but reasonable outcome. However, in at least one case the portfolio did not provide an accurate picture of a student's learning. She clearly had learned more than her portfolio (or lack thereof) indicated and hence the sense of shame and disappointment she was left with, and which decreased her level of self-esteem and left her less motivated for future learning seemed unjustified. While she had every reason to be disappointed in herself for not completing the portfolio, she took her inability to do this to mean that her whole semester was a failure.

Upon closer analysis of each interview subject's case, a set of best-case preconditions and conditions for portfolio success emerged suggesting that students with high levels of buy-in to the program and the portfolio process, adequate requisite skills and who subsequently showed good time management, low levels of emotional and physical stress and who worked hard during the semester were the most likely to create quality portfolios and therefore receive maximum benefits from the process.

Effective portfolio assessment requires teachers to till the soil, so to speak.

Teachers must focus on creating the right preconditions and conditions to make this type

of assessment work to its full potential. Students who believe that what they are doing in school has real value to them will find developing a portfolio genuinely useful and hence will likely work hard to do it well and reap the commensurate benefits. However, they can only do this effectively if they possess the necessary literacy and reflective skills, if they are not overly stressed emotionally or physically and if they manage their time effectively. It is therefore essential for teachers to organize their curricula so as to make them meaningful and engaging to students while also creating an environment which demands hard work and provides opportunities for students to learn the necessary skills while feeling emotionally and physically safe. Of course this will not only benefit the assessment process but the entire instructional process as well. In fact these findings support the notion that good instructional strategies and good assessment not only go hand in hand, they intersect and in one sense can be seen as one and the same thing.

Portfolios cannot work miracles. The benefits they promise are only likely to be realized when the appropriate groundwork has been laid. Once that has been done, their potential as a flexible, multi-dimensional assessment tool which can leave students feeling good about their learning and themselves, and excited about learning in general is exceptional.

Of course there are other factors to consider in creating a fertile environment for portfolios. Teachers' curriculum orientations and their general approaches to assessment are significant factors. Portfolios by their very nature do not fit well into a class that emphasizes rote learning and multiple choice testing. Parent, school and school board support also play a role. However, these issues are beyond the scope of this study. The

focus here is on the students' experiences and therefore also on the optimal preconditions and conditions in students for portfolio assessment.

CHAPTER 7 IMPLICATIONS FOR PRACTICE

Overview of the Findings

This inquiry began by trying to find out how students experienced the portfolio process and what the benefits and shortcomings of that process were. Twenty-six students from two grade 11 Humanities Co-op classes participated in the study and after close examination of their portfolios and anonymous questionnaires, six students were purposefully selected for in-depth interviews. After completing the interviews, a bias in the selection procedure was detected, leading to the selection of two additional interviewees to round out the sample. The analysis of the data generated by this process led to a set of interesting findings.

The vast majority of the students had a predominantly positive experience with the portfolio process. For most the process of reflection and assembling evidence led to a deeper level of understanding of the Co-op program's goals and content and to a better knowledge of themselves as people and as learners. This in turn left them with a well-earned feeling of accomplishment and a sense of pride. Most students specifically commented that while creating their portfolio they were surprised to find out how much they had learned throughout the semester.

Feeling accomplished and proud led to three interrelated benefits for some students. They reported an increase in confidence and self-esteem, a greater level of motivation for future learning and a greater feeling of ownership of the learning process. In addition, there was ample evidence within the portfolios that they helped students form a more integrated and holistic picture of their learning in the program.

However, there were problems with the portfolio assessment. Having students write extensive reflections on 12 goals proved an onerous task, which led to some repetitive responses. For many this made the process less meaningful and meant that some of the reflections lacked depth and conviction. Moreover, the enormous amount of time required to complete the portfolio caused significant stress for a number of students.

A small number of students experienced the portfolio negatively. In extreme cases their experience led to a reversal of the findings where rather than leaving them with a sense of accomplishment, the portfolio left them with a sense of failure. This in turn actually decreased their sense of confidence, their motivation for future learning and their sense of ownership over the learning process. These students learned very little from the portfolio process and it seemed to further alienate them from the educational process.

From an educator's perspective, the portfolio proved to be an excellent assessment tool for assessing goals that were both subjective and individualized. Most students tailored their reflections to their evidence. Even though some of the goals were extremely subjective, the portfolio allowed for a meaningful assessment of progress towards them. The assessment rubric was sufficiently general to allow for this, while being specific enough to set a high standard of achievement for the program.

Furthermore, the portfolio proved to be a form of assessment that offered students with a wide range of abilities a chance to succeed. Students were able to work on each goal at their level of competence while focusing on the growth they had achieved during the Co-op program.

In the process of exploring the students' experiences, a set of best-case student preconditions and conditions for portfolio success emerged. It was found that students

who genuinely bought into the Co-op program, its goals and the portfolio process and came equipped with the necessary skills, managed their time effectively, worked hard during the semester and were not overly stressed emotionally and physically were highly likely to experience success and significant benefits from the portfolio process. The more these preconditions and conditions were present, the greater the likelihood of success. Conversely, when these preconditions and conditions were absent or minimally present students were likely to experience failure with the portfolio process and rather than reap benefits, they were likely to experience negative outcomes. Most students fell somewhere in between these two extremes and most seemed to have positive experiences suggesting that only very low levels of the preconditions and conditions lead to a negative experience.

The findings did not warrant any conclusions about precisely what level of which preconditions and conditions was necessary for which level of success. Rather, they provided a general sense that better preconditions and conditions would most likely lead better portfolio success and more benefits for the students.

Implications for My Practice

Using portfolio assessment in the Humanities Co-op Program has proved promising. Under the right conditions it effectively assesses an integrated program like Co-op and offers significant benefits for students. When I first undertook portfolio assessment, my focus was on the assessment itself. I worked hard to create a good assignment sheet and an effective rubric and spent many hours editing and refining both of these handouts. Although this was vital work, the findings of this research have emphasized the importance of certain preconditions and conditions necessary in students

for portfolios to have maximum impact. Hence, pushing students towards the highest possible level of these preconditions and creating a learning environment which is most likely to lead to optimal conditions will be central to my approach to portfolio assessment in the future.

A Wasted Teachable Moment

Carefully reading all of my students' portfolios has left me feeling ambivalent. On the one hand, I am pleased by the amount of meaningful learning that has taken place for so many students. Conversely, the portfolios have provided me with so much data about my students and their learning that I feel like we have barely begun. Their reflections and evidence have pinpointed for me their strengths and struggles and I would like nothing more than to have another semester with these students. Just as most students know themselves better as learners and as people as a result of creating their portfolios, I do as well as a result of reading them. This finding is supported by Engel (1994) who argues that portfolios show students' learning characteristics and habits of mind because they give students opportunities to reveal themselves through their work. I have also documented a genuine desire for learning among many of my students now that they have completed their portfolios suggesting an exciting teachable moment. Unfortunately, because the portfolios were used mostly as a summative assessment, we were unable to seize that moment.

All of this points me to an obvious conclusion. I have to find a way to integrate the portfolio creation process into the instructional process early in the semester. Of course, that was my intended course of action at the beginning of this research project but despite my best efforts early on to make the portfolio goals and the portfolio process an

integral part of the day-to-day routine, it did not happen. Reflecting back, the major reasons for this seem to be an overly packed semester and a lack of follow through on my part. After working with the goals extensively in the first two weeks of the semester, the students and I became more focused on the day-to-day tasks of Co-op, casting the big picture (the goals and portfolio) aside until later. The nature of Co-op certainly offers a partial explanation as to why we (the students and I) just wanted to "put our heads down" and get the work done without worrying about the big picture or the end of the semester. Preparing for two full-time work placements takes significant amounts of time and mental energy and because all parts of this preparation are assessed authentically (cover letters, resumes, interviews are all assessed by the employers), they become central to the day to day routine. Furthermore, the curricula in English 11 and Social Studies 11 are packed with content making time an ever-present factor. Finally, we have tried to enrich the Co-op program though numerous field experiences and guest speakers, which also take a considerable amount of time and energy (see Appendix M). However, with disciplined follow through and better organization, a semester long focus on the goals and the portfolios is not only possible, it would significantly enhance the overall effectiveness of the program.

If I keep the focus on the goals throughout, working on the portfolio during the semester will seem more relevant to students. This in turn will lead to opportunities for me to read large chunks of the portfolios before the end of the semester. Perhaps a miniversion of the portfolio can be due at mid-term and can then be presented by the students at the parent-teacher conferences. Since the portfolios proved motivational and increased engagement for many students, submitting repeated works in progress throughout the

semester would likely be an effective means to make the most of this benefit of portfolio assessment. This kind of approach would hopefully lead to a steady increase in motivation and engagement throughout the semester.

In fact, the excessive focus on the summative aspect of the portfolio assessment not only represents a wasted teachable moment; rather, it reduces the benefits of the whole process. Completing the portfolios for the end of the semester, in many cases in a mad rush, without having submitted previous drafts reinforces precisely the kind of learning that portfolios are trying to discourage. Too many students are simply getting it done so they can submit it rather that having a meaningful experience. Clark, Chow-Hoy, Herter & Moss (2001) echo the existence of this danger arguing that excessive focus on portfolio as product can decrease or eliminate opportunities for enhanced student engagement and motivation. Therefore, working towards expanding the formative assessment aspect of the portfolios will have numerous benefits.

Increasing Student Levels of the Best-case Preconditions and Conditions

An obvious implication of my findings is that I need to focus on the level of the students' preconditions (see figures 6.2 and 6.3) early in the semester. One idea I plan to adopt came from a student in her interview. She suggested allowing students to create three to five personal goals that fit within the parameters of program. This should increase buy-in to the goals and therefore the program because the students have a greater level of ownership over their learning.

A further change implied by the findings is to decrease the number of reflections students have to write. If the number of core goals could be reduced to seven with an additional three individual goals, students could be asked to choose to reflect on a total of

eight of these goals, reducing their burden significantly and thus hopefully leading to less repetitive, but higher quality reflections and greater meaning. This would have the additional benefit of reducing the students' level of stress and making it easier for them to manage their time.

In addition, I need to become aware of a lack of the requisite skills earlier in the process so it can be remedied. Getting students to submit a reflection for feedback early in semester and having students present a mini-portfolio at midterm parent night should help identify deficiencies. It would be relatively easy to tell who is lacking in which of the skills and allow sufficient time to address problems. By improving my students' levels of the preconditions and creating a learning environment conducive to improving their levels of the conditions, more of them will experience success and reap the benefits from the portfolio process.

Of course, this is easier said than done. For example, I might well identify that a student lacks buy-in into the program, but remedying the situation is a significant challenge. Furthermore, helping a student attain the appropriate writing skills requires one-on-one time that is hard to come by in classes of 30 or more. Nevertheless, focusing on these preconditions and conditions for portfolio success and working towards improvement with students will not only benefit the portfolio process, but my teaching in general.

Implications for Educators Using Portfolios

Even though the relationship between the ideal preconditions, conditions and portfolio success is complex and only a general pattern can be discerned, this pattern has important implications for teachers using portfolios. Figures 6.2 and 6.3 are potentially

useful tools for educators considering the use of portfolios in their classroom. While both figures are specific to this study, it seems plausible that the preconditions would apply in other cases. A teacher using portfolios would be wise to get a sense of his students' level of preconditions and look for students with exceptionally low levels. Teachers should also try to create learning environments that encourage the conditions found to lead to portfolio success. While this sounds like an onerous task, it could be done informally, especially by teachers who know their students well. There is little danger in trying to improve students' level of buy-in, time management skills, work ethic and skill level while trying to reduce their levels of stress. Rather, improving students on these preconditions and conditions will benefit the instructional process in general while also increasing the likelihood of success with the portfolio process for more students.

However, at this time these tools (figures 6.2 and 6.3) are limited by the parameters of the specific situation they were created from. While the barriers to portfolio implementation have been studied from the teacher's perspective (Aschbacher, 1992; Wolfe & Miller, 1997), there is a dearth of research on which preconditions and conditions lead to portfolio success from a student's perspective. More research is needed in other subject areas and at different grade levels focusing on the ideal preconditions and conditions for portfolio success to refine these tools and make them more widely applicable. Furthermore, it would be interesting to explore in more detail if any one of the preconditions and conditions is more important than the others.

Not surprisingly, the findings of this study also suggest that portfolios will not work if students are not engaged in the learning process. In this study engagement was measured as buy-in to the program and its goals and generally speaking, a high buy-in

score was the best predictor of a high quality portfolio. This does not mean that all students have to be totally eager to learn everything at all times, but some level of buy-in is required. Hence, the most well designed portfolio in a class that students find meaningless and irrelevant is unlikely to have many benefits. This notion is supported by findings from McCombs (1991) and Schunk, (1990) whose research on motivation and engagement suggests that when students see the goals they are working towards as personally meaningful, they are most likely to achieve at their highest and most effective levels. While the portfolios did improve students' levels of engagement in most cases, in some students with very low levels of buy-in to the program (engagement) they actually had the opposite effect leaving students discouraged and hence disengaged. This feedback mechanism observed in the current study implies that students need some level of previous engagement and motivation to increase their levels of these through the portfolio process. While portfolios may be helpful in this regard, educators cannot count on them alone to create motivated and engaged learners. Teachers must make it a priority to help students become genuinely engaged in the learning process

The idea that certain preconditions must be met to achieve desired educational outcomes is not new. For example, Michael Fullan (1999, 2000) has noted the importance of certain preconditions and conditions for effecting educational change in numerous studies and books. Furthermore, Newmann and Wehlage (1999) found that more successful schools were those with teachers and administrators who 1) formed a professional learning community, 2) used assessment to focus on student work, 3) altered their instructional practice based on this assessment to improve results and 4) did all of this continually. The pattern of required preconditions and conditions for educational

change is analogous to the current studies findings on portfolio assessment. Just like the best intentioned, well thought out plan for change will not succeed without certain requirements fulfilled, neither will portfolio assessment live up to its potential without certain preconditions and conditions being met. Hence the overall findings of the current study are consistent with what is known about educational change in general; preconditions and conditions are important to consider. Unfortunately no studies have focused on this issue with respect to portfolio assessment and more work is needed.

Moreover, the findings of this study imply that for a portfolio assessment that tries to strike a balance between the three assessment paradigms described by Mabry (1999) while serving a number of purposes, it is also wise to strike a balance in how well defined the portfolio assignment is. The requirements of the portfolio need to be laid out clearly enough that the portfolio can fulfill its contextual and psychometric functions. In addition, if one of the portfolio's purposes is to provide accountability for a program, clearly laid out requirements are important. However, there also needs to be freedom within the prescribed framework for students to showcase personal growth, even when that growth does not fit in neatly to the context of the curriculum. Some personal freedom and flexibility within the portfolio requirements is also important for portfolios that partially fit into the feedback or ownership models described by Wolf & Sui-Runyan (1996). There is debate in the literature about how well-defined portfolio assignments should be. Some, such as Fuevo (2000) argue that for portfolios to be truly owned by students, teachers need to back off and let students play with them without providing any guidelines. Others believe that one of the essential features of successful portfolios is providing students with clear, specific instructions about the format, content and form of

their portfolios (Cole, et al., 2000). Based on the experience with portfolios documented in this study, it seems to me that this debate is really about the operating assessment paradigm and the subsequent purposes of the portfolio. For portfolios that are trying to fulfill multiple functions and operating in more than one assessment paradigm, a balanced approach with respect to the specificity and rigidity of the requirements is called for.

Conclusion

Portfolio assessment holds much promise for educators trying to promote deep, meaningful, active learning. It can provide a means of assessment that is consistent with these goals while holding students and teachers accountable. If implemented successfully, it can effectively assess subjective, individualized goals and deep contextualized learning while leaving students with a better understanding of themselves as learners and as people. Furthermore, it can leave students with an enhanced sense of accomplishment, a sense of ownership, increased motivation for future learning and improved self-esteem.

However, because of its multi-faceted complexity, portfolio assessment is extremely challenging to implement effectively. Teachers must be clear on their purposes and carefully design their portfolios to suit them. Most importantly, they must consider preconditions and conditions in their students such as their level of engagement, necessary skills, work habits, and level of stress and attempt to improve them. Without this 'tilling of the soil,' portfolio assessment will not fulfill its considerable promise. However, if the necessary foundation has been laid, students are likely to create excellent quality portfolios and achieve the above mentioned benefits.

Furthermore, portfolio assessment contradicts much of what many teachers have traditionally believed about assessment. Teachers attempting portfolio assessment for the first time would do well to heed Beth's observation, which although made about the American education system, applies equally well, in Canada:

The central difficulty with implementing a portfolio approach is the uncertainty and discomfort that frequently arise when students assume increased responsibility for their learning. Creating a portfolio demands that students learn about themselves, that they trust themselves and their peers and their instructors, and that they pace and begin to evaluate themselves – unfortunately, this process of increasing metacognition, self-awareness, and responsibility for ones own learning is largely anomalous in American education where student do only what they need to get by and instructors coerce them with the threat of poor grades" (47).

Beth's statement is consistent with my experience in this study. The change required for portfolio assessment to work at its best is a systemic one. Thus, a single teacher in a single classroom working in a school that uses predominately traditional forms of assessment is facing an uphill battle in using portfolio assessment. Despite these difficulties, however, the potential rewards are well worth the effort.

APPENDIX A - ETHICS APPROVAL

SIMON FRASER UNIVERSITY

OFFICE OF RESEARCH ETHICS



BURNABY, BRITISH COLUMBIA CANADA V5A 1S6 Telephone: 604-291-3447 FAX: 604-268-6785

May 1, 2003

Mr. Stefan Stipp Graduate Student Faculty of Education Simon Fraser University

Dear Mr. Stipp:

Re: Portfolio Assessment: Action Research in a Grade 11 Humanities Co-op Program

The above-titled ethics application has been granted approval by the Simon Fraser Research Ethics Board, at its meeting on April 28, 2003 in accordance with Policy R 20.01, "Ethics Review of Research Involving Human Subjects".

Sincerely,

Dr. Hal Weinberg, Director Office of Research Ethics

APPENIDIX B – STUDY INFORMATION SIMON FRASER UNIVERSITY

INFORMATION SHEET FOR PARENTS AND PARTICIPANTS IN THE RESEARCH PROJECT

Portfolio assessment: Action research in a grade 11 Humanities Co-op program

This sheet describes the purposes and procedures that will be pursued in the above research.

Purposes

This two-month study looks at how students experience a comprehensive portfolio assessment at the end of the Humanities Co-op program. A portfolio is a collection of evidence (assignments, learning log entries, pictures, videos, projects, tests etc.) to demonstrate learning. All students in the Humanities Co-op Program are required to create a final portfolio, which provides a compilation of their semester's learning in Social Studies, English, CAPP and Work Experience and comprises one portion of the final assessment for the program (see attached sheet, "Humanities Co-op 11 – Final Portfolio"). The portfolio shows students' progress towards the Co-op goals (see attached sheet, "Why Are We Here"). The study will explore the students' experiences of the portfolio creation process. Are students encouraged to integrate their learning through the portfolio process? Do students show evidence of complex, difficult and contextualized learning in their portfolios? Do students demonstrate growth over time through the portfolio process?

Procedures

All students in the Spring 2003 semester Co-op classes (47 students) are eligible for participation in the study. Only those students who volunteer to participate and have written parent consent will participate. The study's procedures are:

- To closely analyze the students' portfolio with respect to the above-mentioned questions.
- To have all students complete a questionnaire about their portfolio experience.
- To select six volunteer students to interview individually about their portfolio experience.

APPENDIX C - STUDENT CONSENT FORM

SIMON FRASER UNIVERSITY

INFORMED COSENT FOR MINORS AND CAPTIVE AND DEPENDENT POPULATIONS BY PARENT, GUARDIAN AND / OR APPROPRIATE AUTHORITY TO PARTICIPATE IN A RESEARCH PROJECT OR EXPERIMENT

Simon Fraser University and Stefan Stipp, the principal investigator in this project, subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are provided for your protection and full understanding of the research procedures. These procedures will not expose your son/daughter to any physical or psychological stress, nor will your son/daughter be exposed to any harm from electrical or mechanical devices. The only risks involved are those normally associated with participating in the Humanities Co-op Program at Lord Tweedsmuir Secondary School. Your signature on this form will signify that you have received a document, which describes the procedures of this research project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to allow your son/daughter to participate in the project.

	Stipp, Humanities Co-op teacher at Lord Tweedsmuir Secondary
School, to allow	(name of your son/ daughter/ dependent) to
	ect. I have read the procedures specified in the document. I
	be used in this research. I also understand that my son/daughter
•	arch project (but not from the instructional processes of the
	any time without prejudice. I further understand that I may register about the research with the principal investigator named above or
	ofessor of Education in the Faculty of Education at Simon Fraser
	ies of this study, upon its completion by contacting Stefan Stipp.
	that the research material will be treated confidentially by the
principal investigator.	
T (1)	
	ghter to be interviewed about his/ her experience in creating the final
be used for this study.	Co-op class. I also agree to allow my son's/ daughter's portfolio to
oc used for this study.	
NAME (Please print):	
SIGNATURE:	
WITNESS:	
DATE:	

APPENDIX D - PARENT CONSENT FORM

SIMON FRASER UNIVERSITY

INFORMED COSENT FOR PARTICIPANTS IN A RESEARCH PROJECT

Simon Fraser University and Stefan Stipp, the principal investigator in this project, subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of participants. This form and the information it contains are provided for your protection and full understanding of the research procedures. These procedures will not expose you to any physical or psychological stress, nor will you be exposed to any harm from electrical or mechanical devices. The only risks involved are those normally associated with participating in the Humanities Co-op Program at Lord Tweedsmuir Secondary School. Your signature on this form will signify that you have received a document, which describes the procedures of this research project, that you have received an adequate opportunity to consider the information in the document, and that you voluntarily agree to participate in the project.

Having been asked by Stefan Stipp, Humanities Co-op teacher at Lord Tweedsmuir Secondary School, I agree to participate in a research project. I have read the procedures specified in the document. I understand the procedures to be used in this research. I also understand that I may withdraw from this research project (but not from the instructional processes of the Humanities Co-op Program) any time without prejudice. I further understand that I may register any complaint I might have about the research with the principal investigator named above or with Dr. Peter Grimmett, Professor of Education in the Faculty of Education at Simon Fraser University. I may obtain copies of this study, upon its completion by contacting Stefan Stipp. Finally, I have been informed that the research material will be treated confidentially by the principal investigator:

I agree to be interviewed about my experience in creating the final portfolio for the Humanities Co-op class. I also agree to allow my portfolio to be used for this study.

NAME (Please print):		
ADDRESS:		
SIGNATURE:		
WITNESS:		
DATE:	···	

Once signed, a copy of this consent form and a participant feedback form will be provided to you.

APPENDIX E - GOALS OF CO-OP

Non-Negotiated WHY ARE WE HERE?

"The Purpose of education is not primarily to help children know more; rather it is to help children better be able to think, care, imagine, understand and adapt - to become autonomous [independent] learners." Sheri Reynolds

"We go to school to learn how to create the good society, a world in which we can all live freely and responsibly to our greatest potential." author unknown

"The Great aim of education is not knowledge but action." Herbert Spenser

We want Co-op to be a significant part of your journey as a human being and a learner. We want it to help you become thoughtful, informed, contributing, decent and active citizens. We believe that democracy can only effectively provide for the common good of society if its citizens are educated. Uneducated citizens are easily misled by narrow special interests like corporations or unions. Those in power can easily manipulate them. That's one reason we think the following goals are worth achieving. We also think that even if you could care less about making the world a better place, working towards these goals will make you a happier and better person. Of course, they don't start and end in Co-op; rather they are goals we hope you will (like us) continue to strive for throughout your lives. We ask that you consider them thoughtfully now and throughout the course and decide whether they are worthwhile.

Proposed Goals of Co-op

Skills & Habits

- develop habits of thinking critically, logically and deeply
- · learn how to locate and assess relevant information
- develop and enhance a genuine love of life-long learning read critically and thoughtfully to understand write clearly and creatively to be understood speak clearly to be understood work co-operatively with others

Personal Development

- · think deeply about who you are and how you want to live your life
- think deeply about and experience some career possibilities
- select and apply for employment effectively

Knowledge & Understanding

- · understand and critically analyze Canadian issues through history
- understand and critically analyze how Canadian government works
- · understand and critically some important global issues

Changes & Additions

Is becoming a better, happier person and a good citizen something you want to strive towards? If not, what is worth striving for? If so, will working towards these goals make you a better, happier person and a good citizen or is there a better way? You will be asked to answer these questions in detail at the end of the course but we'll be grappling with them all semester.

APPENDIX E - CO-OP GOALS

Negotiated WHY ARE WE HERE?

"The Purpose of education is not primarily to help children know more; rather it is to help children better be able to think, care, imagine, understand and adapt - to become autonomous [independent] learners." Sheri Reynolds

"We go to school to learn how to create the good society, a world in which we can all live freely and responsibly to our greatest potential." author unknown

"The great aim of education is not knowledge but action." Herbert Spenser

We want Co-op to be a significant part of your journey as a human being and a learner. We want it to help you become a thoughtful, informed, contributing, decent and active citizen. We want Co-op to help you become a better and happier person. The following goals are the final result of our goal creation process. They constitute the overarching goal of Co-op; the horizon we are striving for. They answer the question: What do we need to know, have the skills to do, be like and act on to become better people, happier people and good citizens?

THE GOALS OF CO-OP

Knowledge

- · understand and critically analyze how the government works
- · understand and think deeply about a variety of ideas, races, sexes and religions
- · know the rules of the class and the laws of the land
- · know our history and heritage so we can understand the present
- · be knowledgeable about and think deeply and critically about world issues

Skills

- · express thoughts clearly and creatively by writing and speaking
- · understand information broadly and deeply through listening, reading and viewing
- think deeply, logically and critically
- · be a leader and be able to work co-operatively with others
- · locate and assess relevant information

Actions and Attributes

- · be considerate and respectful of the environment
- · be responsible/ hard working in school and in the work world and to set good examples
- · find and admit weakness but always strive to learn more
- think deeply about what line of work I want to pursue post secondary
- · stand up for and serve my community
- enjoy life and find my own path to happiness and have fun
- · respect and love myself as well as others and become more confident
- find the positive in any situation and learn from experiences
- · be loyal, respectful and independent

Of course these goals don't start and end in Co-op; rather they are goals we hope you will (like us) continue to strive for throughout your lives. Is becoming a better, happier person and a good citizen something you want to strive towards? If not, what is worth striving for? If so, will working towards these goals make you a better, happier person and a good citizen or is there a better way? You will be asked to answer these questions in detail at the end of the course but we'll be grappling with them all semester.

APPENDIX F – PORTFOLIO ASSIGNMENT SHEET/ RUBRIC

Humanities Co-op 11 - Final Portfolio

What Are We Doing?

You are creating a portfolio, which shows where you are at in your journey towards the Co-op goals. A portfolio is a collection of evidence (assignments, learning log entries, pictures, videos, projects, tests etc.) to demonstrate your learning.

Why Are We Doing This?

Co-op can be a blur. Between guest speakers, field trips, job interviews, CPR training, work placements, Social Studies, English, CAPP and Camp Jubilee there are lots of learning opportunities, but it all happens so fast. Creating a portfolio will give you a chance to reflect on the following questions: What does it all mean? How does it all fit together? In the big picture what do I know and can I do now that I didn't know and couldn't do before Co-op? We think that once you pull it all together, you'll be amazed at how much you've learned this semester. Your well-made portfolio is the proof of all this learning and something to be proud of as you leave Co-op.

What Does the Portfolio Include?

- 1. Title Page Includes a gripping title, which sums up your Co-op experience. You could also include drawings, photographs, quotes etc.
- 2. Figure of Contents Organizes your portfolio so it's easy for others to peruse
- 3. Cover Letter (write this last) A reflective summary of where you are now as a person and a citizen. Are you a better, happier person and citizen having progressed on these goals? Is becoming a better happier person and a good citizen something you want to strive towards? How far have you come with respect to the Co-op goals? What connections can you make between the goals? How do they all fit into the big picture? What can you do now that you couldn't do before?
- 4. Reflections You will choose 12 of the 19 Co-op goals (four from each section on the Goals of Co-op handout). Each section will be introduced by a reflection, which serves as an introduction of your evidence and includes:
 - The complete goal statement and an explanation of what it means to do this well.
 - A summary of where you were at with respect to this goal at the beginning of Co-op and where you are with respect to that goal now (what you've learned). Be specific. Show, don't tell. Also consider whether you believe this to be a worthwhile goal to pursue and explain why.
 - An explanation of how each piece of evidence used shows progress towards this goal. Why is the evidence you've chosen your best evidence for this goal? Why are you proud of this work?
 - A summary of how you could improve with respect this goal. What do you need to work on?
 - Other thoughts about your learning and its process in this area: What did you enjoy most/least? Why? What did you learn about how you learn (your process)? Any other thoughts in general?
- 5. Evidence The reflection for each section will be followed by evidence. Evidence is anything, which shows your learning towards that goal. You could include projects,

assignments, photographs, drawings, videos, tests, learning log entries, journals, self or peer evaluations, and anything else that shows your learning. Most of the evidence will already have been created; however, you will want to improve your work to demonstrate your learning more effectively. Each goal statement must be supported by **three to five** pieces of evidence (you may have more). We suggest you re-read the entire 'Why Are We Here?' sheet first.

Or... Negotiate your own version of this assignment with Mr. Stipp

For Whom Am I Creating This?

If your see genuine value in the goals of Co-op, you may consider that there is value in creating this for yourself. However, it is also a way to involve others in your journey of personal growth and citizenship development. Your portfolio will be reviewed and assessed according to the rubric by four people: You, a peer, a parent and Mr. Stipp/ Ms. Turpin. You will also present it to a round figure of community members.

How Many Marks is This Worth?

200 marks (70 each for SS11/ Eng 11-30 each for CAPP 11/12). See the rubric for the assessment criteria

Two Sample Reflections:

Goal: Think deeply about who you are and how you want to live your life

This goal means to try to work towards finding the real authentic me. It also means trying to figure out what that person's calling in life is. What am I really meant to do on this earth? What is my purpose? What is my role in making the world a better place.

I entered Corop with what I thought to be a good sense of direction in life. I've always been a confident person who sticks up for his beliefs. I've always lived my life trying to have a good time without hurting others and that has worked well for me.

Yes, this is a worthwhile goal. At times it's scary to think deeply about who you are and to ask all the big questions but I think that they will keep coming up whether you try to deal with them or not. Although thinking deeply about this stuff might cause pain and anguish it's great to feel like you are heading in the right direction or a direction and I think that will make me happier in the long run.

I've certainly given this some deep thought and some of my perceptions have changed during Co-op. My thought that I had it all figured out has turned into the thought that because I know so little, I can't have it all figured out yet. In a strange way things are less certain for me now than they were before Co-op, but in a good way. I realize that there is so much more to learn. I had no idea about some of the problems in our world, or all the other ways of living your life (like people living in communes!?!?) or how religious some people are, or how serious alcoholism can be for some people. I have a far greater appreciation for my family now that I know what my ancestors went through to get me to this privileged place. Part of me really wants to work at making the world a better place, so I'm thinking about doing some volunteer work at the rest home. Another part is totally overwhelmed and stressed and just wants to stick with my old philosophy of having a good time. To sum it up, my horizon is full of possibilities which are a bit scary but also very exciting. I do know that it's up to me to chose my path but I have not really chosen it yet.

As evidence for my progress on this goal I have included 4 pieces. My family history shows how I deeply researched and thought about my past. In it I also made connections to who I am today and how my past has affected that. Second, my world view assignment shows deep

thought about religion, how I think humans should treat others and death all of which relate to who I am. I attached some thoughts I had after we had the Socratic seminar on the world views, which show how much I got out of the dialogue we had. I was totally amazed at how many different ways to look at the world there were. My third piece of evidence is my journal from Keats Island including my commitment to reduce my ecological footprint. It shows one way that I plan to change how I live my life. My last piece is my guest speaker response journal from when the alcoholic's anonymous speakers were here. It shows that I thought about my weekend drinking seriously and have considered making a change.

To improve: I don't even know where to start. I need to learn more (lots more) and to keep thinking about this. I also need to follow through better on the promises I make to myself (like the smaller ecological footprint). I think this is one goal something I will grow on forever because I really believe now that you can never have it totally figured out.

Goal: Understand and critically analyze how Canadian government works

This goal means to understand how the important political decisions in Canada are made and how the people who make those decisions get their jobs. It also means to examine that system and look for things about it that are not perfect and to consider ways to improve it.

Before Co-op, I didn't know anything about how our system of government worked. Now I have a pretty good understanding of how people get elected and how they make decisions. My ability to critically analyze our system of government is at a pretty high level. I can look at our system of electing politicians and see that there are some things that are unfair and undemocratic in how we do things.

This goal is very important. If Canadians don't know how government works and how it could be improved it will never improve. It amazed me how little some of my older friends know about this stuff. How can we make good decisions as voters if we don't even know how it all works? Things can only change for the better if Canada's citizens are well informed and know how to think well. The consequences of not knowing and thinking critically about government could lead to less and less people having all the real power to make decisions. Knowing how our government works is where being informed well starts.

As evidence I've included three pieces. First, my government chart shows understanding of our system of government because I've correctly showed the three different branches of government, how a bill becomes a law, and how you get to be a part of each part of the government. Second, the visual glossary section of my learning log shows deep understanding of 12 of the most important concepts and terms about Canadian government. I created the pictures and examples myself and I they could not have been created without deep understanding. Finally, I included a learning log entry in which I critiqued the Canadian system of parliamentary democracy, which is an example of critical thinking and analysis. Overall, I think I know have a good understanding of Canada's system of government. I see our system as generally effective but with some major flaws. For example, the way that MP's and MLA's are elected in a first past the post system does not seem fair because it means only the winning votes count for anything.

However, I don't understand all I need to about government. I still don't really understand how proportional representation works. I can see why our system of government is flawed but I don't really get the alternatives. I also have a hard time remembering the difference between cabinet solidarity and party discipline. Furthermore, I can see now that there is a lot to learn about government beyond what we learned in Co-op and it is my job as a good citizen to continually learn more about this throughout my life.

Appendix F Humanities Co-op Portfolio Assessment Rubric for Students /24

	Reflections /8	Evidence /8	Conclusion /4	Presentation and Writing /4
Exceeds	Show deep understanding of the	All pieces are relevant	 Connects all goals to each other 	 Looks great (wow factor)
Expectations	goals and deep thought about them	 Work is of superb quality, showing 	meaningfully	 Very easy to find stuff
4	Clearly and fully explain your	deep thought and superior	 Shows extremely deep thought 	• Typed
	evidence and its relevance	understanding.	about the overall goals of the	• Lively, interesting use of
	Clearly and fully explains your	 Evaluated work is of A caliber 	program and your progress towards	language and vocabulary
	progress (learning) and how your	 Sum total of evidence shows 	them (better person/ happier person/	Grammar, spelling and
	evidence shows growth	substantial growth	better citizen)	punctuation are nearly
	Show deep, probing thought about			flawless
	your future growth			
Meets	Show good understanding of the	 > 80% of pieces are relevant 	 Connects four goals to each other 	Looks good
Expectations	goals and thought about them	 Work is of high quality, showing 	meaningfully	 Easy to find stuff
3	 Explain your evidence and its 	thought and understanding	 Shows deep thought about the 	• Typed
	relevance	Evaluated work is of B/ C+ caliber	overall goals and your progress	 Interesting use of language
	Explain your progress and how your	Sum total of evidence shows growth	towards them (better person/ happier	and vocabulary
	evidence shows growth		person/ better citizen)	 Some minor grammar,
	 Show thought about your future 			spelling and punctuation
	growth			errors
Approaches	 Show understanding of the goals and 	• > 60% of pieces are relevant	 Connects three goals to each other 	Looks OK
Expectations	superficial thought about them	Work is of mediocre quality showing	meaningfully	 Some stuff is hard to find
2	Partially explain your evidence and	some thought and understanding	 Shows some deep thought about the 	Hand written
	its relevance	 Evaluated work is of C/C- caliber 	overall goals and your progress	 Some interesting use of
	 Partially explain your progress and 	 Sum total of evidence shows some 	towards them (better person/ happier	language and vocabulary
	how your evidence shows growth	growth	person/ better citizen)	 Some significant grammar,
	 Show superficial thought about your 			spelling and punctuation
	future growth			errors
Needs	 Show little or no understanding of 	 < 40% of pieces are relevant 	 Connects < three goals to each other 	 Looks messy
More	the goals and thought about them	 Work is of poor quality showing 	meaningfully	 Difficult to find stuff
1	Do not explain your evidence and its	little or no thought and	 Shows little or no deep thought 	Hand written
	relevance adequately	understanding	about the overall goals and your	 Language and vocabulary is
	Do not adequately explain you	 Evaluated work is of < C- caliber 	progress towards them (better	monotonous and repetitive
	progress	Sum total of evidence show little or	person/ happier person/ better	Grammar, spelling and
	Show little or no thought about your	no growth	citizen)	punctuation errors interfere
	tuture growth			with understanding

Read the rubric carefully. Meaningful self-evaluation cannot be done in 5 minutes. You need to look at your portfolio and the rubric to see where your work fits into the rubric. Circle the statements that apply to your portfolio. Note that the <i>Reflection</i> and <i>Evidence</i> parts of the rubric are worth twice as much as the <i>Conclusion</i> and <i>Presentation</i> parts. If you feel like your portfolio falls halfway between two categories, circle both and give yourself the average mark of the two (ex. If you circled a 3 and 4 give yourself
5.5). Total the rubric and give yourself a score out of 24. Be ready to defend your mark according to the rubric
Critique the portfolio process. Explain your experience of creating your portfolio. What was good about it for you? What did you learn about yourself as a learner? What should be done differently with this assignment? Deep thought please.

APPENDIX G - STUDENT QUESTIONNAIRE

Please answer the following questions honestly and with as much thought and detail as possible. Feel free to flip through your portfolio if that helps to remind you.

1.	What (if anything) did you like about creating your portfolio?
2.	What (if anything) did you dislike about creating your portfolio?
	÷*
3.	If you had a choice between writing a final exam or creating a portfolio what would you prefer? Why?
<u> </u>	Approximately how many hours did it take to complete your portfolio?
5.	Was creating the portfolio useful to you? In what way? In what way wasn't it?

6.	What (if anything) did you learn from creating your portfolio?
7.	How genuinely did you write your reflections? How much of your reflections was
	writing what you thought I wanted to hear and how much was really you?
_	
	Dogg voya montfelio moint on occupate mietume of voya learning this competen?
8.	Does your portfolio paint an accurate picture of your learning this semester? Explain.
9.	How did the portfolio affect your co-op experience?

10. How did you feel after completing the portfolio?
11. What did you find difficult about creating your portfolio?
12. What did you find easy?
· ·
13. How did the creating the portfolio affect your understanding of the goals?
14. If you were Mr. Stipp, what would you do to improve this project?

APPENDIX H - INTERVIEW SCHEDULE

- Look at your portfolio and find a goal you think you did well on and explain your learning about that goal to me.
- Explain the process of creating that reflection. Take me through how you went about it.
- What was going on in your brain at the time?
- What do you think of the goals in general?
- Do you feel like you understand all of the goals?
- What if anything did you like about writing your reflections?
- How did you decide what to write for your reflections?
- What if anything didn't you like about creating your portfolio?
- What was easy about creating your portfolio for you?
- What didn't you like?
- How did the portfolio affect your Co-op experience?
- Is there any part of the portfolio you are especially proud of?
- Is there any part of the portfolio where you thought, "This is just a waste of time. I'm just going through the motions?
- How are things different for you now that you've completed a portfolio?
- Specific questions based on data from each student's portfolio.
- Is there anything else you want to add?

APPENDIX I – ATTITUDE TOWARDS SCHOOL

How I Arrived at the "Attitude Towards School" Scores for Table 3.1

Because I spent so much time with these students throughout the semester, it was not difficult to get a sense of their attitudes towards school. The following provides a sense of how I arrived at these scores.

5 = very high level of enjoyment and sense of purpose – I will use Linda as an example. The following data was used to arrive at her score:

From an in class assignment which asked students to write about themselves:

Linda: My personal goals just involve getting a good education...I would like to go to university to pursue a career as a sports medicine doctor ... I'm looking very forward to an exciting semester in Co-op and all the experiences I will have over the next five months.

From her portfolio conclusion:

Linda: Over the past five months, I have evolved as a person more then I ever thought I would ... all of the things I have experienced this year have changed my life for the better...

From an early learning log response answering what she thinks the purpose of school should be:

Linda: The purpose of school should be to give people the ability to succeed in whatever they want to, no matter of race, religion or physical appearance. I think school already achieves that.

These pieces of data show that Linda sees school as valuable for her. Data from informal observation throughout the semester depicts Linda as someone who enjoys being at school. Her overall attitude was very positive throughout the semester. She participated in class discussions with interest and put sincere effort into most of her work. She laughed frequently in class and told me verbally that she was really enjoying the Coop program on two occasions. Her attendance and punctuality records were outstanding suggesting that she wanted to be at school.

All of this paints a picture of someone who enjoys school and sees purpose in it. Hence Linda received a score of '5'. Again, despite all the data used to arrive at this number, it is subjective and designed only to give the reader a sense of how valuable and enjoyable the student views school to be.

1 = Very low level of enjoyment and sense of purpose – I will use Alan as an example.

Because Alan did not complete a lot of his work I do not have as much written evidence to substantiate this score. However, the fact that he missed so many assignments is one indicator that he does not see the value in school. Furthermore, this statement which he made while working on his portfolio after school one day, clearly indicates how he feels about school, "...Plus I'm not really into school. I don't really see the point of why we have to learn a lot of this stuff." Moreover, throughout the semester Alan spent many classes off task, quite disinterested in the topics at hand. Alan's attendance and punctuality records needed improvement. Alan has arranged to graduate one semester early (this is possible because of the extra credits he received through the wok experience portion of Co-op) and expressed to me how glad he is to get out school early.

All of this paints a picture of a student who dislikes school and does not really see its purpose.

To get confirmation from my teaching partner, I provided her with the list of student names and the information of what constitutes a score of '1' and what constitutes a score of '5'. She proceeded to score each student without knowing the scores I had assessed to each. Subsequently we compared our scores. Three of the scores were identical, the other five were within one point of each other. We explained our reasons for our scores and discovered that we were able to reach consensus on the other five by providing each other with additional sources of data.

Again these scores are not precise but they provide a general sense. Someone whom I scored '2' clearly feels differently about school than someone whom I scored '5'. My attempt was to have both ends of this spectrum represented in my group of participants.

APPENDIX J - ATTITUDE TOWARDS THE PORTFOLIO

How I Arrived at the "Attitude Towards the Portfolio" Score in Table 3.1

5 = very high level of enjoyment and sense of purpose - I will use Tina as an example. The following data was used to arrive at her score:

The following passage is from Tina's portfolio conclusion:

I think that this is the best project I have ever done. I have had so much fun doing it. It was like walking down memory lane. I think that every class should do something like this because it helps you remember what you did at the beginning of the year. I think that it would help because you won't forget all the stuff you learnt going into the next year.

This similar passage is from her critique of the portfolio project:

...It was fun digging up stuff from the beginning, it brought back lots of Co-op memories for me. I don't think anything should be done different. I think its good just the way it is. It helped me realize how many goals I have, or come close to meeting. I never knew I could complete so many goals at once! I really enjoyed it.

These passages along with the great care and effort Tina took to complete her portfolio show that she found this project valuable and enjoyable and thus account for her score of '5'.

1 = very low level of enjoyment and sense of purpose – I will use Alan as an example. The following data was used to arrive at his score:

This passage is from Alan's critique of the portfolio project

Alan: This portfolio was very hard for me to complete. I had a very hard time thinking of things to put down, it caused me a lot of stress and would have much rather done a test because it wouldn't have taken me as long to do. I also personally found it hard to find evidence for the goals.

Alan also expressed is distain for the project via e-mail. He wrote to me one week after the portfolio was due asking if I could create an exam for him to write instead. He said that he felt that he could not do the project and that it was a waste of his time.

This data, along with the incomplete and poorly done portfolio that Alan submitted show that he did not enjoy or value the portfolio process.

Again, the scores derived from this data are not intended to reflect a precise measurement, but rather to get a general sense. Similar data was collected an analyzed for the other interview subjects with the goal of representing a broad spectrum of student attitudes towards the portfolio.

APPENDIX K – FOLLOW-UP QUESTIONNAIRE

Distributed via E-mail

Hi.

Thanks again for your help with my research. I have two more things I would like you to do for me; a member check and a very brief (7 questions) e-mail questionnaire. A member check is a chance for participants in research (you) to have a say in what the researcher (me) writes in the final version of their work. It gives you a chance to see if I got it right or if I'm making things up. The following paragraph about you is designed to give those who read my research a bit background about my research participants. I wrote a paragraph like this about all the people I interviewed. What I would like you to do is to read it carefully and check for:

- 1. Any errors of fact I made (example: I said you got an A in English 10 but really you got a C)
- 2. Any errors of interpretation I made (example: I said you really liked doing the portfolio and thought it was worthwhile and actually you think it was a useless waste of time.

Press "reply" and make any changes in CAPITAL letters. If you like it the way it is, write "FINE" at the end of the text. Once you've done that, please fill out the questionnaire at the end and send it all back to me.

Questionnaire

Part A

Please rate yourself on a scale of 1-5 for the following four questions. That means you only have to write one number for each answer underneath the question

- 1. On a scale of 1-5, how much did you genuinely care about progressing on the Co-op goals? (1= not at all, 2= a little, 3= somewhat, 4=quite a bit, 5= a lot).
- 2. On a scale of 1-5 rate your level of "buy-in" into the Co-op program. How into it were you? (1= I was not into it at all, 2=I was a little bit into it, 3= I was somewhat into it, 4= I was into it most of the time, 5= I was totally into it.
- 3. On a scale of 1-5 rate how well you managed your time doing you portfolio. (1=very poorly, 2=poorly, 3=all right, 4=well, 5=very well)

4. On a scale of 1-5 rate how hard you worked in Co-op during the semester. (1=I never worked hard, 2=I rarely worded hard, 3=I worked hard some of the time, 4= I worked hard most of the time, 5= I worked hard all of the time)

Part B: Short Answers

Please think deeply about the following questions and answer them in as much detail as possible.

- 1. Explain your answer to question # 1 in part A. Be as specific as possible.
- 2. Explain your answer to question # 3 in part A. Be as specific as possible.
- 3. Explain your answer to question # 4 in part A. Be as specific as possible.

I really appreciate that you are taking the time to do this. Come see me in September to get your portfolio back and to see the finished version of my thesis (hopefully... if I get over my procrastination problems).

Enjoy the rest of your summer.

Mr. Stipp

APPENDIX L - METHODS FOR TABLE 6.1

How I Arrived at the Scores for Table 6.1

From Table 6.1

	Buy-in to Program and its Goals ¹	Buy-in to the Portfolio Process ²	Requisite Skills ³	Hard Work During the Semester ⁴	Time Manage- ment ⁵	Emotional and Physical Stress ⁶	Quality of the Portfolio ⁷
Andrea	4	4	5	4	2	3	A

To explain how I arrived at the scores in Table 6.1 I will provide a detailed explanation of the data I used to score Andrea. Similar data was used for the other students.

Andrea:

Buy-in to the Goals and the Program

Interview Responses

Yeah, I realized that by the first part of the semester when we made up the goals, ok we have to work towards these now and like setting those goals was good because if we didn't have goals to work towards we wouldn't have changed very much and I think that I changed quite a bit like I said not think as much about what people like not worrying as much about everything

Before I kinda just did the work to get the marks for it. In Co-op the stuff we learned actually made me want to learn about it like the research essay I wanted to learn more about teenage pregnancy and I found out a lot of stuff that I never knew before and it made me think that there's so much stuff that I can learn about that I never actually feel like doing but now that I realize that there's so much to know I'll actually try and learn more about everything

...me and Rene we never really talked or anything we just stereotyped or judged or whatever but we actually became like really good friends and if we didn't have Co-o we wouldn't have done that we still not talk to each other

and judge each other and I think that really taught me not to judge people because like everyone has good things about them and if you just judge them and don't really pay attention to them then you could lose out on a good friend.

...like I said if we didn't have goals then I would still be doing the work just to have it done and not to actually learn anything and the goals made me actually strive for them and see what I could push myself to do how I could change.

Portfolio Reflections

Co-op was a wonderful experience for me. It taught me so much about myself and what I want to be like and strive for in the future...Without Co-op, I don't think I could have gotten this far. I would probably still be back where I was at the beginning of the semester, more or less... These goals have made me think about myself and what my decisions are towards learning and other péople. I would have never noticed much of a change if we didn't have goals, either. There are so many things that happen in Co-op that others don't get a chance to experience, but all of it has made me a better person... I will miss Co-op, and tell my little sister to take it for sure, because it changes your life.

Follow-up Questionnaire Responses

As far as the Co-op goals went, I feel that I was interested in seeing how I could progress in respect to most of them... As Co-op went on, I was amazed how much I was starting to progress but I'm sure there were quite a few people who were more into the goals than I was.

These excerpts clearly show that Andrea bought into the program and the goals. She was not just going through the motions; rather, she felt that the program and the

goals were intrinsically valuable to her. It was the last comment from the follow-up questionnaire that caused me to give her a score of '4' instead of '5'.

Buy-in to the Portfolio Process

Interview Responses

I just think it was worthwhile because if I didn't do the portfolio I wouldn't have thought about how much I actually did learn because I wouldn't have realized it so I think that was really good.

The portfolio actually was a chance to get me to think about what I learned. And it made me realize that I learned a lot and it made me realize that I could learn more about certain things and if I didn't do the portfolio I wouldn't have really realized that and I would just keep going with not learning as much as I could possible be learning about everything and the portfolio was a good way for me to think about what I learned and how I learned them and how I grew in general about everything. I think it was definitely one of the better ways to evaluate how you did in the course.

Just that I think it's definitely worthwhile and I think every class should have it not instead of tests because tests are important too but some people do really bad on tests and that could drop their marks quite a bit.

This is a way you just have to think about what you learned and if you didn't learn all of the criteria you can think about what you still need to learn I think that's something that everyone should have to sit there and think about instead of just kinda like memorizing for tests or whatever they do to study.

Because most people don't realize how much they've learned in a class until they actually sit there and think about it like my past high school years I knew I learned some stuff like Math or whatever but this is like a whole bunch of different things I learned not just about like school work but about

myself and how I treat others and I don't know if portfolios would be good for classes such as like Math or something but in something like English and Socials it would be good and helpful and it just makes you sit there and think about what you've learned and if I didn't sit there and think about what I've learned I wouldn't really be motivated to learn more because of it. And I think that's important because everyone keeps learning throughout their lifetime

All of these excerpts indicate a high level of buy-in into the portfolio process. The following comment shows that Andrea was not completely enamored with the portfolio process, which is why her score was a '4' instead of a '5'.

I think most of it was really worthwhile ahm. Some of the goals though it would have been better if we would have chosen like not just out of the sections just in general chosen them because then it would have made me choose more goals that I actually grew more in not to just kinda find evidence that doesn't necessarily work quite as well as other ones could be I think that could possibly be changed but I don't know that's just my opinion.

Hard Work During the Semester

Follow up Ouestionnaire Responses

Once again, my procrastinating got the best of me. I missed a lot of assignments and almost all of the me were handed in late. The work I did do, however, was done with a lot of thought and I did work hard to try to catch up. I am a hard worker, it just takes me while to get everything done.

Gradebook Entry

Despite what Andrea said, she handed in the vast majority of her work, missing only one major assignment during the whole semester. The gradebook does confirm that she submitted many assignments late.

Portfolio Evidence (part of a paragraph from Andrea's research essay on teen pregnancy)

Better access to contraceptives and reproductive health services would be a huge help to preventing pregnancies. Contraceptives are not usually covered by health insurance plans, even though the physician visits are. However, family planning services cost less at clinics than through private physicians. Preventive programs between 1975 and 1983 helped to avoid over 21000 teen pregnancies, saving 25 million dollars; showing that preventing pregnancies is a good investment...

Andrea's essay was 2000 words long (the requirement was 1000) with an impressive list of references. It clearly took many hours of hard work to complete and exemplifies the kind of quality work she completed throughout the semester.

Time Management

Portfolio Submission Date

Andrea submitted her portfolio four weeks after the due date, clear evidence of poor time management.

Follow- up Questionnaire

I have horrible time management skills. I have a habit of doing everything last minute and procrastinating. My portfolio was no exception...I had started a few reflections but I had no idea what evidence I was going to use or anything else for that matter. I ended up handing it in on the absolute last day possible. I know I did a good job on my reflections and everything but it was all thrown together too late.

The evidence of Andrea's poor time management is clear. The only reason, Andrea did not receive a '1' for time management, was that she did manage to submit her portfolio.

Requisite Skills

Writing and Reading Skill

Most of the assignments completed by Andrea throughout the semester show her excellent writing and reading skills. The previous example from her research essay is one

example of her writing skill and do complete the essay as well as she did excellent reading comprehension skills were also required.

Reflective Skill

This was a little trickier to assess. However, reading the portfolio reflections gave an excellent sense of the students' ability to think deeply about their learning and themselves. The following examples from Andrea's portfolio show that she has a high capacity for reflection.

Portfolio Reflections

Before Co-op, I learned from most of my mistakes, but sometimes I just ignored bead things that happened to me and they just came back and wouldn't let me forget about them. My guilty conscience go the best of me and at times I felt like going crazy because I didn't know how to deal with it.

I will always be working more on this goal. It is such an important one, because we all learn in life from our mistakes, journeys and experiences. That is how we humans grow and become better people. We never stop learning, so I will never completely reach this goal; however I will always get closer and closer to it as my life goes on.

Now I make time for myself the best I can and enjoy life as well as balance it with work. I make sure I get enough sleep. And when I get sleep I'm usually happy; which makes life a lot better fro everyone around me. I understand the need to have time to myself and have fun.

These reflections as well as the rest of her portfolio, show Andrea's ability to be reflective about herself and her learning.

Organizational Skill

Andrea's ability to find all of the necessary evidence to support her reflections is a major piece of data to show her organizational skill. Furthermore, the level of organization of the portfolio itself was also excellent.

All of this data shows that Andrea has an exceptionally high level of the requisite skills.

Emotional and Physical Situation

This was extremely difficult to assess. In Andrea's case I looked at the following data. Everyone in the class was affected by the accident and hence no student received a score higher than '3'. However, some students were more affected by the accident than others. Furthermore, some had major other stressors that affected them.

Portfolio Reflection

It [the accident] struck me so hard, and I thought I would never be the same... I became a much stronger person, and realized that no one should ever take life or anything for granted.

Clearly the accident affected Andrea but she coped well with it. Furthermore, other data from her portfolio suggested that she was doing emotionally well during Coop:

Camp Jubilee was an excellent way to get away from any stress in my life and just have a relaxing and fun three days. It was exactly what I needed and I'm so happy we went there...During Co-op, I grew really close with a lot of people...I definitely think I am a stronger, better, more confident and happy individual... I lost my trust in Jessica before and I no longer respected her, but since I started talking to her again I now trust her and respect her. Rene and I never talked before Co-op' for some reason we just didn't like each other. We never said it to anyone, but we judged each other and didn't respect each other. By getting to know, I started respecting her and she started respecting me in return. Just by showing some respect for others, my confidence goes up because it makes me feel good about myself to be nice to others.

All of these reflections show that Andrea had numerous positive experiences, especially interpersonal ones, in Co-op. This in turn likely contributed to making the semester less emotionally stressful. The accident, mitigated by these other factors led me to giving Andrea a score of '3'.

APPENDIX M – CO-OP SPECIAL EVENTS

Humanities Co-op 2003 Field Trips, Guest Speakers and Special Events

Guest Speakers and Special Events

Rotary Interview Day: Wednesday, February 12, 2003

Local Rotary Club members and business people will conduct individual mock interviews with all Co-op students providing valuable feedback. A panel of the interviewers will answer students' questions to conclude the event. Students are expected to dress appropriately.

Placement # 1 Interview Day - Thursday, February 13, 2003

Students are dismissed at 11:30 to have their interviews for the first job placements

CPR Heartsaver Training: Mr. Stipp - April 15 / Ms. Turpin - April 16, 2003

Led by two Surrey firefighters, students receive CPR training culminating in Level A certification. Cost: \$19.00

Peter Parker: Date TBA

Peter is an Austrian Jew who survived the Holocaust. Hearing his story will be an emotional experience for all involved.

Placement # 2 Interview Day - Thursday, May 15, 2003

Students are dismissed at 11:30 to have their interviews for the second job placements

Tom Oleman: TBA

Tom is a residential school survivor and an Aboriginal counselor. He will share his views of the historical and current predicaments of First Nations people in British Columbia.

Nan Houth: TBA

Nan is Surrey school district's public health nurse. She will engage students in her presentation on sexually transmitted diseases and birth control.

Mel Camili: TBA

Mel lost both of his legs in a work place accident. His inspirational talk will cover work place safety and overcoming obstacles.

Alcoholics Anonymous: TBA

Two AA volunteers who are themselves recovering alcoholics will tell their stories in a powerful message against substance abuse.

Field Trips: General

Bard on the Beach: Play and Date TBA

Using a bus, our class will travel to Vanier Park in Vancouver to watch a Shakespeare play performed live. We will leave the school at 10:45 and return by approximately 4:00 PM. As this is also the play the class will be studying in English 11, seeing it live will help students' understanding of the play and increase their enjoyment of Shakespeare. Cost: \$20.00 including transportation

Camp Jubilee: Wednesday, April 30 - Friday, May 2, 2003

This field study will take our two classes to Camp Jubilee located on Indian Arm. The main purpose of the trip will be environmental education, a major part of the Social Studies 11 curriculum. The trip will also have connections to the English 11 and Capp 11/12 curricula. Students will learn about the natural environment in an outdoor setting. The cost of this trip, including all accommodation, food and transportation will be approximately \$116. We realize this is a considerable expense but feel that this educational opportunity is very worthwhile. Our past trips have been amazing. We informed most parents of this in June of to enable you to plan for the cost. For families in difficult financial situations funding may be available.

Mr. Stipp - Wednesday, February 19, 2003 Ms. Turpin - Thursday, February 20, 2003

A major part of the CAPP 12 curriculum is healthy living. Our aim in this unit is not to prescribe a certain lifestyle or set of activities. Instead, our plan is to expose our class to a variety of practices that could contribute to a balanced and healthy lifestyle. One of the planned activities is a Yoga class. Our class will walk to the Danish community centre at 12:15 and partake in a 1.5 hour introductory Yoga class. The class will be taught by Jaquie Querin, a certified instructor, who will specifically plan an easy introductory session for our class. She will also explain the theory behind yoga. Students will be dismissed from the community centre at 2:00 pm. For students not wishing to attend this session, an alternate learning activity will be planned and supervised at school. Cost: \$5.00

Surrey Provincial Court: Mr. Stipp -Tuesday, May 13 / Ms. Turpin - Thursday, May 15, 2003 Using student drivers, we will leave the school at 8:50 am and arrive at the court house at 9:15. Students will attend a 30 minute seminar hosted by the Law Courts Education Facilitator. Students will then watch various court cases of their choice and complete a short assignment chronicling their experience. We will leave the court house at 11:30 at which point students will have until 12:30 to have lunch and return for their last period class.

Field Trips: Research and Active Citizenship

Rationale: "The overarching goal of Social Studies is to develop thoughtful, responsible, active citizens who acquire the requisite information to consider multiple perspectives and to make reasoned judgments" (Social Studies curriculum documents). To work towards this goal, students will choose a global/ Canadian issue and develop a question relevant to them. They will conduct extensive research to answer this question and propose solutions to their problem. Finally, they will implement some of their solutions in a community enhancement project. To conduct this research effectively and to be able to implement their community enhancement projects, students will be given independent class time away from school as needed. Only students with specific plans for research and active citizenship will be permitted to leave the school on these occasions.

For example:

Ouestion: Is global climate change a significant problem?

Research: As well as consulting traditional print sources, a student might interview someone at the David Suzuki Foundation, conduct a survey of local citizens, visit Science World or contact the Petroleum Communication Foundation.

Active Citizenship Through Community Enhancement: After compiling her data in a presentable format (essay) a student might arrange to be a guest speaker at an elementary school on this topic, organize an alternative transportation day at LTS or initiate a Cloverdale car-pool program.

Research Trip # 1: Vancouver Public Library - Wednesday, September 25, 2002

Using public transit, we will leave the school at 7:50 am. Once at the library, students will begin to research their question. We will leave the library at 1:30 and arrive back at the school by 3:00 pm. Students should bring a bag lunch or money to eat out.

Research Trip # 2: Independently Planned - Tuesday October 1, 2002

Students with well planned research activities and parental permission will be dismissed at 11:30. The remaining students will stay in class to continue to research their question.

Active Citizenship Trip: Independently Planned - Friday, November 15, 2002

Students with well planned active citizenship activities and parental permission will be dismissed at 11:30. The remaining students will stay in class to work on their active citizenship plans.

General Information

Please fill out the attached permission and medical forms. If you have any concerns, questions, please contact us at the school (574-7407).

Sincerely,

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