INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI
The Art of Self-Reflection: Adult Learners’ Encounters with Portfolio-Based Assessment

Lori M. Wozney

A Thesis
in
The Department
of
Education

Presented in Partial Fulfilment of the Requirements
for the Degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada

Spring, 2001

© Lori Wozney, 2001
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.
ABSTRACT

The Art of Self-Reflection: Adult Learners' Encounters with Portfolio-Based Assessment

Lori Wozney

In adopting educational policies that promote portfolio assessment, educational theorists and practitioners have argued that portfolios provide a framework within classrooms where self-regulated learning processes and higher order thinking skills can be nurtured. However, academic research in the field of portfolio assessment has focused largely on issues of design, academic achievement and validity and not on the metacognitive processes that foster self-regulated learning. This thesis presents a case study that explored adult learners' experiences with self-reflection in portfolio assessment. The study explored the substance of adult learners' self-reflections, the reflective strategies they employed and the challenges they faced in constructing their assessment portfolios.
DEDICATION

Two roads diverged in a yellow wood,
And sorry I could not travel both
And be one traveler, long I stood
And looked down one as far as I could
To where it bent in the undergrowth;

Then took the other, as just as fair,
And having perhaps the better claim,
Because it was grassy and wanted wear;
Though as for that the passing there
Has worn them really about the same,

And both that morning equally lay
In leaves no step had trodden black.
Oh, I kept the first for another day!
Yet knowing how way leads on to way,
I doubted if I should ever come back.

I shall be telling this with a sigh
Somewhere ages and ages hence:
Two roads diverged in a wood, and I –
I took the one less traveled by,
And that has made all the difference.
-- Robert Frost

I dedicate this thesis to all of the significant teachers in my life.

To Ailie, who has inspired me with her teaching, her guidance and kindness.

To Nancy and Ted, my high school English teachers who taught me to be passionate about the art of writing. Who taught me not to think outside the box but just forget about the box entirely.

To Bill, Cindy and the Wozney clan, who encouraged me to be excellent in everything I do and to press on in life for abundance in all things.

To my Mom and Dad, Anna and Patrick, who taught a talkative, stubborn little Irish girl from Black Point Nova Scotia that she was someone to be proud of.

To Paul, who continues to teach me everyday what life is really all about.

To God who has taught me that I am a song to be sung and a voice to be heard and who taught me how to dance like nobody’s watching.
# TABLE OF CONTENTS

## REVIEW OF THE LITERATURE

**Educational Portfolios** ................................................................. 3  
  Searching for the Essence of “Portfolio” ........................................ 3  
  Purposes of Portfolios: Instruction versus Assessment ....................... 4  
  Instructional uses of portfolios .................................................. 5  
  Assessment uses of portfolios .................................................. 6  
  Positive Features of Portfolios .................................................. 8  
  Development of metacognitive skills .......................................... 8  
  Learning Context ........................................................................... 10  
  Validity of Portfolio Assessment ............................................... 10

## SELF-REFLECTION

**Strategies for Integrating Self-Reflection** .................................... 13  
**Self-Reflection or Self-Evaluation?** ........................................... 14  
**The Process of Self-Reflection** .................................................. 17  
**Assessing the “Quality” of Self-Reflections** ................................... 18  
**Facilitating Self-Reflection** ..................................................... 21

## SELF-REFLECTION AND LEARNING THEORIES

**The Role of Self-Reflection in Self-Regulated Learning** ................... 22  
**The Role of Self-Reflection in Self-Directed Learning** ..................... 26

## PURPOSE

**METHODOLOGY** ............................................................................. 30

**Research Design** ....................................................................... 30  
  Introduction To Qualitative Research ........................................... 30  
  Ethnographic Research ................................................................ 31  
  Case Study Methodology ................................................................ 32

## THE RESEARCH CONTEXT

**Site selection** ............................................................................ 33  
**Institutional Context** .................................................................. 35  
**Participants** ................................................................................ 35  
**Portfolio Assessment** ............................................................... 36  
  Learning Contract ......................................................................... 37  
  Papers ......................................................................................... 37  
  Seminar ....................................................................................... 38  
  Self-Evaluation ............................................................................ 38

## ETHICAL ISSUES

**Ethics Approval** .......................................................................... 40  
**Informed Consent** ....................................................................... 41  
  Obtaining Consent ......................................................................... 41  
  The Concern Over Prior Consent .................................................. 43  
**The Nature of Relationships** ...................................................... 44  
  Participation or Observation, or Both? .......................................... 45  
  Leaving the Field ......................................................................... 47  
**Reciprocity** .................................................................................. 49

## SOURCES OF DATA

**Experiencing** .............................................................................. 50  
  The Content and Scope of Fieldnotes ........................................... 52  
**Enquiring** .................................................................................... 54  
  Choosing the Interview Format .................................................... 55  
  Conducting the Interview ............................................................. 56  
  Sources of Potential Bias ............................................................. 57  
**Examining** ................................................................................... 59
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressing</td>
<td>62</td>
</tr>
<tr>
<td>ANALYSIS</td>
<td>65</td>
</tr>
<tr>
<td>DATA ANALYSIS PROCEDURES</td>
<td>65</td>
</tr>
<tr>
<td>Model for Analysis</td>
<td>65</td>
</tr>
<tr>
<td>Analysis in the Field</td>
<td>66</td>
</tr>
<tr>
<td>Coding and Categorizing</td>
<td>69</td>
</tr>
<tr>
<td>METHODOLOGICAL RIGOR</td>
<td>73</td>
</tr>
<tr>
<td>Procedural Validity</td>
<td>74</td>
</tr>
<tr>
<td>Triangulation</td>
<td>75</td>
</tr>
<tr>
<td>Value Constraints</td>
<td>76</td>
</tr>
<tr>
<td>Researcher Competency</td>
<td>76</td>
</tr>
<tr>
<td>Delimitations</td>
<td>78</td>
</tr>
<tr>
<td>Generalizability</td>
<td>79</td>
</tr>
<tr>
<td>The &quot;A-Typical&quot; Portfolio</td>
<td>80</td>
</tr>
<tr>
<td>Limitations</td>
<td>81</td>
</tr>
<tr>
<td>Scope of Data Collection</td>
<td>81</td>
</tr>
<tr>
<td>FINDINGS AND DISCUSSION</td>
<td>83</td>
</tr>
<tr>
<td>LEARNERS' STRATEGIES FOR SELF-REFLECTION</td>
<td>83</td>
</tr>
<tr>
<td>Exemplars</td>
<td>83</td>
</tr>
<tr>
<td>Speculation</td>
<td>85</td>
</tr>
<tr>
<td>Speculating On What Could Have Been</td>
<td>85</td>
</tr>
<tr>
<td>Speculation About Other People</td>
<td>87</td>
</tr>
<tr>
<td>Comparison</td>
<td>88</td>
</tr>
<tr>
<td>Question-Posing</td>
<td>90</td>
</tr>
<tr>
<td>Metaphors and Quotations</td>
<td>92</td>
</tr>
<tr>
<td>DISCOURAGERS AND ENCOURAGERS</td>
<td>96</td>
</tr>
<tr>
<td>Task Understanding</td>
<td>97</td>
</tr>
<tr>
<td>Conceptualizing the Task</td>
<td>97</td>
</tr>
<tr>
<td>The Meaningfulness of the Tasks</td>
<td>98</td>
</tr>
<tr>
<td>Misunderstanding: Who's the Problem?</td>
<td>99</td>
</tr>
<tr>
<td>Feedback</td>
<td>101</td>
</tr>
<tr>
<td>Peer feedback</td>
<td>101</td>
</tr>
<tr>
<td>Instructor feedback</td>
<td>104</td>
</tr>
<tr>
<td>Power Relationships</td>
<td>107</td>
</tr>
<tr>
<td>Audience</td>
<td>107</td>
</tr>
<tr>
<td>Content</td>
<td>108</td>
</tr>
<tr>
<td>CONTENT OF SELF-REFLECTION</td>
<td>112</td>
</tr>
<tr>
<td>Context</td>
<td>112</td>
</tr>
<tr>
<td>Events</td>
<td>113</td>
</tr>
<tr>
<td>Beliefs and Assumptions</td>
<td>114</td>
</tr>
<tr>
<td>Affect</td>
<td>116</td>
</tr>
<tr>
<td>Emotions</td>
<td>116</td>
</tr>
<tr>
<td>Pride</td>
<td>116</td>
</tr>
<tr>
<td>Comfort</td>
<td>117</td>
</tr>
<tr>
<td>Anxious and Nervous</td>
<td>119</td>
</tr>
<tr>
<td>Self-Image</td>
<td>120</td>
</tr>
<tr>
<td>Cognitive Processes</td>
<td>122</td>
</tr>
<tr>
<td>Goal-Setting</td>
<td>122</td>
</tr>
<tr>
<td>Self-Awareness</td>
<td>125</td>
</tr>
<tr>
<td>Actions</td>
<td>126</td>
</tr>
<tr>
<td>Understanding</td>
<td>127</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>129</td>
</tr>
<tr>
<td>IMPLICATIONS FOR EDUCATIONAL THEORY</td>
<td>129</td>
</tr>
<tr>
<td>IMPLICATIONS FOR EDUCATIONAL PRACTICE</td>
<td>131</td>
</tr>
</tbody>
</table>

vi
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>REFERENCES</td>
<td>133</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>145</td>
</tr>
<tr>
<td>APPENDIX B</td>
<td>148</td>
</tr>
<tr>
<td>APPENDIX C</td>
<td>150</td>
</tr>
<tr>
<td>APPENDIX D</td>
<td>151</td>
</tr>
<tr>
<td>APPENDIX E</td>
<td>152</td>
</tr>
<tr>
<td>APPENDIX F</td>
<td>153</td>
</tr>
</tbody>
</table>
The most recent Canadian and American educational reforms have marked a shift in terms of both the objectives and instructional formats of educational assessment. Since the focus of educational policy appears to be shifting from learning outcomes to learning processes, portfolios are now largely being touted as the alternative assessment method of choice – to be used for multiple purposes in multiple contexts (Mitchel, 1992).

The *portfolio* is not a recent invention. In fact, the concept has long existed in many fields outside of education. Artists, photographers, engineers and financial planners have used portfolios for years to collect, document and showcase their work (Hartnell-Young & Morris, 1999). In the field of education, portfolios are a more recent undertaking and their full potential as an educational tool has yet to be explored. Even as early as 1994, educational researchers claimed that there was a growing need for scholarly research and systematic inquiry into the portfolio process (Herman and Winters, 1994; Gearhart and Herman, 1995).

While more research has since been conducted, the majority has focused on comparing academic achievement in the portfolio classroom with standardized testing (Pierce & O’Malley, 1992). Studies have looked at the validity and reliability of portfolio assessment strategies (Brookhart, 1997) as well as the various characteristics and types of portfolios (Barrett, 1994). Little academic research has been conducted to explore the development and quality of the self-reflective process in portfolio assessment. Moreover, research on self-reflection among adults using portfolios has been almost exclusively conducted during initial teacher education.
As the popularity of portfolio assessment grows, it becomes increasingly important for researchers to critically explore and describe the learning processes in these contexts. This thesis was designed to address some of the gaps existing in current literature on portfolios and explore the relationship between self-reflection and self-regulation. In particular, attention was given to exploring the strategies learners’ use to self-reflect, the context and scope of their self-reflections, social and/or individual factors that enhance or inhibit self-reflection and learners’ perceived difference between self-reflection and self-evaluation. Following is an in-depth look at the current literature on portfolios and role self-reflection plays in the learning process.
REVIEW OF THE LITERATURE

This chapter is divided into three parts. First I will introduce current literature on educational portfolios, drawing attention to the (a) definitions (b) functions (c) features and (d) validity of portfolios as a form of assessment. Second I will focus on self-reflection in the portfolio process. Attention will be given to addressing: (a) portfolio strategies for self-reflection, (b) the process of self-reflection (c) evaluating the “quality” of self-reflections. (d) facilitating self-reflection, and (e) self-reflection versus self-evaluation. Finally, I will explore the dichotomy between self-reflection as a learning process and self-reflection as a learning outcome from the theoretical frameworks of self-regulated and self-directed learning.

Educational Portfolios

Searching for the Essence of “Portfolio”

There continues to be a lack of consensus among educators on how portfolio is to be defined, what precisely a portfolio should include, and what criteria should be used to assess the quality of a portfolio (Adams, 1995; Kennedy, 1992; Parsons, 1998; Perkins & Gelfer, 1993; Winograd & Jones, 1992; Worthen & Leopold, 1992). Graves and Sunstein suggested that educators trying to define portfolio resembled “early biologist[s] trying to define mammal when presented with a whale, a human being, and a bat” (1992, p.115).

The fact that there is no universally accepted definition and functional objective for the portfolio has lead some to argue that the concept has been so diluted that it no longer has useful meaning. Others, however, have seen these multiple meanings as an
asset, allowing portfolios the flexibility of being useful tools in multiple educational contexts (Herman et. al., 1992; LaBoskey, 2000; Paulson & Paulson, 1990).

Despite differences in emphasis, most of the definitions share essential elements. First, portfolios consist of a number of pieces produced by the individual learner. Second, portfolio pieces are assembled for a specific purpose. Third, the portfolio is to present evidence of growth, skill development, learning process, improvement, achievement and reflection (Arter, 1992; Johns, 1992; Vavrus, 1990).

Perhaps some of the confusion surrounding how “portfolio” should be defined originates from the disparate views of what function portfolios perform in the classroom, namely whether portfolios should be used a tool for assessment or a tool for instruction.

*Purposes of Portfolios: Instruction versus Assessment*

In reading the portfolio literature of the past several years, one can easily come away with the impression that portfolios can do virtually anything. *Portfolio News*, a publication of the Portfolio Assessment Clearinghouse in Enchintas, California, lists 35 purposes for portfolios, ranging from helping students set goals to assessing curriculum needs.

Spandel (1993) reported at least four major types of portfolios. The *celebration* portfolios are personal collections of favourite work or treasured mementos. *Growth* portfolios are designed to explicitly capture students; academic growth over time. Spandel suggested that *selected works portfolios* allow the student to showcase their work around specific themes (e.g., research skills). *Passportfolios*, rather than simply showcasing students’ work, provide the basis for evaluating a students’ readiness for more difficult tasks.
Most of the potential uses of portfolios can be reduced to *instructional* or *assessment* purposes. Arter (1995) suggested that *assessment uses* of portfolios relate to keeping track of student knowledge and skills while *instructional uses* of portfolios relate to promoting student learning.

*Instructional uses of portfolios.*

Arter (1995) suggested that instructional portfolios often focus on demonstrating growth. Students create collections of their work to show how one piece evolved from the initial to final format, to show how their revision has improved, or to document their diverse writing (poetry, exposition, journal, stories). What is of primary concern is not the portfolio itself but what students learn by creating one. Through the process of creating an instructional portfolio, learning potential is developed not just measured (Paulson and Paulson, 1990).

Researchers have argued that the merits of instructional portfolios include their ability to (a) allow teachers and parents to share real displays of student work without interpretation of results, (b) they provide a natural medium for teacher-pupil discussions, (c) they allow for easier customization of individual learning experiences to fit individual learning styles, and (c) they provide for a more learner-centered teaching style (Arter, 1995).

Instructional portfolios take on a number of formats and are used for one or more subject areas. Current literature on portfolio formats and contents is virtually all directed towards classroom use with children. Martin (1999) found countless formats for children’s instructional portfolios including: (a) a pizza box filled with art samples, (b) an
accordion file of observations, art work and samples, (c) a zippered container with changing items selected by teacher, student and parents, (d) a computer file containing observations, medical information, letter to and from home, scanned work samples and school reports, (e) a home-made portfolio filled with sentimental items, best work samples and growth charts.

The popularity of portfolios as an instructional tool is evident in the rate at which portfolios are being integrated into the classroom. Templates, design guides and ideas for portfolio integration in the classroom are increasing in number as the application of the portfolio broadens into new subject areas (Adams and Hamm, 1992; Danielson and Abrutyn, 1997; Potter, 1999). The use of electronic portfolios is also gaining popularity (Wiedmer, 1998) as policy makers and those involved in curriculum reform try to link technology with instruction.

Assessment uses of portfolios.

While some researchers and educators have argued for portfolios to be used only as an instructional tool (Chancer, 1994, Purves, 1994) there has been general agreement that portfolios are, in fact, a combination of instruction and assessment (Lucas, 1992; Paulson & Paulson, 1990). In fact, portfolios have arisen, at least in large part, out of awareness that assessment strategies should be more informative to the instructional process, with the ultimate goal of improved student learning (Shepard, 1992).

Supporters of “alternative assessment” have argued that portfolios are an ideal assessment strategy because they “are more likely to elicit the true capability of most students, not just those motivated to do well on decontextualized, on-demand, one-shot tests” (Herman & Winters, 1994, p.52). Fundamental to “authentic assessment” or
“alternative assessment” in educational theory is the principle that learners should demonstrate rather than tell about, what they know and can do (Cole, Ryan & Kick, 1995). Documenting the progress towards these skills requires obtaining information beyond what can be provided by standardized or norm-based testing. Portfolios, it is argued, provide a practical strategy for “authentic assessment” (Sewell, Marczak & Horn, 1999).

Danielson and Abrutyn (1997) suggested that assessment portfolios present potential challenges for the educator, particularly if portfolios are being used for high-stake decisions (e.g., graduation, college acceptance, streaming, etc.) In these instances, clear criteria and descriptions of different performance levels are essential. Unless desired outcomes are clearly identified and tied to program objectives the rubrics for scoring portfolios could prove to be unreliable.

As the popularity of portfolios increases, educators and researchers continue to identify potential areas of concern for using portfolios in assessment. There is concern over (a) whether the portfolio work is really representative of what the student knows and can do, (b) the criteria used to evaluate the portfolio may not reflect the most relevant dimensions of the skill or activity being measured, (c) the work a student selects for their portfolio may make the reader (teacher, parent, peer) wonder what is authentic about it, and (d) the conclusions drawn from the portfolio can be heavily influenced by the person doing the evaluation (Arter, 1989, 1991; Rothman, 1990; Valencia, 1989).

Whether the portfolio is used as a tool of instruction or assessment, educators, theorists and policy makers cite numerous benefits to student learning from integrating portfolios in the classroom. Following is a description of some of the key portfolio
features being argued as a rationale for portfolio integration.

Positive Features of Portfolios

The widespread use of portfolios has stimulated a shift in classroom practices and policies toward learning contexts that more fully meet the range of learners' needs. Portfolio enthusiasts tout many beneficial features of portfolios for students' learning. Most of the benefits can be categorized under four main features. These positive features include: (a) the opportunity for student autonomy and learning choices, (b) the promotion of metacognitive skills and self-reflection, (c) the opportunity to present multiple sources of evidence to document learning, and (d) the opportunity for the learner to convey the learning context.

Student Choice and Autonomy

It has been suggested that flexibility provided through portfolios allows learners to become more autonomous and more oriented toward themselves as learners (Camp, 1990; Farr and Trumball, 1997). Students using portfolios are empowered with a range of opportunities to set goals, analyze their work, determine and articulate what their work demonstrates, participate in the establishment of evaluation criteria and reflect on how they learn. These features, according to Adams and Hamm (1992), encourage personal autonomy and responsibility for learning. The ongoing process of collaboration between the instructor and the learner results in greater sensitivity to learners' personal learning style and preferences (Lucas, 1995).

Development of metacognitive skills

Documented in many of the writings on portfolios is the claim that portfolios promote high-order thinking skills, engage the learner in cognitively complex activities,
provide opportunities for self-reflection and self-assessment and are culturally responsive/allowing for variation in language, in cognitive and communicative style (LaBoskey, 2000; Linn et. al, 1991; Farr and Trumball, 1997; Wolf et. al, 1991;).

Although there appears to be a general agreement among educators that portfolios do in fact promote these skills, the majority of information on portfolios comes not from research findings, but from logical arguments and anecdotal evidence (Arter, 1995).

As the popularity of portfolios grows the question of whether portfolios do in fact promote learner autonomy, motivation and metacognitive development becomes a question of growing concern. Among some educators, policy makers, administrators and curriculum developers there is a concern about whether there is evidence to support wide-scale adoption of portfolio assessment.

Multiple Sources

Portfolios have the flexibility to include learning evidence from a number of sources. The evidence of learning incorporates not only intellectual development of children but social and emotional development as well (Farr and Trumbell, 1996). Gordon (1993) has argued that in using combinations of portfolio activities and tasks, the teacher can still evaluate using standards but can also use tasks to make sense of the context in which the learning is taking place. Student writing, student dictations to teachers, photographs, videotapes, drawings and other sources of evidence are all becoming accepted as sources of evidence. Martin (1999) cited more than 30 potential sources of evidence including: (a) autobiographies, (b) personality/learning style rating scales/analyses, (c) learning logs containing learner reflections, (d) student success plans
and short-term goal setting strategies, and (e) photographs of the student in action or of work produced by the learner.

**Learning Context**

It has been argued that portfolios have the potential to be a more meaningful and valid form of assessment and instruction because they reflect the context of student learning and classroom instruction (Farr & Trumbell, 1996). Theorists have maintained that the portfolio process is flexible enough to encourage, accommodate and incorporate culturally diverse interests, experiences and ways of learning in the classroom (Ball, 1993; Yancey, 1992). It has also been suggested that portfolios provide evidence not for norm-referenced standards but locally relevant goals and criteria. The students “evidence” is directly linked to program and classroom curricular objectives (Sewell, Marczak & Horn, 1999).

**Validity of Portfolio Assessment**

Many educators, educational theorists and researchers have argued that like other forms of alternative assessment, portfolios must be a valid and equitable assessment process. The issue of assessment validity or “authenticity” is widely acknowledged by educational theorists as being one of the primary concerns in an examination of the use of any mode of assessment (e.g., Linn et al. 1991, Messick 1989). The functional worth of portfolios is a concern for students, teachers and policy makers. Researchers have argued that effort must be made to enhance the validity of portfolio assessment so that it can be formally incorporated into the curriculum.

Sheppard (1993) provided a framework for assessing the validity of portfolio assessment: (a) what does the testing practice claim to do, (b) how well does the testing
practice do what it claims to do, and (c) what does the testing practice do beyond that which is claimed? More recently, Bartley (1997) argued that examining both the intent and consequences of the portfolio assessment enterprise would enable educators and policy-makers to evaluate the validity of portfolios.

Despite the fact that current resource material claims that portfolios will foster growth in students' metacognitive and higher order skills (Farr and Trumbull, 1997) systematic research on the "validity" of portfolios has focused almost exclusively on measuring academic achievement (Klein, McCaffrey, Stecher and Koretz, 1995).

Gearhart and others (1993) researched Vermont's statewide portfolio initiative and focused on whether students who scored high in a portfolio evaluation would score equally as high when given a standard uniform test. LeMahieu and colleagues (1993), in a research study of writing portfolios examined whether portfolio assessment equalized performance scores across gender and racial lines. Research has also examined demographic patterns of performance for traditional standardized and portfolio assessments (Hearne and Schuman, 1992; Supovitz and Brennan, 1997).

CRESST, the National Center for Research on Evaluation, Standards and Student Testing agrees that the criteria for validity in portfolio assessment should be more congruent with the intended outcomes. Linn and her colleagues (1991) suggested that further research is needed to determine whether portfolios do, in fact, foster learner autonomy and higher-order thinking skills. Others have agreed that future research on portfolios should not focus on the surface features, but rather the deep conceptual structures of student learning (Calfée and Perfumo, 1993).
The irony is that the more popular portfolios become as an “alternative” form of assessment the greater the pressure to “standardize” how portfolios are assessed. Supovitz and Brennan (1997) argued that for portfolio assessment “to be taken seriously” it should undergo the same rigorous examination that has accompanied standardized testing. The problem with this line of reasoning is three-fold.

First, it is precisely the lack of standardization that preponderates argue; make the portfolio a more relevant assessment strategy. Forcing a more static measurement of portfolio achievement undermines the philosophy of contextual and dynamic measurement currently underlying portfolio assessment.

Second, to judge which assessment strategy, portfolio or standardized testing, is actually closer to student performance there needs to be a measure for the learners’ “true” ability – however, no such measure exists. For this reason, comparisons of portfolio versus standard testing can only be done in the most relative of terms and cannot provide evidence of which strategy is actually a better measure of ability.

Finally, standardized testing and portfolio assessment are different in one very fundamental way. Once they reach the classroom, portfolios are an intensely human enterprise. Teachers using portfolio assessment are involved in constructing portfolio objectives, formulating rubrics for evaluation, and scoring learning achievement (Supovitz and Brennan, 1997). The teacher’s role in standardized testing is limited, requiring little human judgement. Any research on the validity of portfolio assessments needs to take this “human factor” into consideration. The theoretical application of portfolios is often not reflected in the practical application. The “validity” of portfolio assessment is largely dependent on the “validity” of the classroom application.
A review of the literature suggests that even though portfolios are seen as an
*alternative* form of assessment, the "validity" of portfolios has been evaluated based on
traditional concepts of student performance. Moreover, the researchers do not address the
fact that the outcomes being used as the basis for assessing validity do not relate to the
claims being made about what portfolios can do.

Not only is there incongruence in the research between intended and measured
outcomes, but also the pervading research design behind assessing the "validity" of
portfolios has been quantitative. One could argue that if the effectiveness of portfolios is
their ability to assess learning processes, rather than learning outcomes, (Aschbacher,
1993) research designs should explore the relationships, interactions and experiences
inherent in the portfolio process (Martin, 1999). This could provide a more contextual
cling to the idea that only that which can be measured through standardized testing is
worth doing would find portfolios resistant to traditional measurement. She asserted that
"ethnographic" research into portfolios that "looks into" portfolios rather than attempts to
prove them "worthwhile" will be an important part of the portfolio movement.

**Self-Reflection**

*Strategies for Integrating Self-Reflection*

One common conceptual element in most portfolios, and an element that
distinguishes them from traditional measures of performance, is the provision they make
for learners' self-reflections and self-evaluations (Paulson and Paulson, 1992, Short and
Kauffman 1993).
Many procedures and strategies have been proposed for integrating reflective practices in portfolio work. These include: letter writing and summarizing assignments (Potter, 1999; Spandel and Stiggins, 1997), various self-evaluation forms and annotating individual samples of work (Barrett, 1994; Gearhart and Herman 1995), checklists of completed work and pre-written reflection questions for students to answer (Farnan and Kelly, 1991).

Arter (1990) argued the self-reflective responses in portfolios could be fostered and solicited by using reflective prompts. The instructor could ask questions such as: (a) where did you get the idea for this part of the portfolio?, (b) what do you want me to look for when I collect your portfolio?, and (c) if you had more time to work on this piece what would you do? It has been suggested that using these prompts helps the instructor tap into the students’ personal judgments and thought processes (Zimmerman and Martinez-Pons, 1992).

As self-reflection becomes more desirable as an element of portfolios, educators, policy makers and researchers must consider the potential differences between self-evaluation and self-reflection. What processes, exercises and activities fall under the umbrella of self-reflection? Moreover, do students perceive the portfolio process differently if they are asked to evaluate their learning as opposed to reflecting on it?

*Self-Reflection or Self-Evaluation?*

Despite the fact that there is general consensus over the ability of portfolios to promote self-reflection there is great debate over what exactly “reflection” means in this context. Few authors have directly addressed the potential problem of using the terms *evaluation* and *reflection* synonymously. McIntyre (1995) contended that self-reflection
and self-evaluation were synonymous terms. Drawing upon the work of several theorists (Tom 1985; Van Manen 1977; Zeichner and Liston, 1987) McIntyre suggested that there was a growing consensus over the forms or levels of self-reflection: technical, practical, critical or emancipatory. The technical level of reflection is concerned with the effective attainment of goals and objectives. At the second level, practical, learner’s focus on the assumptions, predisposition, values and consequences associated with their actions.

Critical or emancipatory reflection, however, is where the individual concerns themselves with wider ethical, social and political issues that may constrain or limit the efficacy of their actions. Self-reflection, in his model, was defined as systematic inquiry of one’s action and thoughts, which leads to improved practice and deepens one’s understanding. He argued that evaluation and reflection are both guided by the desire for improved professional development and action and, therefore, can be used interchangeably.

McLaughlin (1991) maintained that self-evaluation is not synonymous with self-reflection. According to him, self-evaluation is one potential form self-reflection can take. Klenowski (2000) attempted to differentiate the two, suggesting that self-evaluation is concerned with judging the quality of one’s individual performance, whereas self-reflection involves constructing meaning and becoming more conscious of the philosophical, socio-political and cultural contexts that influence one’s learning.

In the literature on metacognition, evaluation and reflection are often used to differentiate between metacognitive monitoring and metacognitive control. Winne and Hadwin (1998) argued that metacognitive monitoring is the process by which the learner creates an account of how closely their behaviour matched predetermined standards or
criteria. In Phase I these standards are determined by others and in Phase II, III and IV they are student set standards. Metacognitive control, they argued is when learners alter their behaviour in order to reduce discrepancies revealed by metacognitive monitoring. Whereas self-evaluation entails the learner comparing some element of their performance to a set standard (Belfiore, & Hornyak, 1998), self-reflection is the ability to comprehend what was observed or monitored, and creates a new learning focus based on the self-evaluation (Belfiore, & Hornyak, 1998). In Phase IV, students’ self-reflections lead them to reintegrate and reorganize the self-evaluative information, which in turns gives them future direction.

The students’ understandings of the terms “evaluation”, “assessment” and “reflection” in the portfolio process are related to their prior experience with these terms in other learning situations. Research, however, has not been conducted to determine if (a) the learner differentiates between self-evaluation and self-reflection within the portfolio process, (b) how they differentiate the two, and (c) what impact that has on the way they engage their portfolio.

In trying to understand the potential differences between reflection and evaluation, a deeper understanding of the essential cognitive process involved in reflecting is in order. Any research conducted on self-reflection within the portfolio process necessitates an understanding of the primary characteristics of the self-reflective process. In the following section I describe some distinctive characteristics of the self-reflective process.
The Process of Self-Reflection

Dewey (1910) suggested a developmental framework for understanding the process of self-reflection. In his model individuals proceed through three stages: (a) problem definition, (b) means/ends analysis, and (c) generalizing the understanding. In proceeding through these stages, the learner’s actions provide the content for reflection, and, in turn, reflection becomes the catalyst for action. Self-reflection, therefore, is intricately tied to changing behaviour and improved action. Dewey’s model has been criticized for under-emphasizing the complex processes involved when learners engage in reflection (LaBoskey, 1993).

In contrast to the developmental stages suggested by Dewey, Grimmett (1988) organized reflection into three increasingly complex categories: (a) reflection in order to direct or control practice, (b) reflection to inform practice by deliberating and choosing among competing options, and (c) reflection to appreciate or apprehend practice by reconstructing experience, creating a new possibility for action. LaBoskey (1993) and others have proposed that this model, much like Dewey’s, undervalues the complex and dynamic nature of the reflective process (Green, 1986). Critics suggest that self-reflection is often not as cut-and-dry as Grimmett suggested, but rather, can involve elements from all three categories within a given reflection.

Shon’s (1983, 1991) central argument was that reflection-in-action, or moment-to-moment reflexivity stands in sharp contrast to the technical-rationale model proposed by many developmentalists where learning always moves from the simple to the complex, passing through progressive stages and steps. Shon (1983) argued that self-
reflection could happen not only within the context of problem solving, but in the
ambiguous and unpredictable situations of problem-stating and problem-framing.

Research on the changing, dynamic nature of students’ self-reflections during the
portfolio process has been limited to a handful of anecdotal investigations in the early
1990s that have dealt exclusively with young children (Paulson and Paulson, 1992,
1992b, 1993). More should be done to understand the self-reflective process of adult
learners, particularly since, according to Brookfield (1987), metacognition figures more
strongly in adulthood than childhood and adolescence.

The complexity of the self-reflective process has sparked concern over how self-
reflection can be “measured” or “assessed” reliably. Should self-reflection be measured
by behaviour or improved action? Should others (e.g., teacher) “evaluate” student self-
reflections? If reflections are of “worth” what criteria should be used to determine the
difference between good and poor reflections? Researchers interested in understanding
the “quality” of self-reflections are posing these and other questions.

Assessing the “Quality” of Self-Reflections

Ecclestone (1996) reasoned that there is a moral assumption, at least in North
America, that reflection is intrinsically worthwhile. She argued that self-reflection is in
danger of becoming a catch-all title for an ill-defined process. She advocated that
educators, theorists and researchers present clearer accounts of the values and
interpretations that underpin reflection and to provide a more structured and focused
understanding of this process.

Ecclestone (1996) exposed a growing divide between those who see self-
reflection as a process and those who see it as a functional competence. While most
educators tend to prefer the former, those in business, human resource development and professional development agencies tend to prefer the latter. As the emphasis increases in higher education on "transferable skills" and "performativity", the conceptual understanding of self-reflection will undoubtedly shift and take on new meanings.

Theorists have long debated the notion of self-reflection, questioning how and if one can actually self-reflect, considering the social, cultural, psychological and emotional contexts in which we "reflect" (e.g., Bleakley, 1998; Heididegger, 1988; Sass, 1994,). Foucault (1970) argued that the modernist fascination with self-knowing through self-reflection would lead to "warped and twisted forms of reflection" (p.343), a spiral into thinking about thinking that inevitably becomes a simulation of thinking. Others have also criticized this emphasis on self-reflection, arguing that it can lead to a self-absorbed intellect. Brockbank and McGill (1998) suggested that although self-reflection is a significant element of the learning process, on its own it is insufficient to promote critical reflective learning since the possibility for self-deception is too great.

Hillman's (1989) concern was that in our deepening introspective pondering we might in fact become less aware of the world around us. Rather than being a process of moving outward, self-reflection can become synonymous with introspective personalism. For Hillman, self-reflection must move beyond the purely personal to a more worldly and "holistic" orientation if it is to become a central part of our education.

At the time of Brookhart's research (1997) looking at the validity of information provided by students' portfolio annotations she found no "studies on the technical qualities of portfolio measures of student reflection" (p. 16). Brookhart examined two things: (a) did the students' ratings of how difficult the work was match their perceived
ability to learn the material? (validity), and (b) was there internal consistency of student responses in their self-reflections over time? (reliability). Overall her findings suggested that the use of student annotations for self-reflection were neither valid nor reliable but that they could be of general use. For example, annotations could be used as a tool for indicating student judgments about their work including their perceptions about tasks difficulty and their willingness to engage in certain activities.

Paulson and Paulson (1992) identified four categories for assessing the quality of self-reflections in showcase portfolios among young learners: (a) off-track (when students portfolio work is completely unorganized), (b) emerging (when there is some organization but no coherent story of self as learner), (c) on-track (where there is evidence that the student has begun to tell a coherent story, and (d) outstanding (where the student tells a coherent story of their learning). The authors do not discuss how one measures a “coherent story”, or what happens when the students “story”, as coherent as it may be, is not an accurate depiction of actual behaviour. In addition the authors do not discuss the generalizability of this model to cases where the portfolio format is not “showcase”.

The potential risks involved in ascribing a definition of “quality” to self-reflection and measuring whether self-reflection leads to improved action are issues that have not been addressed in the literature. While Paulson and Paulson (1992) have conducted research on the quality of self-reflections among children, research has yet to be conducted which looks at the issue of quality among adult learner’s self-reflection in the portfolio process. Adults are of particular interest in this instance because they present a unique environment where models of instruction tend to focus on facilitating, guiding and modeling adult learning (Knowles, 1975).
Facilitating Self-Reflection

While the evidence suggests that students require a supportive environment in which reflective practice and self-evaluative skills can be fostered (Zeichner and Liston, 1987), there is a growing concern about relying on pre-determined reflection questions, prompts and checklists. The concern is whether portfolios should promote self-reflection as a process or as product. In either case, the question of how one teaches, facilitates or guides self-reflection is crucial. Moreover, there is the question of how much teaching, facilitating and guiding can/should take place before the "self" component of self-reflection is undermined.

The role of the teacher in the portfolio process has been largely overlooked in the current literature on both portfolios and student self-reflection. In addition, no studies have examined how/if the instructor can foster or hinder self-reflection among adult learners using portfolios aside from incorporating self-reflective "pieces" in the portfolio requirements. This issue is of particular importance as college and high-school students generally have better capabilities for higher-order thinking than younger students (Pintrich, 1990; Wigfield, Eccles and Pintrich, 1996) This might suggest that the role of the teacher in fostering self-reflection would be different for adult learners than school-age children.

Theories of self-regulated and self-directed learning present two frameworks for understanding: (a) the relationship between the learner and the instructor, and (b) the relationship between self-reflection as process versus outcome.
Self-Reflection And Learning Theories

*The Role of Self-Reflection in Self-Regulated Learning*

Recently educational policy agendas and reform documents have emphasized the need for students to develop skills and attitudes for self-regulated learning. Self-regulated learning (SRL), in this context, refers to learning that occurs largely from the influence of the students’ self-generated thoughts, feelings, strategies and behaviours (Zimmerman, 1998).

Advocates of self-regulated learning contend that the learning process must be directed towards the development of metacognitive skills. Flavell (1971) suggested that metacognition it is the individual’s awareness of themselves as being an active element in their environment, deliberately storing and retrieving information. Flavell’s conception of metacognition is based on the notion that we can think about our own thoughts. Thinking in this instance can be what one knows, one’s current behaviour, or what one’s cognitive or affective state is. Metacognitive skills such as problem solving, self-reflection, self-assessment and goal-setting, are essential components of the learning process and are important skills to develop in learners as they make their own learning decisions, set their own goals and sustain interest in difficult cognitive work.

Within the literature on self-regulated learning, self-reflection is identified as both a desirable competency and as a process that produces improved learning (Belfiore & Hornyak, 1998; Zimmerman, 1998). Self-reflective practice emerges though the learners’ process of self-evaluation and self-assessment strategies. Metacognitive control and metacognitive monitoring are both processes and also skills developed by the learner that
feed back into future self-regulated behaviour. The reflective process or outcome is not measured for validity or reliability within itself but in its ability to produce future self-regulating behaviour. Self-reflection in this model is inherently cyclical, each reflective skill that is developed can facilitate or undermine subsequent learning processes (Zimmerman, 1998).

Shin (1998) suggested three perspectives through which theorists of self-regulation see the potential for teaching self-reflection: (a) learning ability can be improved through training of relevant skills, (b) metacognitive skills such as reflection can be practiced throughout one’s life and, as a result, become incidentally developed, and (c) metacognitive strategies can be developed through training and transferred to dissimilar learning situations (metacognitive theory). The latter suggests that there can be an emphasis on both self-reflection as process and as competency.

Others, like Zimmerman (1998) have suggested that the ultimate goal of self-reflection is for the learner to use the self-reflective process in subsequent experiences to further improve their ability to learn new information and skills. Zimmerman identified four processes involved in self-reflection: (a) self-evaluation, where the learner compares their efforts with some sort of standard or goal, followed by, (b) attributions about why they achieved the results they did, (c) self-reaction and identification of the source of their learning errors, and (d) adaptation, where the learner improves their learning process using strategies that work best for them. Here self-reflection is conceptualized as both a process by which a learner’s actions are improved and as a skill, which the learner employs to set goals, identify the source of problems/successes and adapt their learning.
Ertmer and Newby (1996) present a similar model in which reflection serves as the link between metacognitive skill and self-regulation. According to them, effective self-reflection requires learners’ involvement in a number of activities. First in characterizing a problem. Second, in analyzing knowledge of (a) one’s self as a learner, (b) the nature of the task, and (c) strategies for learning. Third, reorganizing one’s available resources (cognitive strengths, weaknesses, motivation, ability, attitude). Fourth, managing the progress of learning through a continuous process of planning, monitoring and evaluating (Ertmer and Newby, 1996). Self-reflection, in this instance, is viewed as a competency manifested in self-regulated learners.

If self-reflection is in actuality not only a process but also a desirable skill (outcome) it requires a re-examination of the role the teacher plays in monitoring and “teaching” self-reflection. Schunk (1993) identified three major ways that an instructor can train students in metacognitive strategies like self-reflection: (a) helping learners acquire knowledge about various self-regulated learning strategies (declarative and procedural knowledge) (b) providing the student with opportunities to practice and use the strategy (applied practice) (Schunk, 1993), and (c) providing reasons for why the strategy should be used by emphasizing how, when and where to use it (conditional knowledge) (Volet, 1991).

Self-reflection can be fostered using a strategic approach (Shin, 1998). Instruction should focus on helping students reflect throughout the learning process. Students should be encouraged to reflect on (a) the requirements of a given task, (b) the type of learning that is desired, (c) the appropriate strategies that will help accomplish the goal, and (d) whether the strategies helped accomplish the task. In Winne & Hadwin’s (1998) model of
metacognitive monitoring and control, studying was found to involve four interrelated phases: (a) defining the tasks, (b) goal setting and planning, (c) enacting study tactics and strategies, and (d) metacognitively adapting studying strategies for the future.

Carr and Biddlecomb (1998) proposed that in teaching metacognitive strategies to students, teachers can orient students towards the desired goal by constraining student actions or by orienting them to the possibilities of the situation (e.g., there are at least six ways to solve a given mathematical problem). The teacher is helping the student develop competency and an understanding of the process of self-reflection. Peterson (1988) found that teachers needed to actively model and instruct cognitive and metacognitive strategies in order to promote the acquisition of mathematics.

Researchers, however, acknowledge that even after developing a competency for self-reflection there is no guarantee that students will abstract sufficient information to allow them to assimilate new problems into that strategy. (Peterson, 1988; Shin, 1998)

Belfiore and Hornyak, (1998) suggested that portfolios are one of the practices that foster self-reflection in a way that learners are able to develop both a competency and improved self-regulated learning ability. Recently, however, Perry (1998) examined the elementary school classroom contexts that support self-regulated learning and found that the teacher's use of particular educational innovations such as portfolios did not guarantee a high SRL environment. Perry argues that more in-depth investigations into writing and portfolio activities in classrooms are needed to create a better understanding of the quality and quantity of support that portfolios provide for SRL.

Perry's (1998) findings and recommendations are of particular importance in that they deal exclusively with portfolio environments in which children are engaged.
Research into how portfolio assessment can support SRL among adult learners is nonexistent at the present time.

At this point it is important to note that many people use the terms “self-regulated” “self-directed” interchangeably. As will be demonstrated in the following section, self-reflection is conceptualized quite differently in the self-regulation literature than in the literature on self-directed learning. As theories of self-directed learning predominate literature on portfolios usage among adults, it is essential to note how these two views differ.

*The Role of Self-Reflection in Self-Directed Learning*

Categorizing self-reflection as a teachable skill presents problems for those who advocate an adult-centred or andragogical approach to education. Knowles (1975), a pioneer in the development of adult theories of learning, suggested that it is the learner who takes the initiative to develop their skills with or without the help of others, in diagnosing their needs as learners, formulating their learning goals, choosing and implementing learning strategies and evaluating learning outcomes. Knowles (1975) argued that as individuals mature and grow, their self-concept moves from one of dependency on the instructor to one of increasing self-directedness.

Knowles’ (1975) model presents three reasons for self-directed learning. First, people who are proactive learners rather than reactive learners enter into more purposeful learning (retaining and using more of the information they learned). Second, self-directed learning is more in line with our natural psychological development in which we become increasingly more responsible for our own lives. Third, new developments in the field of education are putting more expectations on students to take initiative in their learning.
This model is in contradiction of the notion that one can “teach” self-reflective practice to an adult learner. As Marriam and Caffarella (1991) found in their research on learning in adulthood, “self-directed” learners have the primary responsibility for planning, carrying out and evaluating their own learning experiences. The role of the “teacher” is transformed in this model to one of facilitation. Brookfield (1987) describes this new facilitation role as one in which the instructor is not directly teaching desired skills but rather contributing to the development of contexts and conditions which allow “learning” to occur. Although the learner has more control under the self-direction model, it has not been proven that greater learner control automatically leads to improved self-reflection. If the learner has control of the learning process but not the skills necessary to guide their self-reflective process, we cannot guarantee improved future action.

Summary

This review has critically examined the current literature relating to the role self-reflection plays in the portfolio process and its relationship to self-regulation. The review has also pointed to gaps in the current body of literature, in particular the lack of research that: (a) explores self-reflective strategies employed by adult learners using portfolio assessment, (b) uses qualitative research designs to assess the kinds of self-reflective practices adult learners engage in, (c) investigates learner's perceived difference between self-evaluation and self-reflection, (d) researches the social and individual factors that enhance or inhibit self-reflection among adult learners, and (e) explores the relationship between self-reflection as a learned skill and self-reflection as a metacognitive process.
These and other issues relating to portfolio assessment are critical for educators, policy makers and curriculum developers. Improved understanding about how learners self-reflect through the portfolio process and how self-reflection in turn leads to more self-regulating behaviour is essential for improving instructional design and enriching classroom application and curriculum reform.
Purpose

The purpose of this study is to explore learner’s self-reflective processes in classroom portfolio work and provide a deeper understanding of the relationship between self-reflection and self-regulation. “Portfolio” is defined here as the material that documents the nature and quality of learning serving as the basis to examine effort, improvement, processes and achievements.

Guiding research questions included:

1. How do learner’s self-reflect in their assessment portfolios?
2. What do learners focus on when they self-reflect? (e.g., what they are learning, why they are learning, how they are learning or what they will do with what they are learning)
METHODOLOGY

Research Design

Introduction To Qualitative Research

Qualitative research and ethnography have become more readily accepted and respected as legitimate forms of research (Bogdan and Biklen, 1992, Miles and Huberman, 1994). This is due in large part to researchers’ recognition that our experiences occur within multi-layered contexts and that this complexity requires a method for examining the “whole” as opposed to quantifiable “parts”. In the context of education a more “holistic” approach is extremely valuable, especially when dealing with individuals’ learning processes. Learning behaviours, strategies, attitudes and skills are part of a complex process by which a learner constructs knowledge. The elements of this process work together to produce learning.

Unlike quantitative researchers, qualitative researchers do not see themselves as collecting “the facts” of human behaviour, which when accumulated will provide verification and elaboration on a theory that allows the researcher to state cause/effect relationships and predict behaviour. Qualitative researchers’ goal is to understand better human behaviour. They seek to grasp the processes by which people construct meaning and to describe what those meanings are. (Bogdan and Biklen, 1992).

The nature of this study is not to explain and predict patterns of self-reflection in portfolios but rather to explore learners’ processes and describe them as authentically as possible. Using a qualitative framework in this instance is supported by Carspecken’s (1996) argument that there are human phenomena that do not lend themselves, by their
very nature to quantitative methods. In addition, a study like this where (a) the researcher perceives there to be multiple constructed realities, (b) the research question is exploratory in nature, and (c) available literature on the topic is limited, a qualitative research design offers the greatest potential for understanding (Leedy, 1997).

**Ethnographic Research**

Within the qualitative research framework, ethnography has played a significant role in helping to frame data collection and analysis techniques. Moreover, ethnography has provided a framework for understanding the interconnectedness of culture and cultural knowledge. Malinowski said, "an ethnographer who sets out to study only religion, or only technology, or only social organization cuts an artificial field for inquiry, and he will be seriously handicapped in his work" (Malinowski, 1922, p.11).

While there is general agreement over the techniques used to experience, enquire and examine the complex nature of culture (e.g., observations, interviews, examining artefacts etc.) there is a growing disagreement over what constitutes "true" ethnography. While conventional conceptions of ethnography focus largely on methodological *product*, the more contemporary perspectives points to differences between "doing ethnography" and "borrowing ethnographic techniques" (Wolcott, 1999).

More contemporary approaches to ethnographic research recognize that the traditional "stereotype" of the ethnographer who travels to a foreign country to live with the "natives" is being replaced with an ever-widening vision of who and what makes up ethnographic research. Wolcott (1999) suggested that a starting point for evaluating whether ethnography is the most reasonable course of action is for the researcher to explore her research question. He suggests that an "ethnographic question" is one that
goes beyond developing a descriptive account of "what" is happening, to a question that
frames deeper issues of "how" things happen and the role that "meanings" play in that
context.

While the questions guiding this study are in one sense looking to understand the
"what" that is happening in learners' portfolio assessment, I also recognize that how
learners are self-reflecting, how they attach meaning to "self-reflection" and how self-
reflection fosters self-regulation, are the deeper "ethnographic questions" guiding this
research. In my guiding research questions there is an emphasis on the context and
culture of the learning environment.

*Case Study Methodology*

Many qualitative researchers in the field of education use the case-study method
as their main approach to ethnographic research. Yin (1984) suggested that case study
research is particularly valuable in education because it has the potential to protect the
integrity of participants' experiences and meanings, and encourages sensitivity to
changes in the context. Ryan (1986) pointed to case study methodology as a valuable
design because of its ability to present what he called the "essence" of schooling and
teaching:

That essence is rarely captured in educational research. Somehow, the reality slips
through the net of our research paradigms . . . Much of the wisdom about
education has been captured in constructed narrative accounts based on human
experience -- or more simply in stories. (Ryan, 1986, p.ix)

There is great debate in the field of education over what specifically constitutes a
"case". Some see a case as a form of story, while others see it more as an experimental
group. Noddings (1991) suggested that well-written cases were much like other forms of narratives where the experiences and voices of the participants are paramount. Stake (1995) argued that a case is a specific, complex, functioning thing and often emerges from our need for general understanding about a specific phenomenon. According to Stake, "custom has it that not everything is a case" (p.2). In his view, different academic disciplines have precise definitions and thus conflicting precedents exist in any attempt to label a "case".

Eisner (1991) argued that case study methodology is a particularly appropriate research design when the researcher seeks to explore new areas of investigation or when the boundaries of the phenomenon are limited and when the research is exploratory in nature. Of the current literature on portfolio assessment, action research and case study designs are the most common among researchers interested in exploring learners' experiences with the portfolio (Paulson & Paulson, 1992, Fox, 1993). However, as noted in the literature review, systematic research looking at how adult learners self-reflect within the portfolio environment is virtually non-existent. As this is a new area of investigation and the nature of the question is exploratory, case study methodology provided a coherent research design.

The Research Context

Site selection

The membership of respondents involved in the research was in accordance with my specific interpretation of portfolio and not with predetermined criteria for the type of learner. Stake (1995) argued that in case-study analysis, the first criterion for selecting a case should be to maximize what we can learn. Since the concern of this research is with
the process of self-reflection and not with specific cultural groups, course content, or other demographic factors, finding a site using portfolios was the central issue.

In looking for a potential site to conduct the research, three criteria were developed based on current portfolio research. The use of site selection criteria helped in judging the feasibility and availability of data sources and in maximizing learning potential. (Bogdan and Biklen, 1992). As documented in the review of the literature, definitions and types of “portfolios” vary considerably but usually consist of three main elements. The portfolios for this study had to (a) involve a number of pieces produced by the individual learner, (b) be assembled for a particular purpose (e.g., assessment), and (c) present evidence of growth, skill development, process, improvement, achievement or reflection. While the instructor in this course did not use the term “portfolio” to describe the assessment strategies he was using, these three “portfolio” criteria were evident.

In addition to the three main portfolio criteria, I was interested in working with a class using assessment that incorporated self-reflective pieces (e.g., reflective prompts, journals, self-evaluations, etc.) and required learners to submit their work throughout the duration of the course not only at the end. This was of particular importance because the study employed an emergent design where the data are analyzed and collection techniques adapted if the data lead to new information.

The time frame for the study was also a consideration, as I needed to complete data collection by December 2000 in order to complete my thesis by the summer of 2001. As Stake points out, “our time and access for fieldwork are almost always limited. If we can, we need to pick cases which are easy to get to and hospitable to our inquiry” (Stake, 1995, p., 4). While the instructor’s use of “portfolios” was not “typical” compared to past
research on portfolios, I agreed that often "the unusual case helps illustrate matters we
overlook in typical cases"(Stake, 1995, p.4).

Institutional Context

The study was conducted with a group of students enrolled in an elective 3-credit
course offered by the Department of Education in a predominantly English speaking post-
secondary institution in Canada. The institution has a student population of
approximately 25,000, 4000 of whom are graduate students. The course was offered for
students interested in examining the processes, skills and conditions involved when adults
work in groups. The class met a total of five times during the fall semester (September to
December) once every two weeks from 9:00 a.m. to 4:00 p.m. The course also involved
using the departmental computer conferencing system to supplement class discussion and
provide students a forum to conduct group work outside of class time. Despite having
access to the computers at school there was no computer technician or resource person
available on the weekends when the course was being offered.

Participants

The class consisted of twenty-four adult learners in both undergraduate and
graduate programs from numerous academic disciplines including; adult education,
human relations, communications, urban planning, theology, etc. Some students were
taking the course as an elective, others as part of a graduate diploma or degree, and still
others were taking the course for personal development and were not enrolled in any
university program. For this reason, the formal educational levels of the class members
varied considerably, with some students having a background in predominantly
vocational training, others having teaching certification, undergraduate degrees or even
other graduate diplomas. Many of the students were part-time, having full-time or part-time jobs.

The age of participants ranged from early 20s to mid 60s. There were ten men and fourteen women taking part in the course. Several members of the class were international students and/or students who did not speak English as their first language. Students represented a range of cultural, ethnic, religious and racial groups. This large number of differences among the participants is not uncommon in case-study research and does not present a problem if the research emphasis is on the uniqueness of the case, and not how it is different from other cases (Stake, 1995).

All twenty-four class members agreed to participate, at least at the level of observation. Ten participants provided me access to at least one of their written assignments. Five students as well as the instructor also participated in interviews. Five students withdrew from the interview portion of the study. One student did not complete the course (dropped out), one student left Canada before an interview could be scheduled, and the remaining three participants informed me via e-mail that they were too busy writing exams at that time of year (beginning of December). Two of these three respondents approached me via phone after the Christmas holidays asking if I still needed their interview information. At that time I was concerned about their ability to recall the events. In addition, I had completed the other interviews more than four weeks prior. I had already completed the initial analysis of the data and did not think it was wise to proceed with collecting more data at that time.

*Portfolio Assessment*

Students were given an extensive course outline that detailed: course objectives,
assignments, attendance/participation expectations, expectations on student abilities, evaluation/grading system and an extensive bibliography. The course had no required text, but students were provided with a bibliography of resources available through the university’s library that would supplement course handouts.

Students were assessed on five main assignments: (a) learning contract, (b) journal, (c) seminar, (d) paper and (e) self-evaluation.

Learning Contract

The learning contract allowed students to outline what they wanted to achieve in the course (learning goals) as well as the specific letter mark they would be working towards. Each mark range required certain assignments and expectations for levels of achievement.

Journal

The group experience journal was to be used as a forum for individual students to reflect on issues associated with group work relating to the course. The instructor provided a list of suggestions for the content of journal entries. Instructions were also given as to what the intention of the journal was not (e.g. not a place for course critique).

Papers

The papers were designed to give students the opportunity to express opinions, ideas, reactions and thoughts to material they were reading as part of the course. (i.e., from the list of references provided or from their own personal reading). Students were required to: (a) provide a brief summary, (b) relate the text to class discussions or interactions, (c) describe how the information could be used in life situations, (d) provide a personal view on the information and (e) provide examples that supported their
personal view.

**Seminar**

The group seminar provided students the opportunity to explore an issue relating to group dynamics in-depth. Groups were given 1 hour (including a 15 minute period for discussion) to convey the information they had gathered to the class.

**Self-Evaluation**

The self-evaluation was the final course assignment where students were asked to describe what they had achieved, their accomplishments as well as their areas for growth. Participants were asked to refer back to their learning contract and discuss how successful they were in achieving their goals. Students could also suggest a specific mark for their work.

Students were given a schedule that outlined when each of the portfolio pieces would be submitted to the instructor. The instructor detailed verbally, on two separate occasions, the type of feedback that would be provided to students on their work.

**Ethical Issues**

Qualitative researchers looking for the “rules” of ethical research in education will find that no adequate set of rules exists (Homan, 1992). The notion that research encompasses a set of “morally permitted behaviours” (LeCompte, Millroy, Preissle, 1992) is difficult to envision if you consider the vast spectrum of what individuals perceive as “moral”. Ethical misconduct may be portrayed as a necessary or common aspect of fieldwork by some researchers (Punch, 1986) but Kiegelmann argues that “the entire framework of a research project needs to be under ethical scrutiny, not just
dilemmas that arise in the field...the choice of the research topic already is an ethical decision” (1996).

Fine (1993) describes the "underside" of ethnographic fieldwork. She argued that ethical tensions that can't be avoided or overcome, but must be negotiated, worried over, from day to day. Researchers should grapple with how honest they are with the people they work with, how accurate their fieldnotes are, how much of an intrusion their presence represents. While these issues may not be specific to ethnographic fieldwork it is vital for researchers to frame “ethics” as something to be discussed openly rather than obscured.

I grappled with these issues from the very beginning of the research process, as an excerpt of my journal documents:

More than just filling in the who, what, where, when, why and how space on the ethics approval forms. I am becoming increasingly aware of how the “ethics” involved in research involves far more than abstract legal and professional obligations. I am having to consider issues of how engaged I will be with participants. how will I build trust in the environment, how much will I and they disclose concerning the progress of the research? How will I negotiate my involvement? What happens if I know some of the individuals in the study? What if I’ve been in classes with participants before or will be in the future? Will that affect our relationship outside of the research and is that a risk they or I am willing to take? Not that the whole focus of my time will be on these ethical issues but I want to keep this “tension” in my mind. I think it is important for me
to grapple with these issues, to struggle with my own moral and ethical beliefs about people, relationships and research. - *Entry Sept. 17, 2000*

Addressing these ethical "dilemmas" became a significant element in my growth as a researcher as well as in putting my research decisions in context. In this chapter I particularly address: (a) ethical standards and university review process, (b) informed participant consent (c) the nature of relationships in the research process, and (d) reciprocity.

*Ethics Approval*

Ethical standards in post-secondary institutions have changed dramatically over the last decade as researchers grapple with corporate sponsorship, intellectual property rights, and the rights of the individual versus the rights of society. Agencies and organizations at the local, national and international levels continue to publish guidelines for researchers involving human participants. The Social Sciences and Humanities Research Council of Canada (SSHRC) for example, publishes their ethics policies and guidelines, the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (1998)*. The American Psychological Association (APA, 1992) is another organization often cited by social scientists when outlining ethical procedures relating to research with humans. These guidelines promote accountability in research and aim to protect both the researcher and the participants from being advertently or inadvertently harmed.

As part of my thesis, I was required, under the Concordia Ethics Policy to submit a proposal outlining how I would attempt to address ethical considerations through the duration of the study. This Proposal (see Appendix, A) was submitted to my thesis.
supervisor and three members of the Departmental Research Ethics Committee (REC) for review. In the Summary Protocol Forms I was required to provide details on basic information (e.g., title of research, literature review, description of project), research participants (e.g., sample of persons to be sampled, method of recruitment), and ethical considerations (e.g., informed consent, freedom to discontinue, risks to participants and confidentiality). The research could not proceed until I had received approval from the REC. This process allowed my research design to be scrutinized by individuals external to the research and thus provided a check and balance as to the merits of the research design and proposed analysis.

**Informed Consent**

Two principal issues emerged when considering informed consent as it related to this project. In the following section I will address: (a) obtaining consent from participants and (b) the potential conflict inherent in obtaining prior consent when using an emergent research design.

**Obtaining Consent**

Virtually all university and post-secondary institutions in Canada have ethics policies which argue that it is not ethically permissible to violate participants’ self-purpose or self-determination when conducting research. That is to say, human participants must be allowed to determine if and how they will be involved in research. The degree to which participants are “informed” is also a complex issue. How much “information” should be given to participants? At what point does “informing” participants affect their behaviour during the study? At what point does informing participants affect response rates (Raffe, Blundell, & Bibby, 1989)? Many researchers
acknowledge that there is often conflict between the rights of the individual to privacy and the public's right to know (Evans and Jakupec, 1996; Punch, 1986).

Reason (1988) suggested that in approaching potential participants the researcher be as open and honest about the research process, discussing what is ahead of them and answering questions relating to participants' expectations, ideas, fears, knowledge levels and anxieties. I felt that "informing" potential participants also involved them informing me of what wasn't appropriate, or what their expectations were for the research.

At the class's first meeting I was given an opportunity to address the members to discuss their potential participation. I wrote in my journal about the whirlwind of thoughts that went through my mind:

I had to outline how I was going to handle the research responsibly and with openness. I also knew it was up to them. I was looking in their eyes wondering what they were thinking. Do they think I can do this? Do they trust me? If they say "NO" how should I react? What if one says yes and one says no? What am I getting myself into anyway? Am I making this clear enough? Do they understand what I'm saying or is this going totally over their heads? I hope this isn't over my head!!! - Entry Oct.1, 2000

Both the instructor and I indicated to students that participation in the project was completely voluntary, and had no bearing on the students' final grade in the course. Students interested in participating were asked to sign a consent form in accordance with the Ethics Committee requirements of the department (see Appendix, B).

The students were advised, verbally and in writing that three levels of participation were possible and that they could choose to be involved to the degree that
was most comfortable for them. The levels of participation were to: (a) be observed during regular class time, (b) provide access to written assignments collected and examined and (c) to volunteer for an interview outside of class time. The levels were arranged in the order of their obtrusiveness. Having someone attend and observe a class requires much less involvement than participating in a one-on-one interview outside of class time.

Students were informed verbally and on the consent form itself, that they were free to withdraw from the project at any time, that their participation in the research would be confidential, and that they would be given pseudonyms in the research report to protect their confidentiality if they chose to participate. Beyond knowing that the class agreed to be observed, the course instructor was not made aware of who was participating.

If there had been a learner who did not want to participate at any level, I would have sought an alternate site to conduct the research. I felt strongly that if any individual did not agree to being observed, I could not attend the class and observe only a small number of participants. In my view the respect for autonomy should be extended to the autonomy of the group as well as the individual; fieldworkers need to respect the communities they study as well as the individuals.

I also distributed contact information to students in the event that they had problems, concerns or issues relating to the research (see Appendix, C).

*The Concern Over Prior Consent*

Some researchers argue that there are problems with obtaining prior informed consent especially in the case of qualitative and ethnographic styles of research (Cassell,
Proponents claim that it is self-contradictory to secure informed consent before research is initiated, since the direction of and conclusions drawn from research are unknown at the onset.

Prior informed consent was a concern for me in that while I had guiding research questions, I was following an emergent research design, and thus the focus of the research could shift during data collection and analysis. In addition, I was required by the university to obtain consent prior to commencing the research. In the end, I decided to obtain consent prior to collecting data, for a number of reasons. First, while there was the potential for the research to evolve into something different from what I had first envisioned I was reasonably sure that self-reflection and self-regulation would remain the predominant constructs to be explored. The risk of not obtaining prior consent outweighed my reservations about invalidating the original consent because the research focus shifted. I informed the learner’s on the consent form that the research was exploratory in nature.

Another reason why I chose to obtain prior consent was that I agreed with the university’s policy that recognizes individual rights as paramount. Learners in this case had the right to know, for example, that the results of the study could be published. The fact that the learner’s assignments, submitted as part of their course work, could be examined necessitated in my view, obtaining consent in advance.

The Nature of Relationships

The nature of relationships in qualitative research is paradoxical. On the one hand the researcher is trying to get inside and be part of the group while simultaneously trying to remain somewhat “objective” and retain an outside perspective. This tension was only
augmented in my case, by the fact that I was a graduate student who had previously taken courses with some of the students involved in the research. Moreover, I had taken courses with the instructor during previous semesters. I was conflicted about my roles as “friend” and “stranger” (Deyhle, Hess & LeCompte, 1992, p. 618). Two concerns in particular surfaced during the course of the research: (a) participation/observation, and (b) leaving the field.

*Participation or Observation, or Both?*

Participant observation is identified as central to most approaches to qualitative research, however: researchers often find it difficult to find the “right balance” between *participation* and *observation*. Wolcott (1999) suggested that while the term “non-participant *participant observation*”, appears contradictory, it captures the difficulty some “researchers have with the idea of interacting, or even accepting that they might or should or are *allowed* to interact in any setting where they accept responsibility as observers” (p. 48). My concern was that in using the term “observation” I would create the perception that I was studying *them*, not the way I wanted to portray my role as the researcher. So I adopted Wolcott’s label of *non-participant participant observer* (Wolcott 1999, p. 42), because I didn’t hide what I was doing but also didn’t take on a completely interactive role.

The question of *how* much I should be participating became a struggle for me as a researcher. There were often times when participating could possibly lead to interesting opportunities for dialogue yet I felt the need to distance myself to make sure I remained the “researcher”, if not in the participants minds, I thought at least in mine. In the back of my mind I often felt that if I was participating than I couldn’t be “really” observing. It
often seemed as if I had to do one or the other.

The specific class I was working with was structured to be very interactive and I recognized early on that I would miss a lot of the “action” by simply sitting in a corner of the room taking notes. My participation was focused on two research functions; gaining trust and finding information about the learner’s self-reflective practices that I wouldn’t have access to if I did not participate. I chose not to participate in activities that, from my perspective, did not help me accomplish either of those goals. For example, I participated in an icebreaker activity because it gave me a chance to meet each student in the class and help build rapport with the students. I did not participate, however, in many of the self-surveys on what kind of a leader/personality type I was because they provided me with no new information about the learner’s self-reflective and self-regulating behaviours and thoughts.

There were times however, when my choice of how engaged I would become presented a problem for the research. For example, during one class, a situation occurred between some of the students and the instructor. I wasn’t sure if and how I should get involved. I felt a certain loyalty to the instructor but recognized that participants might loose trust in me if I was not “on their side”. I described the conflicted feelings I had about this incident in my journal the next day:

I felt really awkward in this whole thing. I usually feel quite relaxed and comfortable in this class, joking with the students and the instructor - building friendships. I knew people would be talking about this incident after class, at lunch, in their journals and I had this sinking feeling that people would want to know what I felt about it. This was going to put me in a strange position – I would
undoubtedly isolate someone if I were to be on the opposite side of their argument. I was really worried about this and sure enough during lunch somebody asked me what I thought about the whole thing. It was one of those fork-in-the-road type moments. It was a catch 22. Whether I responded one way or the other, or even if I didn’t respond I would affect the relationships, even if only in a limited way. So, I responded . . . – Entry Oct. 29, 2000

Perhaps it is because I was also a student, that I felt a strong need to establish a professional identity with the students. While it would have been really easy to involve myself all of the time I agreed that as researchers we want participants to “trust us because of what we do rather than because ‘we are people just like them’” Dockrell & Hamilton (1980, p 52).

Leaving the Field

While leaving the field, in my case, was not as dramatic or as consequential as LeCompte’s experiences with leaving an African village (Deyhle, Hess, & LeCompte, 1992), saying goodbye was still difficult and presented some interesting questions about where my role as non-participant participant observer would really end. The last class of the course highlighted “closure activities” adult educators can use when groups/classes they are leading come to an end. One activity involved standing in a circle; each of us was then passed a small basket in which a few grains of sweet-grass were slowly burning. After the basket was passed, each member of the group selected a smooth stone. We were to place it in front of us on the ground, and for a moment the floor was open for people to
comment on anything they felt they needed to say. A moment went by in silence, then the facilitator asked us to step in front of the stone symbolizing our closure on the course. I wrote my thoughts out in my journal:

After the exercise some people commented on how they felt it was too spiritual, like a self-help group, others were touched and felt it accurately described their feeling of sadness in having to end the course. I sort of smiled because for many of them this was “just another course” but for me, this was the last moment of this important phase of the project I’ve been working towards for years. I sat there and was touched and surprised at how people came up to me and spoke encouraging words, expressed their desire to stay in touch and how much they had enjoyed the class. As I walked home with my last set of written assignments in hand, I have to admit that I felt a sadness come over me and then I remembered a quote I once read during my first year course in anthropology and again in LeCompte, Millroy and Preissle’s book: “‘An anthropologist has failed unless, when he says goodbye to the natives there is on both sides the sorrow of parting’” (Evans-Pritchard, 1951). - Entry Nov.26, 2000

At the time I wrote this passage, I had no idea how the relationships and trust built between myself and some of the students would linger even after the course was finished. These relationships required me to reevaluate the ethics involved in conducting ethnographic research. As LeCompte, Millroy and Preissle noted, “leaving might mean finishing the study, but the demands and needs of people do not stop with the completion of the research” (p. 632).

One incident in particular demonstrated the ethical obligation I felt toward the
participants. During the course of an interview, one participant began to cry as she described her experiences of being a foreign student and trying to learn "on her own". After the interview was over she asked if I could assist her in completing an application for a graduate program. How could I not? I realized at that moment that I wasn’t only conducting research to find out about self-reflection and self-regulation, I was dealing with people’s lives – my research came with responsibilities. This incident brought gave me a whole new perspective on what reciprocity meant to the research process.

After an interview with another participant I received an e-mail including a paper written by the students relating to the topic of adult learners, he thought it would be a useful resource for my research. His willingness to go beyond what was being asked, as a participant to help with the research I was conducting was encouraging and helped me see that others were feeling attached to the research; to the findings and to the implications they had for other learners.

**Reciprocity**

Reciprocity is a critical ethical component of research. There needs to be some kind of respectful, locally valuable fair return for the participant’s involvement in my research. (LeCompte, Millroy and Preissle, p. 627). I struggled over what this study offered in practical terms, which in turn made me question the value of the study itself. I wrote out my concerns in one journal entry:

In preparing for my thesis I’ve been thinking a lot about what I am looking for, what I am excited about and what I am interested in. Regardless of how important this project is to my degree requirements and my personal learning, it seems as though I’ve only given brief consideration to what the participants might be
interested in, expecting, wanting for their willingness to participate in the research. This concern with being “locally” relevant is difficult. I feel that what might be a motivator or acceptable compensation for participating is so relative to what the individual’s goals are. What they find as being valuable has a lot to do with their objectives, goals, personal values, beliefs. – Entry Sept. 17, 2000

I felt it was vital to discuss this with the potential participants to find out what would be meaningful for them. Together we came up with two meaningful ways for them to feel it was a reciprocal relationship. First, the students would be helping other adult learners and instructors understand what learners experience in the portfolio process and the role self-reflection can play. For the students, the opportunity for them to share information that would be beneficial to other educators and students was an important reason to engage in the research. As LeCompte, Millroy, Preissle, (1992) noted, reciprocity can manifest itself in many ways, not all of which are material (p. 627). Participants also agreed that a resource package of materials relating to portfolios (templates, ideas, learning contracts, self-evaluation prompts etc.) would be distributed to participants after the research report was written. It is interesting to note, “one of the most important commodities exchanged involves the sharing of mutually beneficial bits of information” (LeCompte, Millroy, Preissle, p. 627).

Sources of Data

The qualitative researcher employs a variety of strategies and methods to gather evidence and clues that will serve as the basis of analysis (Denzin & Lincoln, 1994; Coffey & Atkinson, 1996). Flick (1998) argued that the process of gathering data is one in which the researcher,
Participates, overtly or covertly, in people's lives for an extended period of time, watching what happens, listening to what is said, asking questions; in fact collecting whatever data are available to throw light on the issues with which he or she is concerned (Flick, 1998, p. 148)

Some educational researchers have argued that there is no particular “moment” when data gathering begins in qualitative research (Stake, 1995; Wolcott, 1999). Stake (1995) argued that a considerable proportion of all data is impressionistic, picked up by the researcher as they become acquainted with the world they are studying. The pool of data, therefore, includes the researcher's earliest observations and understandings of even the research questions.

This chapter describes the variety of data sources used in this study. Gathering strategies are grouped under four categories: (a) experiencing, (b) enquiring, (c) examining, and (d) expressing. This chapter also addresses the importance of triangulating qualitative data.

**Experiencing**

As a participant observer, to whatever degree, the researcher carries out two distinctive activities. First, there is participation in an unfamiliar social world and the production of written accounts of what she has learned and experienced. Fieldnotes are distinctively a method for capturing and preserving these insights and understandings that emerge from experiences in the field (Bogdan & Biklen, 1992). However detailed and full of “thick description” field notes may be, the process of recording them isn’t as simple as describing the world you are observing. Fieldnotes constitute.

A way of life through the very writing choices the ethnographer makes and the
stories she tells; for, through her writings she conveys her understandings and insights to future readers unacquainted with these lives, people and events. In writing fieldnotes, then, the ethnographer does not simply put happenings into words. Rather, such writing is an interpretive process (Emerson, et. al, 1995, p. 16).

Below I discuss the content and scope my fieldnotes and the process of learning when and what should be written down.

The Content and Scope of Fieldnotes

Bogdan and Biklen (1992) argued that fieldnotes consist of two kinds of material; descriptive (word-pictures of the setting, people, actions and conversations as observed) and reflective (the observer's frame of mind, ideas and concerns). The format I chose for taking fieldnotes highlighted this dual purpose.

My descriptive notes included portraits of the subjects, reconstruction of the dialogue between and among participants, a description of the physical setting, description of class activities and a record of accounts of specific events. The reflective part of the fieldnotes focused on ethical considerations, my own assumptions, initial analysis and points of clarification (Bogdan & Biklen, 1992). In addition to space for descriptive and reflective elements of my fieldnotes I also kept a column where I could record the time sequence of events.

I brought my small notebook to each class as well as to the interviews. The length and content of the fieldnotes varied day to day, anywhere from 10 - 20 pages in length. Although I had had previous experience in taking fieldnotes, I was concerned about my ability to concentrate on taking notes since the class was seven hours long. I
was concerned that the majority of my fieldnotes would be from the morning session of the class and would fade during the afternoon session, from lack of concentration. Before the first class I had considered using a coding scheme to help alleviate some of the “brainwork” but decided against it. I wrote about my decision a few weeks later in my journal:

While using a coding scheme helps to keep your observations focused and makes it easier to identify patterns, I tend to follow Atkinson and Coffey’s (1996) lead when they point out that when you have a set of pre-determined categories you furnish yourself with a conceptual grid that is difficult to escape. In other words, flexibility in shifting focus becomes more difficult. – Entry Oct. 8, 2000

In using a pre-determined set of behaviours, expressions, etc. I could have easily missed out on other patterns and themes emerging in the setting that didn’t fit with the pre-set criteria. In addition, the literature on portfolio assessment did not point to important rubrics for assessing self-reflective strategies among adult learners. Perry (1998) had used a coding scheme for observations of self-regulation among children but I was not convinced that the same behaviours applied to adult learners.

In the end fieldnotes were taken during some of the day’s activities and also elaborated on in the evening after the class. By allowing myself the extra time after class to write up more notes I was able to observe more of the class and simply jot down reminders (Bogdan & Biklen, 1992, p. 127) about things I wanted to include in my notes later. This way I did not have to be writing constantly for the entire class.

Knowing When and What to Write Down

I never expected fieldnotes to be such a challenging activity. Almost immediately
after entering the class I would have these conflicted feelings about whether I “should” write specific things down. On the one hand I wanted to keep track of all the details as they occurred but I also felt that if I were to take out my notepad and write certain things, I might ruin the moment or cause mistrust from the participants. I worried about the participants feeling that my “primary interest lay in discovering their secrets and turning their most intimate experiences into objects of scientific inquiry” (Emerson, et. Al. 1995, p. 20).

Despite my concern, the thought of trying to take notes covertly was impractical and, at least in my mind, presented the possibility of equally negative consequences later on (Emerson, et. al. 1995). Given that the nature of this study was to explore people’s learning it was crucial that I use tact in judging whether or not taking notes in the moment was appropriate. There is also the realization that even in times when you are writing notes, you inevitably miss fleeting expressions and events because writing the notes themselves distracts you.

Even though I had initially viewed “observation” as the least intrusive for participants, I realized in the end that this discomfort was an unavoidable consequence of taking notes. This experience made me question the prevailing belief among researchers that observation is the “ideal” gathering technique because it is considered to be “unobtrusive”. In reality, the researcher is always “intruding”(Emerson, et. al. 1995).

*Enquiring*

Asking questions is one of the major activities of gathering information. Bogdan and Biklin (1992) suggested that interviews are particularly useful because they help the researcher understand the participant perspectives—their individually constructed
meaning and interpretations. Through interviewing the participants I learned that "much of what we cannot observe for ourselves has been or is being observed by others" (Stake, 1995, p. 64); by interviewing I was able to tap into these other perspectives. Below I describe the process of choosing the interview format, conducting the interviews, and sources of bias in interviewing.

**Choosing the Interview Format**

After researching the various formats the interview could take (e.g., structured, semi-structured, unstructured) I decided on a semi-structured interview for a number of reasons. Even though I had previously participated in conducting interviews, this was a relatively new skill. I felt it was appropriate to interview at a level at which I was competent. Borg and Gall (1989) argued that while many researchers conduct unstructured interviews in qualitative research "graduate students can very seldom employ the unstructured interview in their research because skillful use of this technique requires a great deal of training and experience" (p. 453). Drew, Hardman and Hart (1996) also commented on the fact that unstructured interviews take practice and skill in order to elicit the kinds of responses that prove useful in analysis. While I could have taken the time to develop these skills and gain experience in the unstructured interview, the open window for conducting the study did not allow the time for extensive training. The semi-structured interview format complemented my skills while still allowing me to probe respondents' experiences and opinions.

I also realized that the topics I was interested in exploring (e.g., self-reflection, self-regulation, portfolio assessment) were complex. The semi-structured interview allowed me to ask general "framing" questions while still having the opportunity to probe
deeper for additional insights into the central themes. Using a semi-structured interview guide facilitated the discussion of complex issues by outlining major ideas and building questions to improve the respondents' understanding. Borg and Gall argued that the "semi-structured interview is generally most appropriate for interview studies in education" (1989, p. 452).

After deciding on a semi-structured interview I felt it was important to construct and interview guide. After my initial attempt I shared my outline with Professor Cleghorn for her to comment on and provide feedback and suggestions. This brought out issues of question clarity and question layering. The questions needed to be better organized in order to maximize the participants' responses (e.g., not wording for 'yes' or 'no' answers). Questions focused on two main themes: (a) the elements of the portfolio assessment process and (b) self-reflection in students portfolio work. The final versions of the instructor and participant interview guides are presented in Appendix D and E.

Before beginning the actual interviews I conducted a pilot interview with a colleague, a strategy recommended by Stake (1995) to practice the sequence of your questions, taking notes while interviewing and also to familiarize yourself with the questions.

Conducting the Interview

In using an interview guide it was important that I remember not to apply it rigidly. Hopf (1978) warns that strict adherence to an interview guide can restrict the benefits of openness and contextual information. The interviews consisted of both questions from the guide and probing questions that emerged from the participants' responses.

In addition to using an interview guide I also felt it was important to tape-record
the interviews. Borg and Gall (1989, p. 455) argued that tape recording has several advantages: (a) it reduces the tendency of the interviewer to be biased in selecting the data she records, (b) it allows for a more thorough analysis as it can be played back, and (c) it speeds up the interview process by cutting down on the time needed for the researcher to take extensive notes. Not all researchers agree, however, that recording the interview is most appropriate. Researchers have raised concerns about how the presence of the tape recorder changes the interview situation: with respondents being reluctant to express themselves freely is they know they are being recorded (Flick, 1998; Bogdan & Biklen, 1992).

I felt that the best way to avoid making participants feel uneasy was to give them the option of whether they wanted to be recorded. In addition I placed the tape recorder within their easy reach, as opposed to mine, and informed them that if at any time they wanted to stop the recording, they were free to do so. All of the respondents agreed to being recorded.

Interviews were scheduled with participants over a two-week period. While trying to maintain similar conditions for the interview, the convenience of the participants was paramount. For this reason interviews were conducted both at the university and in one instance at a participant’s home. Interviews were conducted between 9:30 in the morning and 5:30 in the evening. Being unable to control for the time and setting of the interviews could be a limitation of the internal reliability of the study.

Sources of Potential Bias

While interviewing is widely used among ethnographic researchers, there are disadvantages in using this method of data gathering, most of which relate to response
effect. I frequently considered the limitations of my data collection techniques in my journal:

The biggest debate and perhaps the one that is of the most concern to me is; can interviews be seen as “true” reports or as simply situated narratives? I don’t see how interview statements could be seen as only potentially accurate or distorted reports of reality. Interview data, in my view provides the researcher with access to rich data about how people account for their experiences. I think it is important to understand the context in which the interview is conducted (when, how, what questions are asked etc.) but not to dismiss this type of data as being somehow less “valid” than other forms. - *Entry Nov.5, 2000*

Weiss (1975) argued that there are several sources of potential bias in the interview process: (a) participant predispositions, (b) interviewer predispositions, and (c) procedures in conducting the study, being the three basic sources.

I was concerned about two predispositions of the participants in particular. I was concerned that they would give information on their learning and their opinions about learning only if they thought it would be “acceptable” to me, or that they would want to present themselves and their learning in a favorable light. To address this issue I reiterated at the beginning of the interview that I was not trying to evaluate their learning or self-reflections but rather to understand the relationship between self-reflection and self-regulation in the portfolio environment. Despite my concern, participants discussed their learning strengths and weaknesses openly. One interviewee in particular described motives and objectives in taking the course; citing lack of interest in learning large amounts in the course but a desire to get the credits so they could graduate.
It was also important for me to evaluate where my own predispositions could bias the process. Feeling comfortable with each of the participants and to be at ease in the setting where the interview took place were both potential sources of bias. Choosing to conduct the interviews at school was a way to make both the respondents and myself more comfortable as it was a familiar setting. In the instance where the interview was conducted at the individual’s home, I felt at ease, probably because I had a very comfortable relationship with the respondent. In fact, I felt more at ease there than I did with the other students because I felt I had such a good rapport.

Potential sources of bias that emerged from the procedures involved in the interview presented another area of concern. Weiss (1975) argued that: (a) the presence of other people, (b) the length of the interview, and (c) the way the interview is explained to the respondent are all sources of bias that need to be considered by the researcher. I feel that I addressed these through careful planning. Booking the space for the interviews so that no other people would be present, developing an interview guide to ensure that the interview did not extend beyond a reasonable amount of time and taking care to explain and provide opportunities for the respondents to ask questions and express concerns about the interview were all ways that I tried to reduce the potential bias created by the interview procedures.

Examining

Gathering artifacts provides ethnographic researchers with some of the most substantive and comprehensive data. Bogdan and Biklen (1992) suggested that participants written materials serve as rich descriptions of how people who produced the material think about their world. The study of artefacts if often used in studies where
participant observation and interviewing have also been conducted; this allows for triangulation of the data (Bogdan & Biklen, 1992; Borg & Gall, 1989; Wolcott, 1999).

Although a third method of data collection provided the opportunity to triangulate the data, it also led to a consideration about how, in an emergent research design, methods of data collection influenced one another. I wrote in my journal about the ethical consideration relating to the relationship between the verbal, visual and written data I was collecting:

As I read through the learning contracts, the weekly self-evaluations and journals I wonder if what I read will affect the way I observe, who I focus on, how I respond to questions, how I will structure the interview? I realized today that I wasn’t expecting this huge feeling of “RESPONSIBILITY” when reading their writings. I’ve spent many days in my life reading through my peers’ work, editing my own work, correcting my students work, even evaluating other people’s curriculum and materials. yet, I feel so responsible as I read these words. I feel responsible not only in terms of protecting their confidentiality and their autonomy but responsible for reading it with the right lens. –Entry Oct.22, 2000

Bogdan and Biklen (1992) argued that subject-produced written material falls into two categories: personal documents and official documents. The written materials collected as part of this study were official documents. That is to say, the respondents were submitting copies of their course-work and did not write for their own personal use (e.g., diary). The various documents submitted by this class are described in detail later.

Portfolio pieces were submitted at different times throughout the day. Students who wished to submit copies to me either (a) brought additional copies or (b) asked me to
make a copy and return it to the instructor before the end of the class. I recorded the date and individual who submitted each piece and cataloged them in files according to the date they were received. At the end of the course I organized the material according to participant and recorded on each piece the date it was received. In total I gathered over forty artefacts varying in length from one to fifteen pages. I gathered at least one piece of written material from each of the ten participants who had consented to analysis of their portfolio pieces. I collected material from each of the eight course assignments and activities. Despite the fact that I had received documents from all of the ten participants who agreed to have their portfolios analysed, the majority of documents came from Sharon, Anna, Lynn, Andre, James Ben, and Kelly. For this reason the analysis focused largely on the experiences of six or seven people. Later in the thesis I discuss the potential limitations and difficulties arising from this problem.

Collecting the written material became a difficult task. While the initial idea was for participants to make an extra copy, they often forgot and asked if I could make the copies. This was not a problem in terms of convenience but I likely lost a number of artifacts because I was not able to make copies before the assignments had to be submitted. On one particular day I did not have access to the nearby photocopier (it was broken) and so there were approximately ten documents that were not collected. This prompted me to re-evaluate the way documents were being submitted. Some students, upon realising that I didn’t have a copy of their work, suggested that I call the instructor and ask for it. This would have revealed to the instructor who was participating and I felt that would be a breach of the agreement I had made relating to confidentiality. For this reason, the response rate of artifacts was lower than I would have liked. The logistics
involved in having respondents submit extra copies proved more difficult than first expected.

I also gathered copies of the course outline, course handouts and material relating to the classroom activities. These were supplementary documents I thought could prove useful in corroborating and understanding the students’ journal entries and papers. These were also filed according to the date they were gathered. There were forty-three supplementary artifacts in total.

Expressing

In qualitative research, the researcher herself is the main research instrument. For this reason it is important that the researcher explore their subjectivities and perceptions, their ethical decision-making process and the meanings and assumptions they bring to the research process (McMillan & Schumacher, 1997). The strategy I used to systematically reflect on these issues was a field journal.

My journal was a continuous record of decisions made during the emergent design and the rationale at the time. These records formed the basis for documenting the changing methodology of the study. The focus of my journal was on developing the conceptual understanding and personal skills needed to make good ethical decisions throughout the research process. I discussed the various data collection techniques within the theoretical and philosophical context of qualitative research and I grappled with the issues of voice, reflexivity and ethics in conducting qualitative research. It also included references to relevant literature and discussions about alternative methodologies. Finally, it included my ideas, reactions and feelings about what I was experiencing in the field.

McMillan and Shumacher (1997) argued that a field journal is a valuable strategy
for monitoring and evaluating the impact my subjectivity and perspective had on the research (p. 409). Other researchers also point to the increasingly important role that field journals play in guarding against researcher biases (Drew, Hardman & Hart, 1996; Wolcott, 1999; Emerson et. al., 1995).

I wrote in my journal every week, including the weeks when the class was not meeting. Often my reflections during this “downtime” helped prepare me for the following week’s activities. I started my journal with an introductory poem that I often referred back to as I struggled to make decisions and fought with myself over my “ability” to do the research and do it well. In times when the research seemed to be “coming together” or not coming together, when I was tired or exhilarated, when I was frustrated or composed, whatever the mood or the problem, my journal provided the outlet I needed to stay motivated and progress through the research. Here is the quote from my journal:

A Noiseless Patient Spider

A noiseless patient spider

I mark’d where on a little promontory it stood isolated,

Mark’d how to explore the vacant vast surrounding,

It launched forth filament, filament, filament out of itself

Ever unreeling them, ever tirelessly speeding them.

And you, o my soul where you stand,

Surrounded, detached in measureless oceans of space,

Ceaselessly musing, venturing, throwing, seeking the spheres to connect them.

Till the bridge you need be form’d, till the ductile anchor hold,
Till the gossamer thread you fling catch somewhere, o my soul.

(Walt Whitman)

Keeping the journal was an important part of developing my skills as a researcher. Combined with the other sources of data, my journal proved to be a critical account of the methodological process and ethical considerations that made up this study. One of my final entries put it this way:

As I reflect . . . I realize that this journal has allowed me to discover and struggle with these concepts and to work out, however rudimentary, an understanding of how I can approach this research in a way that addresses these concerns. I cannot say that at all times my focus has been on achieving these ethical rules individually, but I do see myself as trying to conduct the research in a way that is comprehensive- addressing these issues as they arise. - Entry Nov.19, 2000
ANALYSIS

In an emergent research design, such as in this case, data collection and analysis are intricately tied. Through this process the researcher works with new conceptualizations, transforms and summarizes the data as it is collected. As initial patterns emerge from the data, the researcher identifies ideas and facts that need to be pursued further. Data collection draws to a close as the researcher “leaves the field”. Analysis of the data, however, should not be seen as a completely new stage of research; rather, analysis has played a significant role in directing the data collection. As Glaser and Strauss (1967) noted:

[The researcher] believes in his own knowldegeability . . . not because of an arbitrary judgment but because he has taken very special pains to discover what he thinks he may know, every step of the way from the beginning of his investigation until its publishable conclusions . . . [The researcher] has been living with partial analysis for many months, testing them each step of the way, until he has built his theory [interpretations] (pp.224-225).

This chapter describes the four main elements of analysis in this study: (a) basic model of analysis, (b) analysis in the field, (c) coding and categorizing, and (d) influences on coding and analysis

Data Analysis Procedures

Model for Analysis

This study closely followed the constant comparative model for qualitative research described by Lincoln and Guba (1985) and used by researchers using the case-study method in the field of portfolios (Barrett, 1994). This type of analysis is common in
interpretive-descriptive research and represents a process of identifying themes and patterns in the data. The steps involved in this approach include: (a) collect data through observations, documents and interviews; (b) determine issues, events and activities to become categories of focus; (c) concentrate data collection on focus areas; (d) write preliminary results on these categories while continuing data collection; (e) build a working model to discover social processes and relationships; and (f) write up the final analysis of the key categories and the model after coding and sorting the data. The focus of the analysis was to have the experiences of the learners, reflected in the students' work, help describe patterns and salient themes observed throughout the portfolio process.

*Analysis in the Field*

My analysis in the field centered mainly around data summary sheets which I used throughout my time in the field to query my own data, identify potential questions to ask during the interviews and point to areas in the document analysis where I should focus my attention. Authors writing on the topic of qualitative analysis have often advised researchers to use data summaries or memos to develop links between observational data and other data sources (Bogdan and Biklen, 1992; Drew et. al., 1996, Flick, 1998). These data summary sheets provided the first level of coding and analysis by recording my speculations and initial reactions to the data. Emerging themes and patterns were first identified in these summary sheets.

To develop the format for my data summary sheets, I found examples from other researchers (Drew et. al., 1996; Miles & Huberman, 1994; Bogdan & Biklen, 1992; Emerson et. al., 1995) and used parts of each to create a model that would be useful for
me. I wanted my summary sheets to be brief, but also to provide the opportunity to note key terms, ideas, repeated concepts, and etcetera.

In order to illustrate how these data summary sheets provided the first level of analysis I have included one here as an example (Box 1). Looking at this particular data summary sheet you can see that key components of the written material were summarized, key terms used in the writing were pulled out, speculated on and linked to other data sources. This was not a formal analysis or writing activity, I followed Bogdan and Biklen's suggestion to "use a free style, informal language, and let the ideas flow...[there is] plenty of time to ponder over what you say when you get to the more formal analysis after you have completed data collection" (1992, p. 159).

Working with the data summary forms was a way to work through the texts and identify tentative themes and patterns. I also provided a place to cross reference with other data sources, suggested by researchers as good way to build and speculate about ideas (Bogdan & Biklen, 1992). Aside from the logistical function, the summary forms helped me resolve a philosophical/methodological concern I had. Written artifacts were the only data source I had no previous experience with. Because the text was the only non face-to-face data I collected I was concerned about my ability to present the data authentically.
Box 1  Document Summary Form

Description of Document
Final self-evaluation

Significance or Importance of Document
Gives learner’s definition of self-evaluation
Refers to other portfolio pieces

Brief summary of contents
Discussion of “being” versus “doing” learning
And the role goal-setting plays in learning.

Also describes thoughts/reflections about what others think about her personality.
A description of the role “risks” and “limits” play in balancing and propelling learning.

A list of times when risks were taken for learning, confrontation (e.g., “I confronted **** with the blocking of the groups progress), defending (e.g., “...people were not willing to tell me how I affected them”), soliciting constructive criticism, (e.g., “...wanted to know if my perception of what happened was a shared one”) avoidance (e.g., “I limited the amount of time”) new skills (e.g., “...I have done this after studiously avoiding first class for nearly three years”)

Concluding comment: “I have contributed to my own learning partly by taking risks and by staying true to myself.”

Also alludes to experiences noted in FIELDNOTES October 28th, LEARNING CONTRACT (Document 1) and JOURNAL (Documents 2 and 5)

Does not include letter grade

Key concepts/Terms
Goal-setting, emotions, risks, feedback, contribution

Thoughts/Ideas
Goal-setting is something that emerges DURING learning for this learner, maybe for others. Did they reflect on their goals or just write the contract and forget about it? Did everyone see new/improved/different behaviour as the proof of learning? She talks about what she learned in terms of experiences that demonstrated her application of the techniques she was reading about. Was that her rubric for evaluating her learning or what she thought the instructor would be evaluating her on?
My journal entry below, describes my feelings during the study. Only after completing a large number of the summary forms did I realize how useful they were in helping me feel confident about using texts as a meaningful source of data:

Analyzing texts can be threatening at first. It somehow seems too ephemeral and insubstantial to be the subject of “scientific” analysis. Words are such an important method of communication yet scribbled on a piece of paper they seem to miss something, something of the author, perhaps their expressions, sarcasm, humour, creativity . . . something you can ‘know’ when you have face to face contact. October 22, 2001

After writing and reading though the summary forms I realized how rich a source of expression, sarcasm, humor, creativity and insight the participants written documents really were. These summary forms proved to be more useful than I imagined.

I completed data summary forms for each piece I received from the participants (total of 40 summary forms). These forms were filed according to the author of the piece. The key words and terms section on the forms became the basis for creating categories and a “coding scheme”.

Coding and Categorizing

Within the qualitative research framework, there are numerous methods and strategies for coding qualitative data. It has been argued that coding strategies vary along a continuum of phenomenology to positivism (Drew et. al., 1996; Coffey & Atkinson, 1996). They reveal very different assumptions about the kind of conclusions that can be drawn from qualitative data. The more positivist the orientation the more likely that coding strategies will involve counting codes, analytical matrices and formal pattern
matching (Drew et. al., 1996, p 420). The more phenomenological the approach the less
structured the coding scheme and the more emphasis that is placed on meanings and
literal presentation of participants voices. I used my journal to document my vision of
“coding” and where I fit on the coding continuum.

Codes are heuristic devices. I don’t simply “count” the codes, I’m in the process
of identifying and reordering data so I can approach it in new and different ways.
My first step in this process has been to take Miles and Huberman’s (1994)
advice: to create a “start list” of codes. By creating a set of key concepts and
theoretical ideas. Since the codes are not set in stone they can be expanded,
changed or scrapped altogether as my “ideas develop through repeated
interactions with the data” (Coffey and Atkinson, p. 32). - Entry Oct. 22, 2000

As heuristic devices, codes in my mind were not an exhaustive list of concepts to
be tallied by how frequently they occurred. Rather, coding provided the necessary
framework for reducing and expanding the data so that it could be analyzed from multiple
perspectives. My “start list” consisted of 38 codes as suggested by Bogden and Biklen
(1992) who pointed out that having more than 50 codes would make data reduction more
difficult. A list of the initial codes is presented in Appendix F. My codes categorized
information at two levels. Major codes included categories covering a wide-range of
activities, attitudes and behaviours. Minor codes, or subcategories highlighted specific
activities under the major code. For example one of my major codes was, reflection
strategies and had seven subcategories, metaphors, examples, comparison, question-
posing, speculation, lists/summary, quotations. After developing the list of codes I
assigned each code a number. I then went through the data and marked each unit.
Because of the large amount of material I used the paragraph as the unit of analysis. Each paragraph could have multiple codes. The process by which categories were developed in this study was based on principles of grounded theory (Flick, 1998). According to grounded theory the researcher should give preference to the field data as opposed to pre-existing theoretical assumptions when generating units of analysis and coding categories.

All of the written data (including fieldnotes) were scrutinized before the interviews were conducted; interview questions were formulated to probe the key themes identified during the coding of documents. After the interviews were conducted I used an Interview Summary Form to record participants' comments in detail.

Coffey and Atkinson (1996) suggested that once coding is achieved, the data have to be interrogated and systematically explored. According to them the move from coding to interpretation has three discrete levels. The first step is to organize and display the data in a way that is easily read (p. 46). The interview and document summary forms as well as my researchers' journal and typed fieldnotes were put in a file on the computer. When a particular code was identified I could use the search function to retrieve and highlight all documents relating to that code category. As each of the original documents was given a number, they were easily identified in the computer file and retrieved from the filing system.

The second step in moving from coding to interpretation involves exploring the codes and categories. Coffey and Atkinson (1996) suggested that the researcher retrieve, split, subdivide, splice and link together codes. This allows the researcher to link the codes in different ways, test alternative codes and expand the list of potential codes if necessary. Chunks of data, incidents and events that do not “fit” the codes should also be
considered at this point. To this end, I drew a number of diagrams in which I linked the codes in a variety of ways. In addition went through the data another time, looking at patterns or places in the data that didn’t “fit” the codes. I found that two important codes I had initially overlooked. First I realized that I needed a code to identify demographic information on the participants. An example of an important piece of demographic data could be “as a TESL student I am aware...”. In addition, I realized I needed a code for where participants had referred to setting characteristics. An example of this code could be; “that room is sooooo small for all of us to be moving in groups... it is a bit stuffy for me”.

The final step in the process of moving from coding to interpretation emphasizes looking for themes, topics and patterns as well as paradoxes and irregularities. Bogden and Biklen (1992) made a distinction at this point between themes and topics. According to them, themes are conceptual concepts, significant trends, master conceptions, or key distinctions that emerge from the data. Whereas themes are conceptual, topics are descriptive. Topics are pervasive concepts in the data but represent a smaller unit of a larger idea. Bogden and Biklen (1992) suggested that this list of themes and topics could become the headings found in the results section(s) of the thesis or paper. After initial diagrams and maps of the relationship between codes, I was able to organize the codes around a number of themes and topics. These themes included, reflective strategies used by adult learners, inhibitors and enhancers of self-reflection (task-understanding, goal-setting, feedback, modelling, power structures in the classroom), and the scope of reflections (performance criteria, emotions, perceived roles).
The following chapters describe these emergent themes and corresponding topics, focusing on how they related to this study's guiding research questions. However, before discussing the results of the study I think it is important to address at this point the question of methodological rigor.

Methodological Rigor

Qualitative researchers rely, implicitly or explicitly, on a variety of conceptualizations of validity in the process of describing, interpreting and explaining phenomena of interest. However, qualitative research methods are often criticized for failing to "pass the test" of methodological rigor. Hammersley and Atkinson (1983) suggested that the findings of qualitative research are often viewed as subjective, mere idiosyncratic impressions that cannot provide a solid foundation for rigorous analysis. Researchers have generally responded to this argument by asserting that qualitative research has its own set of principles for assessing validity that are simply different from those used within the quantitative framework. (Kirk and Miller, 1986, Lincoln and Guba, 1985)

Brinberg and McGrath (1985) argued that validity is not a commodity that can be purchased with techniques. Rather, validity is like integrity, character and quality, to be assessed relative to purposes and circumstances. In the context of this research, validity could not be assured by simply following a set of procedures, but rather, depended on the justification of the researcher's decisions (Cook and Campbell, 1979).

LeCompte, Millroy and Preissle (1992) stated that, while static and mechanical conceptions of validity are often too rigid for ethnographic research, articulated standards of validity serve a crucial function in that they provide a starting point for reflecting upon
and improving educational research. In the following sections I discuss the issue of methodological rigor looking specifically at: (a) procedural validity, (b) triangulation, (c) value constraints, (d) researcher competency, (e) delimitations, and (f) limitations.

*Procedural Validity*

Flick (1998) suggested that an important element of methodological rigor that qualitative researchers should consider is procedural validity. That is to say, researchers must demonstrate the suitability of the research design for answering the research question and must present a credible rationale for the researcher’s specific choice of subjects, data gathering and analysis techniques (LeCompte, Millroy and Preissle (1992). Where the researcher is interested in accumulating sufficient knowledge to lead to understanding, Lincoln and Guba (1985) recommended the use of an emergent research design, in which data collection and analysis are undertaken simultaneously. As my concern was with increasing understanding, I used a case-study methodology with an emergent research design. In doing so I was able to identify initial trends in the early phase of analysis and pursue these themes by asking participants new or refined questions, observing new situations or previous situations with a slightly different lens, and re-examining documents. In developing the data-gathering strategies I researched how ethnographers and educational researchers were collecting data in similar situations. The use of observational data, interviews, and document analysis were all well established methods for collecting data in qualitative research (Wolcott, 1999).

Procedural validity also requires that the research question drive the data collection techniques and analysis, not vice versa. I was interested in having a research
design that would allow me to complete the study within the 2000-2001 academic year due to my family’s possible relocation. LeCompte, Millroy and Preissle specifically addressed the issue of time constraints among graduate students and suggested “the expedient thing to do would be to whittle down the question so that a conventional research design could be used to address it” (1992, p. 658). For this reason, the initial research question went from a more complex investigation of multiple metacognitive processes within the portfolio environment to an ethnographic study of how learners self-reflect within a portfolio setting.

_Triangulation_

Most qualitative researchers not only believe that there are multiple perspectives or views that need to be represented, but that there is no way to establish what is the “best” view. So how does the researcher know if they are doing it right? Stake (1995) argued that in our attempt to be both accurate and provide alternative explanations, we need a method for evaluating our research that goes beyond our intuition or good intentions. He argued that triangulation is the process by which the researcher can guard against misinterpretation and misunderstanding.

Denzin (1989) categorized four types of triangulation in qualitative research: (a) investigator triangulation, (b) theory triangulation, (c) methodological triangulation, and (d) data triangulation. In this study, it was primarily the methodology that was triangulated. That is to say, I used multiple methods to collect data in order to illuminate or nullify outside influences and bias. Observation, fieldnotes, interviews, document analysis and my researcher journal were used not only to validate interpretations but also to increase the scope, depth and consistency of the methodology.
In exploring self-reflection in the portfolio environments; a very personal process, I realized the importance of providing as broad and detailed a view of their experiences as possible. For this reason, I attended all classes, looking and listening to how participants engaged in the reflective process. Through triangulating the data I was able to provide a detailed and thick description of the learners' self-reflective processes and limit the potential for misinterpretation or misunderstanding.

Value Constraints

LeCompte, Millroy and Preissle (1992) suggested that valid research studies must include a discussion of the practical and theoretical importance or usefulness of the study and its risks (the practical and theoretical implications of this study are taken in the final chapter).

In addressing the value constraints of the study researchers must weigh the quality of the data they can gather against principles of confidentiality, privacy and truth telling (LeCompte, Millroy and Preissle (1992), p. 662). In a study such as this, where the research question necessitated exploring very personal processes, meanings and interpretations, the ethical considerations that went into eliciting consent, addressing confidentiality and understanding the role of the researcher were significant. Allowing multiple levels of participation, providing pseudonyms to participants in the report, maintaining a log of research decisions and triangulating the data were all strategies I used to limit the potential risks involved in the study. Ethical considerations played such a significant role in the research that I devoted a chapter in this report to describe more fully how risks to participants and myself were addressed (see Chapter Two).

Researcher Competency
The researcher's competence is the most critical factor in the validity of ethnographic research. More than being knowledgeable in the data collection techniques accepted within the field of education, the researcher must competently apply these techniques (LeCompte, Millroy and Preissle, 1992). In fact, the researcher's competency is such a critical issue that Yin (1998), identified five skills necessary for conducting case study research.

The first is an inquiring mind and the willingness to ask questions before, during, and after data collection, and to constantly challenge oneself as to why something appears to have happened or is happening. I kept a journal throughout the duration of the research process. This provided the opportunity to question possibilities, grapple with decisions and reflect on different elements of the research process. It allowed me to challenge my biases and make better decisions relating to the study.

The second skill is listening, observing and sensing in general, and assimilating large amounts of new information without bias. Having been involved in a research project during my undergraduate program and several smaller projects through my graduate degree, I had the opportunity to participate in collecting observational data. These experiences also prepared me for assimilating large amount of new information. While my skills may not have been highly developed, I chose strategies that highlighted my competencies. To further improve my skills, I practiced taking fieldnotes (four one-hour sessions) and conducted a mock interview before data collection began.

The third skill identified by Yin is adaptability and flexibility to accommodate unanticipated events and to change data collection activities if preliminary analysis points to additional or alternative sources. Throughout the research I ran into a number of
situations that required altering either my level of participation or the focus of the data collection and analysis. For example, preliminary results emerging from the data summary forms were used to alter interview questions and refocus my document analysis.

Yin’s fourth researcher skill is a working understanding of the issues being studied in order not merely to record data but to interpret and react to it as it is being collected. My reading of current literatures on portfolios, self-reflection and self-regulation was a fundamental element for developing an understanding of the constructs and cultural issues relating to my research. Moreover, my reading of research methodology, in particular case-study and ethnographic research, equipped me with a solid understanding of how research studies emerge and change over time. Triangulating the data was an important strategy for helping me corroborate the data and point to areas where I needed elaboration or clarification from the participants.

The fifth quality proposed by Yin is a lack of bias in interpreting the data. Yin suggested that a good test for bias is the degree to which one is open to contrary findings. While strategies such as triangulation and a researcher’s log were used as sources to identify potential bias, bias in qualitative research is always apparent at some level due to the researcher’s subjectivity. Rather than obscure these potential areas of bias I have documented and described the limitations of this research. As this is a relatively new area of study it is my hope that future research will provide alternative perspectives, additional insights and greater understanding of the research questions explored in this study.

**Delimitations**

The term delimitation was one I came across while reading Rudestam and
Newton's (2001) book. They make the distinction between limitations in the research design that were imposed deliberately (delimitations) and those restrictions over which the researcher has no control (limitations). The delimitations that will be addressed here are generalizability and a-typical portfolio use.

Generalizability

The generalizability of qualitative research findings to the larger population has long been a point of contention among researchers. In addition, critics have argued that case-study analysis in particular leads to bias because of the unique characteristics of the cases chosen (Borg & Gall, 1989).

I have made no attempt to say that what was experienced by the learners in this course is "typical" of other adults' self-reflective processes in portfolio assessment. The mission of qualitative research, as I understand it, is to discover meaning and understanding, rather than to verify truth or predict outcomes. Self-reflection in learning is a contextual process and as such, is highly variable and context-bound (Eisner, 1990). This, in my view, limits any significant generalization of the findings.

I would suggest that while this study is not generalizable in the traditional sense of the word, this study does have other redeeming features that make it highly valuable in the education community (see Chapter Five). Case study findings often resonate experientially or phenomenologically with a broad cross section of readers and thus facilitate greater understanding of the phenomenon in question. As this is a new area of research it is my hope that the findings will in fact speak to a broad cross-section of readers and generate future research that explores different learning contexts and different learners.
The "A-Typical" Portfolio

This study recorded a very A-typical use of portfolios. The portfolio was not for example; one large dossier of collected works, nor was it submitted at the end of the course as an overall evaluation tool. While there may be concern of the "value" of these findings as this is not the "typical" application of portfolio assessment, I would suggest it represents a valuable and valid case study.

As I already mentioned Stake (1995) has argued that case study research is not sampling research. The study of a case is not primarily to understand other cases. My first obligation was to understanding the case before me. Although this course was not using portfolios in a typical way it still represents an interesting case for study.

Patton (1990) outlined a number of ways in which researchers select cases, two of which have relevance here. Patton suggested that while typicality is one potential focus of a case, intensity and convenience are also potential reasons for selecting a particular site or case. Intensity refers to cases where the interesting features, processes and experiences are of greater intensity than typical cases. This is of specific importance in this study because the course integrated weekly self-evaluations, a final self-reflective piece, a reflective journal and paper, a learning contract as well as group discussions and integrated peer feedback. The intensity of the self-reflective elements of this course made its uniqueness more desirable for the purposes of maximizing what could be learned about self-reflection in the portfolio assessment process. Patton (1990) also pointed out that sometimes cases that are the easiest to access under given conditions are most useful. Convenience was as issue in this study. Finding a post-secondary course that integrated portfolio assessment, self-reflective pieces, that would be taking place between
September and December of 2000 and that would be accessible to me as a graduate student was difficult. So while the A-typicality of this case may be perceived as a limitation of the study it was a limitation deliberately imposed on the research for issues of convenience and for maximizing learning potential.

*Limitations*

Qualitative research is an interpretive craft, and as such is highly subjective. Though every researcher takes great pains to provide an authentic and accurate analysis and reporting of the research, there will always be areas where things could have been done differently, or better. There are as mentioned before, some things which occur during the research process that are beyond the researcher’s control and, thus, they create limitations which must be considered in any discussion of methodological rigor. Limitations in this study included difficulties in document collection and experimental mortality. These will generally be referred to as issues relating to the scope of data collection.

*Scope of Data Collection*

As I mentioned earlier in this thesis, participants in this study were engaged in the research at different levels. This variability in participation was a concern to me. Why did certain individuals participate more and others less? What could have been missed because of this variability in participation? The majority of data were collected through written assignments and interviews. Only seven of twenty-four participants consistently (almost all portfolio pieces) submitted written assignments for me to analyze, though I did receive a large number of pieces from the other consenting participants. While this constituted a large amount of documentation it was concentrated on approximately ten
individuals limiting the breadth of potential analysis. The logistics of making copies of each assignment during class time could be one possible and probable explanation why more pieces were not submitted, however, why particular pieces were not submitted is unknown. Another way in which the scope of the data was limited during the research was through what Borg & Gall (1989) refer to as experimental mortality where subjects were lost during the course of the study. Three participants who had originally agreed to take part in an interview were in the end unable to participate due to other seasonal commitments (exams, travel plans, family commitments).

Summary

Methodological rigor is a most important issue for qualitative researchers, one that questions the assumptions and bias that emerge in such a subjective research enterprise. The results presented below find their “validity” in the rigor with which the research was undertaken. Decisions made during the design of the study, ethical obligations and the congruence between collection and analysis of data all play themselves out in the final analysis. The next few chapters are the culmination of many decisions, reconceptualizations and subjective processes, all of which I tried to document and speak to in the preceding chapters.
FINDINGS AND DISCUSSION

Learners’ Strategies for Self-Reflection

One of the major objectives of this research was to understand how adult learners self-reflect in their assessment portfolios. What seemed to underlie their self-reflections was a set of strategies used to help them negotiate, conceptualize and express their self-reflections.

These strategies developed differently over the course of the portfolio pieces for different learners. While some individuals used particular strategies consistently throughout their portfolio, most respondents seemed to go through “phases” in their reflections. Respondents used exemplars of their performance, later providing a lot more speculation about why they had acted or thought a certain way. Students also used comparison as a strategy to reflect back to past experiences and link it to present behaviour. Nearing the end of the course learners generally increased their use of question-posing in their writing moving from speculation to direct self-questioning. Finally, metaphors and quotes were used as models and illustrations that served as a way to conceptualize reflections and ideas.

In the next sections, I describe these strategies, how they were used, and how different participants used them differently.

Exemplars

The course outline referred to the importance of using examples to support and illustrate the learner’s ideas. Students were encouraged to “be specific and use specific examples” in their journals and to use “examples, personal and fictitious, that supported [their] view” in their appreciation papers. Student work indicated that they applied these
directions as a starting point for conceptualizing self-reflection, with a number of students including headings like: “Examples” or “My Personal Point of View with examples” in their papers. This initial use of examples as the springboard for deeper reflection is not surprising since students were encouraged to use examples and also because previous research has shown that initial reflections are often simply constructed and content driven (Spaniel, 1993). Examples ranged over a number of topics but generally fell into two categories: supporting or negating examples. Examples were used as a strategy to reflect on whether the learner agreed with or disagreed with certain parts of the texts they were reading or the behaviours they were observing in themselves or others.

In the first appreciation paper submitted on Oct. 14th, one learner wrote about how he “agreed” with the book he was reading and described a situation in which he applied what he was learning: “For example, during our first class on Sept. 30, when we were in our little groups, I used this information especially orienting-facilitating to work out a little problem that our group had”. Ben went on to describe the problem and the strategy he used to improve the situation he ended the example by saying “it turned out to be effective. I will elaborate further on this in my learning experience journal. This is also a good example of how I used ‘Dimock’s book’ in daily life”.

Other uses of examples proved to be more lengthy and detailed. One of Susan’s examples was two typed pages long and included a very detailed description of an experience she had with another student. Her example included pieces of dialogue and the various events that were part of her experience.

As illustrated in the writings of these two students, the use of examples was a
strategy employed by learners to reflect on significant experiences and illustrate their opinions. After writing these examples most learners reflected back on their own learning, using terms such as “this has shown me”, “I recognized, “I was reminded”, “I have learned”. The instances I have commented on above come from the learners’ first submitted portfolio pieces. In later assignments examples were elaborated on by using speculation as a strategy for self-reflection.

Speculation

Much like the case of using examples as a strategy of self-reflection, it was suggested in the course outline and through verbal instruction that the students discuss how problems were resolved or could have been resolved in their groups. For this reason it was not surprising to see learners using speculation as a strategy for self-reflection. Speculations tended to fall under one of two main categories:(a) speculations about what they could have done differently, (b) speculations about why others did what they did.

Speculating On What Could Have Been

In reading through the portfolio pieces submitted on October 28th, there were a significant number of learners who, after giving an example, speculated about how they could have altered their behaviour to improve the situation. One learner Lynn wrote:

I felt very busy doing that job and I don’t think I was as good as I would have liked to be, at having each person be actively responsible for his or her role.

Perhaps I could have done that by saying something like: you each have your area of expertise speak out for what you think is important.

In cases where the learners were reflecting and speculating about their own behaviour, they tended to use specific examples of how they should or could have
behaved differently. A few students, like Anna even gave multiple alternatives.

In retrospect, rather than just putting up with the communication difficulties, I could have done one of two things: 1) asked the speaker to talk louder, 2) asked the speaker to move from the end of the table to the middle where she could be better heard by all group members. As it is, I did none of the above, only thinking of these ideas after the fact.

I was interested in knowing whether the speculations being made and alternatives being given about what one could do “the next time” were actually translated into future behaviour. In looking though Anna’s other portfolio pieces I noticed that she recounted other situations with similar communication issues. Interestingly, she did not specifically refer to her speculation strategy as the catalyst for her improved behaviour the “second time around”. Anna reported that in a situation where there was again a communication problem, this time she speculated not about how she could change her behaviour but the root cause of her inability to address communication problems generally:

I find that as I reflect on the day’s activities, I am wondering why I did not broach the subject of her inappropriate ways of addressing the meeting members and the raising of her voice when talking. It seems that for me, confronting or challenging another group member for annoying behaviour is out of the question although a challenge on a topic is not. This is a revelation to me. Now that I am aware of it, my challenge is to deal with it but not make a big deal of it.

Interestingly Anna later recounted how she actually did “deal” with a communication problem by speaking out. She wrote in her final group journal entry: “I felt the need to speak. Having difficulty being articulate when pressured to speak (even if
the pressure is self-imposed), I may have repeated myself more than once”. Her initial self-reflections, specifically her speculations about how she could have behaved differently in a specific situation later translated into different behaviour.

As in Anna’s case, speculation as a self-reflective strategy was used to: (a) propose alternatives for future action, and (b) identify the cause of behaviours and attitudes. Using speculation could direct her future behaviour in a way that was more useful to her learning.

Speculation About Other People

In addition to using speculation as a self-reflective strategy for their own behaviour and attitudes, learners also used speculation as a strategy for reflecting on what they thought of others’ behaviour and attitudes. These self-reflections pointed to the social nature of the learning process. Speculating about what others were doing and why appeared to be an avenue for understanding their own learning process.

Sharon, in her journal entry for Oct. 14th, used speculation to reflect on a number of interactions with other students and what those interactions taught her. She documented how she tested he speculations in class.

I wondered if he was setting his boundaries or reacting to his own perceptions of the domination of [two members of the class] in a group from last class. I responded by saying that every group needs a recorder. He smiled and said it sounded good to him because he preferred brainstorming alone.

She described another incident, with the same individual, where she again tested her speculations about his behaviour “I thought he might being sarcastic since he had chosen not to participate in the exercise. I asked him, and he said no he really liked our
group". Near the end of the journal entry she describes what she has learned from these experiences: “I learned that individuals can change their behaviour depending upon who they are in a group with and whether or not they value the issue we are discussing”. By using the self-reflective strategy of speculation, Sharon appeared to learn the importance of, as she put it in her final self-evaluation, “checking out my perception of reality”.

Kelly speculated about another students’ behaviour and how it helped her identify positive learning achievements.

I did not think I was ‘too quiet’. I said something when I had something to say.

The problem might have been that my group member was not comfortable with ‘quiet’ members in her group. I thought that it was very considerate of her to ask to begin with, which is a sign that we are able to be open with each other as co-members of a group.

The use of speculation as a self-reflective strategy among these learners was one way in which learning experiences were analysed at a deeper level. Rather than simply illustrating or describing what was happening, learners used speculation to probe questions of why things were happening.

Comparison

Students in this class also seemed to benefit from using comparison as a technique for self-reflection. While comparisons were made in the learners' initial portfolio pieces the use of comparison as a self-reflective strategy generally increased in frequency and detail over the length of the course. The use of comparison provided the learners with the opportunity to reflect on how their thinking and/or behaviour had changed over time and how that affected how and what they had learned. Comparisons were made on a number
of different levels, comparing past and present experiences and comparing current experiences with a theoretical argument or philosophical concept.

Comparisons being made between current and past experiences were most often used to demonstrate the learner’s growth or improvement in an area. The comparisons were particularly evident in the learners’ final portfolio pieces, the self-evaluations. For example learners used comparison to document how things had changed since the beginning of the course. One learner wrote this: “I hooked up early to first class and kept going back. I have contributed energetically and I have done this after studiously avoiding first class for nearly three years”. Another student used comparison as a strategy to describe skills he previously didn’t have but now can apply “in this course, I improved on my leadership skills. From past experience, I gained some knowledge about group situations and how to observe groups. I used this new knowledge to become a leader”.

The instances where the learners compared their experiences to a theoretical argument were most often found in the appreciation papers, whereas the discussion of past and present experiences were recorded most often in the journals. Comparing current learning experiences with theoretical criteria, standard or concept is one way that learners process the content of what they are learning. In Ben’s appreciation paper he described how what he was learning could be compared to his current experiences. After summarizing the key concepts presented in the book he was reading, Ben compared these criteria to his own experiences, “Our group fits into the inclusion phase because each member gave some ideas, therefore, felt included. We had a high level of cohesiveness and there wasn’t any struggle for leadership”. Ben had compared his current group experience with the theoretical concepts he is reading about.
In another example, Sharon used comparison as a strategy to compare her current group experiences with the concepts of "lifters and leaners" she had found in a poem. By using the experiences to illustrate both types of behaviours she was able to reflect on the learning benefits of each concept and which would be most useful to her personal learning.

Each member has communicated ideas, concerns, suggestions, information and put in the time necessary to develop the relationship with each other. The lifters are lifting their own weight while supporting the others to do the same. I believe this is a demonstration of healthy interdependence. *Lifting* your own weight, while *leaning* upon others for support. Having a balance within yourself is what I think an effective group member's behaviour should reflect.

Comparison was a strategy used often by the learners in this course, however, a strategy used for different reasons by different learners. In reflecting on how their attitudes and behaviours compared to past experiences or theoretical concepts, these learners we able to show evidence of their growth as learners and their understanding of complex theoretical issues.

*Question-Posing*

In reading through the portfolio pieces submitted later in the course (second appreciation papers, final journal entries and self-evaluations) I began to see a pattern among some of the learners. Many of them were now using question-posing as a strategy for self-reflection. Learners began to question themselves on many things.

They questioned their *emotions*: "would I let my emotions and dislike for those characteristics shut me down?", "was it about fear or power?". They critiqued their
behaviour by posing questions to themselves like; "what do I need to change about some of my behaviour that would make me a better group member?", "What should my reaction have been?", and; "What do I believe? Where does that belief come from? How does what I believe effect my behaviour?". In addition, many learners posed questions to themselves concerning decisions they had made. For example Sharon asked herself a number of questions relating to why she choose to work with certain people. She wrote: "I am here to interact with as many people as possible types. Is it a confidence issue? An approach to learning? An avoidance of potential conflict issue?".

In posing these questions it appears they had more then one function. Some of the questions seemed to be the starting points for a more elaborate reflection on the topic. For example Andre, the learner who asked, "what do I need to change about some of my behaviours" actually went on in his writing to answer the question by providing specific examples of behaviours he wanted to change.

For example, it was noticed quite early on (the first week I think) that I have a dominant personality. I challenged myself to accept such interpretations. And even though I was somewhat reluctant, as was illustrated in my somewhat defensive comments in the first journal entry, I eventually welcomed such feedback".

Other questions however, were left abruptly unanswered. This could suggest that the questions in many of those instances were a way to connect with the instructor through shared understanding. For example, learners wrote questions like, "Balance in all things, right?", "Aren't we all?", and "Who has time to teach content?" The questions were being directed not only to themselves but also to the reader.
Whether the questions were posed as a way to connect with an audience or as a strategy for critically examining one's attitudes, behaviours and emotions, questioning was one of the strategies these learners used for self-reflection.

Metaphors and Quotations

The use of metaphors and quotations were strategies that only appeared in the final two weeks of assignments. However, since not every piece was collected from every student there could have been students employing this strategy whose documents were just not accessible to me.

The use of metaphors was of particular interest because I found myself using metaphors throughout the process of writing my reflective researcher journal. These metaphors were used as themes, like my initial poem that provided the inspiration for my journal, or as illustrations of what I was feeling. One journal entry in particular, where I was describing the process of learning about ethics in qualitative research illustrates my point about using metaphors as a vehicle for self-reflection.

It’s like a maze … You’re all alone and there is only one way to get out. There is this sense panic, of rushing and of knowing that YOU have to make the right decisions or you’ll never get to where you want to go. You feel that you have to rush to get through, and you get agitated because you’re so confined. I’m sensing a shift in my metaphor. Now it seems more like I’m embarking on voyage. I have a number of skills and abilities that will help me in negotiating through obstacles along the way, perhaps an unforeseen storm, a misplaced navigational instrument, a disheartened crewmember, etc. My choices are informed. I can collaborate with
others and I have space for flexibility, room to shift with the changing
environment. —Entry Sept. 17, 2000

Some of the metaphors used by the participants were complex others were brief
references to commonly used metaphors in education. In addition to the literary
metaphors, learners also used quotes from poets, philosophers, religious leaders and
others as points for self-reflection. Quotations were used in two ways, only one of which
was considered a self-reflective strategy. Learners used quotations in the traditional
academic sense, to cite specific references in the relevant literature and they used brief
quotations/poetry as metaphors for their learning experiences. It is the use of quotations
in the metaphoric sense that I will be describing.

One example of poetry used as a starting point for reflection is in Sharon’s paper
on her perception of the two kinds of people in groups the “lifter” who does their part and
the “leaner” who lets others carry their load. At the beginning of her paper she included a
brief poem, which introduces these concepts. The final section of the poem goes like this:

No, the two kinds of people on earth I mean
Are the people who lift and the people who lean,
And wherever you go, you will find the world’s masses
Are always divided into just these two classes;
And oddly enough you will find to, I ween
There is only one lifter to twenty who lean,
In which case are you- are you easing the load
Of the toilsome toiler who toils down the rod,
Or are you a leaner, who makes others bear
Your share of the labor and worry and care?

-Author Unknown

Sharon used this poem to provide a framework for reflecting on the different roles people play in groups. Throughout her paper she referred back to this poem as a metaphor for her experiences with groups. Metaphors and quotes were used to reflect on; what was being learned, difficulties experienced while learning, the processes involved in learning, and emotional reactions to the learning experiences.

While most students did not see metaphor as a self-reflective strategy, one student in particular, consistently used metaphors in her portfolio. In her first paper Lynn began using metaphors as a way of “seeing” herself in the learning process. In reading a particular book she commented on the following: “unfortunately the language used to express these ideas is intellectual and complex. I personally find it like walking through mud in rubber boots. Every time I move forward I am in danger of loosing my boots”.

She later goes on to incorporate a number of quotes like “New seed is faithful. It roots deepest in places that are most empty- C. P. Estes” and “For these few days, The hills are bright with cherry blossom, Longer, and we should not prize them so – Yamabe No Akahito”. These two quotes in particular were not referred to directly in the text of the Lynn’s writings but were representations of what she was reflecting on in her writing. For example the quote about “new seed being faithful” was a metaphor for how she had learned by being rather than doing. It was in her not doing (empty) that she learned the most (new seed).

I do believe that I have recognized in myself during this class that I have given up trying. I have given up trying to lead and I led. I have given up trying to be
compassionate with others and I am compassionate. I have given up showing off and I show up in the crowd. In some real sense I achieved my goal of being rather than doing group dynamics.

As mentioned earlier, some learners used more common metaphors as a way to reflect on their learning experiences. In reflecting on how she tended to be task oriented in her learning, Anna wrote “I was like the proverbial bull in the china shop, clomping over everything in the way”.

Although not the primary strategy used by learners in this course, metaphors and quotations were still employed in the process of self-reflection.

Summary

Self-reflection manifests itself in many ways: examples, speculation, comparison, question-posing and using metaphor are some of the many ways in which learners engage the reflective process. Recognizing that learners use specific strategies to organize their self-reflective process is an important consideration for researchers interested in SRL. If we extend Shin’s (1998) logic that learning ability can be improved through strategy training then it may be possible to identify self-reflective strategies that are more likely to develop self-regulated learning. Lin (1994) suggested that metacognitive strategy training involves providing students with information about what strategies to use, how to use the strategies and when to use them. Metacognitive strategy training could be useful in helping to develop skill at self-reflection but it requires further research into which reflective strategies are most useful to learners.

I would suggest that models of self-directed learning overestimate the learner’s ability to automatically acquire learning strategies. It has been argued that supplementing
instruction with such strategies could improve learning outcomes (Brown and Barclay, 1976; Lee, 1993).

This study, in focusing on how learners self-reflect was not designed to evaluate whether these strategies were “valuable” or why certain learners used and did not use certain strategies. These questions and others relating to how self-reflection manifests itself in portfolio assessment are questions that future researchers should continue to explore. In addition, understanding how learners combine different self-reflective strategies for different portfolio tasks could be useful in helping teachers, students and curriculum developers create self-reflective activities that go beyond the current format of “prompts” and reflective checklists.

Discouragers and Encouragers

One of the main objectives of this research was to explore how adult learners self-reflect in the portfolio assessment environment. Part of understanding how they self-reflect is understanding the factors that are shaping the reflective process. Discouragers and encouragers can be both the individual’s actions and attitudes or social structures within the learning environment that influence the content and process of the students learning.

As was previously discussed in the review of the literature, researchers investigating self-regulation are particularly interested in factors affecting learners’ self-reflection. By studying factors that discourage or encourage self-reflection, strategies can be designed to improve self-regulation among adult learners.
During analysis of the data a number of factors emerged as key themes. Three in particular will be addressed here; (a) task understanding, (b) feedback, and (c) power hierarchies.

Task Understanding

Despite recent advances in alternative assessment, adult learners are generally used to “traditional” strategies for measuring their performance. Any time a new strategy is employed, such as portfolios, task understanding becomes crucial to the learner’s ability to achieve (Hadwin, 2000)

From my perspectives it appeared that problems with task understanding generally manifested in two ways. While some individuals did not feel they had a clear sense of what was expected of them while others struggled to find the tasks meaningful learning experiences, though they understood what was required.

Conceptualizing the Task

Clarity was a problem for a number of students. While some students like Sharon, reported having a very good sense of what the different portfolio tasks required, other students seemed to struggle. However, this was not perceived as a problem for everyone. Anna for example, did not seem to think the lack of understanding was all that important commenting; “I am not sure of the purpose of this activity but I expect that you will divulge it eventually”. Others, like Kelly, showed more concern.

Once we new what was expected of us in this exercise, we went about solving the problem. I am not sure how it came about but we had a disorganized start. I would call it a small panic state where we were unsure how to begin.
During a conversation I had with Dawn and Lynn during lunch on October 14th the issue of task understanding surfaced again. Lynn asked me about the instructor's grading criteria and what she was “supposed” to put in her appreciation papers. Dawn interjected and commented about how she was really struggling to understand what to put in her learning contract, she said: “I only chose a B for the contract I wasn’t sure if what I did was right. I spent hours going over my journal entries wondering which way I should do them. But I know I can renegotiate later”.

It appeared that Dawn was reassured by the instructor’s vow to renegotiate student contracts if students were to change their minds, or wanted another stab at their assignments. Lynn on the other hand continued to be concerned about what was required. In her journal she asked the instructor for clarification “I have two different styles” she wrote, “and I don’t feel attached to either, I still feel unsure of what you are after”.

Andre indicated that he thought individuals in the group should take more responsibility for making sure tasks were understood;

I saw many groups today, including my own, waste a considerable amount of time on understanding what the task is. It is also important that the task be understood by all members, no matter how clear the instructions were. In fact, it is perhaps wise for the group to reiterate the task so as to avoid confusion.

**The Meaningfulness of the Tasks**

In addition to understanding what the tasks required in terms of effort and format, some argued that the tasks weren’t meaningful to them. In an interview with Lynn, when asked what her feelings were on the weekly-self evaluations she commented:
I did the first one and handed it back in thinking ‘this is not useful to me because I know how to do these things and I know I do them well’. I looked at the second one and said ‘I’m not doing this’. I didn’t even look at the third one. The fourth one, again it was like asking superficial stuff; did you do or not do ... they [self-evaluations] weren’t useful to me.

Andre also described what he called “lack of commitment to a particular task”. He described how he “had difficulty immersing [him]self fully in the task requested” and found himself “simply ‘going along with it’”. Reflecting back on his performance in the class he noted that is not applying himself he “somewhat cheated [himself]”, and missed the “educational purpose of the task”. During the interview, I asked him about this “lack of commitment” and he explained how his failure to complete certain tasks wasn’t because he didn’t understand them, but because he felt they were not “necessary”. He described his impressions of the weekly self-evaluations and said: “Funny thing is, I did them the first part because I thought they were required. When I found out that they weren’t required I didn’t do them”.

**Misunderstanding: Who’s the Problem?**

So why are people not understanding the tasks? And who is ultimately responsible for lack of understanding, the instructor, the peer group, or the learner?

This general lack of understanding does not necessarily suggest a communication problem on the part of the instructor. When asked about whether he thought students understood the tasks, David speculated that lack of communication wasn’t the primary cause of misunderstanding. An excerpt from an interview illustrates this:
I find it hard to believe that they don’t understand the tasks because I explain it in many different ways. They aren’t used to this type of assessment and I also think laziness… in terms of the same patterns they are used to… they like to be safe and not do things differently.

The instructor designed the course in such a way as to give learners extensive responsibility for directing their own learning. While the instructor did offer suggestions and describe the objective for each portfolio piece, his role was not to tell them what to think or how to do things like in what I would call a traditional pedagogical way. I didn’t want to give them information and have them regurgitate it… [I use] activities that allow them to explore what they want to get out of the course.

During an interview with Lynn I asked about whether she felt she understood the various portfolio pieces. Her response, much like David’s, pointed to potentially different and deeper issues:

Often I didn’t have a clear picture of what he was trying to get at with the different activities. I questioned that and I got no response- so I have no idea whether I was on or off. For me… it could have been my own insecurities. I had no sense that he and I had a relationship and I felt that was disconcerting because I usually feel that way with teachers and I saw that he had that relationship with other people in the room. I wondered why- it wasn’t a really big deal – but I think if I had of felt that I would have felt better about letting go – not that I’m worried about the grade
Understanding the task was a key element in determining not only what students choose to reflect on, but also the strategies and formats they used to document and express these self-reflections. Solving the dilemma of misunderstanding and lack of task understanding is obviously not as simple as reiterating the objectives, as was illustrated in this case. For many of these learners it was the first or second time being in a class that uses alternative assessment strategies. In order for alternative assessment to be more successful learners may need to be socialized into the “new” way of being assessed. It is possible, in my view that what Lynn was lacking was not understanding at a basic level, but reassurance or feedback about whether she was on track.

*Feedback*

Feedback was another factor that appeared to shape the portfolio process, and thus affect the way students were self-reflecting. The issue of feedback was more than a perceived lack (quantity) but specific preferences for the type of feedback they wanted (quality). Feedback from the instructor as well as the peer group appeared to be important.

*Peer feedback*

The feedback provided for the students in this course proved to be an important strategy for reflecting on their learning and behaviour. Some learners reflected on feedback given to them by peers that they perceived as incorrect and tried to justify their argument. Others used feedback as a source of validation for their ideas and behaviour.

During one class activity (called FISHBOWL) students were required to give each other’s groups feedback. This sparked some interesting discussion on feedback in the journals. Kelly for example, wrote:
Another issue... was the misinterpretation of the observers of our group. For the first question, one of those who observed said that we 'rewrote the question' which I thought was completely wrong. The reason I bring this up is that even though someone might be listening and observing... their perspective may not be what it really is.

Andre, shared some of Kelly's concerns, he described how the feedback he had received was "in [his] opinion, somewhat inaccurate". He cautioned that peers should look deeper when providing feedback because things "may be more complex than what was initially observed". During his final self-evaluation, Andre reflected on this first journal entry. He wrote: "even though I was reluctant, as illustrated in my somewhat defensive comments in the first journal entry, I eventually welcomed such feedback, particularly in my seminar group".

Two learners in particular used feedback as a way to validate and "check" their impressions and opinions. Lynn wrote about a time when she "took the risk to ask for feedback". She wrote:

I wanted to know if my perception of what happened was a shared one. Caroline validated my experience. I picked Caroline because I felt she would tell me if she had a different perception from mine. I thought about asking Amy but I wasn't sure she would be honest. You know it's nice to be nice but it has its limits. If I had been feeling particularly bold I might have asked Kevin for feedback but I was and am not yet that bold.

As is illustrated in Lynn's comments, who provides the feedback is often as important as what the feedback is. This ability to rationalize and chose from existing
sources of feedback, the one that will be the most “useful” seems to be an important part of Lynn’s learning process.

Another student, Sharon, described a positive experience she had in receiving feedback, however it brings up an important point about the function feedback has in the learner’s mind. Sharon said she was thrilled to take on a role in class that allowed her to “state [her] opinion and potentially receive feedback from the large group”. After completing the activity she said the following about the feedback she received. “I was pleased with the feedback I received (only from males) that I did a great job and brought up good points to consider”. Interestingly enough, Sharon later commented, during an interview about how the lack of peer feedback was a real problem for her.

I like investigating my perceptions and introspections but feedback is important. I like feedback that says “yes, when you did this it was helpful”. Sometimes in this course I felt that was lacking. I wanted the class’s opinion about if I did something wrong. I would have liked to know the class’s perspective. I never received that kind of feedback. It would have been more helpful to me.

While she was initially “pleased” with the feedback, Sharon later points to wanting more constructive or critical feedback about what she was doing wrong. It appears that some times individuals prefer feedback that supports their behaviour or ideas and at other times find feedback most useful when it points to potential problem areas in their thinking and behaviour.

If people working in a portfolio environment do not understand that feedback means different things to different students and that it occurs in a complex social structure of trust and relationships feedback could become ineffective as a way to
stimulate self-reflection. It will be important for future researchers to look at how feedback strategies differ among children and adults using portfolio assessment as well as how feedback can both validate or redirect student learning.

Instructor feedback

The issue of the instructor’s feedback did not appear until the end of the term. Only one individual commented on her desire for instructor feedback before the last class. At the end of the first journal entries, Lynn asked if “David could give [her] some feedback about the format of the journals”. This issue did not emerge again until the final self-evaluations and interviews.

Some of the learners appeared to understand and value the feedback provided by the instructor. Ben in his final self-evaluation referred to the evaluation criteria.

On my first appreciation paper, I got a ‘very good’. I don’t know what I got on my second paper and the seminar, but I think I did well. However, I do need some improvement on writing the Group Experience Journal. I got a ‘fair to good’ on my first journal.

Ben remembered David’s instructions to the class that feedback indicating “fair to good” meant that piece needed to be worked on.

In reading through the interview summaries and self-evaluations it would first appear that learners were concerned about the amount of feedback they had received, however; further exploration brought different issues to the surface, namely why people want feedback in the first place.

Sharon was the most vocal about her feeling that there was not enough feedback. During an interview with her I broached the subject of the weekly self-evaluation forms.
I found it odd that they were anonymous. I didn’t get any feedback. I was expecting “you are absolutely right, you did do more of that”. I put my name on it hoping it would come back right/wrong or ‘no I didn’t see that’. I would have really liked more feedback ...It would have been good to see if what you/saw/felt was accurate. I would have liked more processing.

She also described what she saw as a lack of feedback in her journal saying; “the feedback I got was in the form of questions, but two minutes later I had answered the question. I didn’t get much feedback. I got an excellent at the end on my journal but I don’t know what that meant. What was an ‘A’ or and ‘A+’?”

While Sharon obviously wanted more feedback from the instructor, the reasons why she wanted the feedback became an interesting dilemma. When I asked her about the final self-evaluation, she seemed to have a much clearer sense of her performance saying “I knew clearly that I put myself out there and risked. I did everything I was supposed to do plus took risks”. The question then becomes, was feedback perceived as an indicator of performance or was it perceived as a tool to improve learning and reflection? Sharon appears to have wanted more “processing” which could mean that she wanted feedback to be a source for reflecting on what she was learning. Others, like Ben seemed to use the feedback as a performance indicator.

It is interesting that during the interviews, each of the participants commented on specific instances where David gave feedback; “he asked me to relate the future situations”, “he told me once to analyze more”, “he wanted the students to focus on more personal things as opposed to distant information”, “more personal is where I think he wanted us to go”, and “I got an excellent at the end of my journal”.

105
I asked David about this and he described his strategy for feedback and pointed out some important issues.

I ask questions or if people are getting at what is true self-reflection I put a checkmark beside it … I don’t write reams of commentary. When they are sort of getting at it or if they don’t get it at all I will be more explicit. “You might want to do this; focus on this”- more probing. That is really all I can do. I can tell them what to do and think and get regurgitation. At breaks they show each other the comments and say, “see - he wants us to do this…”. I’ve done that before and then everyone has the same sentences in their journal entries the next week. I don’t want them to tailor it to me. Very few students respond or write back …. It is also a function of time there is only so much one could do.

David’s response points back to his philosophy of teaching, which was described numerous times during the course. In David’s view “learning is the function of the student not the teacher”, and as such “students are the better judge of what they have learned”. While it initially appeared that it was the lack of feedback that inhibited self-reflection it could be that there was not a common understanding of the role feedback was going to play. Actors in this learning environment seemed to attach different meanings to the role feedback plays in learning.

This is a key issue for teachers and curriculum developers because it gets back to the notion that portfolios should not become “attachments” to the traditional classroom. The philosophy behind portfolios is contradictory in many ways to traditional concepts of the teacher-student relationship. I think David’s comments illustrate that moving toward a more student-centered approach to teaching involves the renegotiation of who is
responsible for learning. Until learners have the necessary scaffolding to understand this
shift in power, they may continue to want traditional forms of feedback even if it is not
conducive to helping them become self-regulating.

Power Relationships

The negotiation of “power” is an important factor in learners’ self-regulation and
self-reflection. In this class power was negotiated from the very beginning with the
learning contract, where learners were empowered by being given responsibility for
“choosing” what grade they were going to aim towards. Aside from the obvious examples
of power negotiation there were less visible ways that the issue of “power” played itself
out in this class. In particular, the learners’ perceptions of whom they were writing the
reflections for and the assumptions about the instructor’s role.

Audience

In my view one of the most interesting ways that students illustrated the role that
power played in their learning, even in a course based on principles of self-direction, was
how they directed their journal entries and who they directed them to. In looking through
the journal entries I noted that some people seemed to be writing as if the instructor was
the intended audience while others seemed to be writing to a third party.

Jessica had an interesting way of starting off each journal entry, she wrote “Dear
Group Experience Journal”. She never referred to David directly or attempted to create
dialogue between David and herself. Others however, seemed to use the journal as a
forum for dialogue.

Anna used the journal a few times as an opportunity to express to David her
personal thoughts. She wrote; “in this case as a group leader, you listened to a group
member... I felt you made them less wordy. Thank You”, and “I observed that the group seemed uneasy as you asked for answers.... I'm not sure of the purpose ... but I expect you will divulge it eventually”. It would appear that Anna was writing for the purpose of expressing to David what she was learning.

Whereas Sharon used her journal in a few instance to ask David's questions, like “did you do that on purpose?”, James skipped over things in his journal that he perceived as mutually understood by him and David, saying: “after that we know how the assignment went so. I'm not going to write about what we had to do”. Lynn seemed to carry on a more consistent attempt at dialogue. She often made comments like “you set a very jovial mood I have the impression that you want us to feel we can say anything”, and “So... why don’t you deal with it I can hear you say?”

While David has specifically stated that the journal was about them and their learning, many students still wrote to David as the primary audience. The question becomes, even in a portfolio environment where learners are given control over their learning, do learners still see the instructor as the audience of their learning? I would argue that power is often expressed by where we direct or learning and whom we direct it to.

Content

It was interesting that a few of the students actually addressed the topic of power in their appreciation papers and journals. These reflections shed light on how learners in this course were grappling with the paradox of being self-directed but in the end evaluated by the instructor. These discussions also pointed to the learners' assumptions about the boundaries of the teacher-student relationship.
After an incident where the instructor was questioned by a student on his teaching methodology, Anna illustrated in her journal that assumptions about the teacher-student relationship affect how student act in learning situations. She wrote: "Possibly due to my generation and upbringing, I felt initial horror that a student would actually question the teacher… although I did agree with the reasoning". While Anna’s first impression was that the teacher’s position of power was one to be respected she later reflected on her feeling of frustration.

A less positive outcome was the effect on the group as a whole seeing a group leader [David] exerting control (power) as demonstrated during the afternoon session… I feel this incident will limit any further questioning of the instructor however valid and that will be a shame by stifling learning and honest dialogue.

Sharon also pointed to the role assumptions play in the teacher-learner relationship. She questioned whether the exchange between David and the student was "viewed as having broken some kind of university group norm that one does not interrupt, challenge or question the professor".

There were other students who reflected on the role power played in teacher-student relationships. Lynn questioned the paradox of trying to “create power-with classrooms when the teacher has ultimate power-over”, even in instances where the course is based on self-direction. Lynn picked up this argument in her second appreciation paper commenting that the central issues for adult educators is how they “deal with the paradox of wanting to create change that is meaningful to our students and being required by our cultural, professional and legal responsibilities to evaluate”. It is
precisely the fact that the instructor "has the final" say in the evaluation that brought the issue of power to the surface in this class.

Learners also reflected on their role in the learning process and the inherent contradiction between being self-directed in a course that is externally evaluated. Despite the fact that portfolio assessment is an "alternative" form of assessment that seeks to conceptualize learning and give learners greater control, it remains an instrument of assessment. The question then becomes who's assessment is it and who's standards are these assessments based on? Self-reflection for personal learning can take a different shape than self-reflective activities that are perceived as being "for" the teacher. I would argue that the issue of power-with and power-over to use Lynn's terms; has not been adequately addressed by curriculum developers, educational theorists and teachers interested in promoting self-reflective strategies in portfolio assessment.

Summary

Self-reflection doesn't happen in a vacuum. Social and individual factors that make up the complex environment where learning takes place all influence a learner's self-reflective process. In this case, lack of task understanding, different conceptions of "feedback" and the hierarchy of power all appeared to be issues influencing learners' reflective process.

These are similar to concerns addressed in the literature on self-regulated learning. Shin's (1998) analysis of instructional design considerations for self-regulated learning identifies a number of ways we can address elements of the learning environment that act to discourage. Strategies could involve: (a) using the modeling method where learners are able to see successful strategies in action (Schunk and
Zimmerman, 1995); (b) engaging in cognitive apprenticeship involving experiential learning with an expert or mentor (Lee, 1993); and (c) providing feedback that focus on learning strategies and evaluation (Shunck, 1990).

In models of SRL the role of the mentor is key to the development of these skills. Under the model of self-direction the learner would be attempting to develop these skills in absence of a formal “teacher”. I would argue that it is questionable whether learners would develop sufficient skill at feedback and task understanding without external support (Lee, 1993). Part of SRL involves the negotiation and renegotiation of strategies and standards of evaluation. Although the teacher is an active agent in this process, the learner shares in the instructional control and goal-setting (Winne and Hadwin, 1998; Hadwin, 2000). In this study, where learners were given extensive control over their own learning, they clearly demonstrated difficulty with task understanding and the role of feedback in their own learning. Schunk (1993) argued that feedback needs to be integrated into the instructional design in order to promote self-regulation.

More than learners paying better attention to instructions or instructors providing more feedback, these students’ reflections point us back to deeper issues relating to the nature of assessment, our philosophies of education and the power structures of formal schooling. This is one area that needs to be explored further in relation to self-regulated learning. Theoretically self-regulation involves a process whereby the learner exerts progressively more control over their learning through evaluating and monitoring their progress (Hadwin, 2000). In current systems of schooling, however, the teacher, not the learner, is ultimately responsible for "assessment". How do the power structures evidence in the classroom affect learner's ability to self-regulate? Can self-regulated
learning be reconciled to a system whose aim is to stream learners through assessment? How do issues of power manifest in the learner's process of self-regulating?

The difficulty in embedding strategies for improved self-reflection and in turn self-regulation is only compounded by the inherent contradiction between self-regulation and current philosophies of formal schooling.

Content of Self-Reflections

One of the main questions underlying this research concerned the focus of students' self-reflections in the portfolio environment. What learners focus on when they reflect can tell us a lot about learners' assumptions, attitudes, learning strategies and goals. This chapter describes the different areas that students in this study focused on in their self-reflections.

It appeared from the data that there were three major areas focal points in the self-reflections, with a number of sub-categories. The first major focus of reflections related to the learning context, under which fell reflections on events and assumptions. The second major category of reflections was what I categorized as affect, that is things relating to feelings and perceptions. Sub-categories under this area included emotions and self-image. The third and final major focal area related to students' cognitive processes. Reflections on cognitive processes fell under one of three categories; goal-setting and self-awareness.

Context

It is not surprising that learners focused a majority of their reflections on the events experienced in class and prior experiences they had had. In fact, learners were encouraged to reflect on their experiences during the class. Beliefs and assumptions about
learning and relationships also constituted a significant part of the reflections. In the following sections I describe how both events and assumptions were reflected on in this study.

**Events**

I remember, on two different occasions when David reminded the students that journal entries should not be a chronology of the class activities. Making a joke of it he said lightheartedly “You don’t need to tell me what happened in class… I was there too… I know what happened”. Despite his counsel a number of students used a significant portion of their journals to reflect on the sequence of class events.

Some students, like Kelly found it useful to describe the class activities chronological in her journal. This allowed her to describe her reaction and feelings about each activity. She wrote:

The first group exercise that we did in today’s class was the Distance Exercise in pairs… the second exercise dealt with the topic of effective group communication … the next group activity was the Zoo Board Meeting… the last group exercise that we did in class was the Fish Bowl exercise.

Another student, Jessica also focused on listing activities or things she learned providing elaboration after each list. For example, in her first journal entry she wrote;

“the different activities we did included: an icebreaker, birthday date, what you want from the class, your name what every letter means to you… the energizer, the pig drawing game…” She then went on to describe how felt about certain of these activities.

While many of the learners tended to focus on describing the activities, others tended to focus on the people involved in the activities. This presented a global
perspective of who was involved, what was everyone doing and how the event unfolded. Sharon was one learner who focused on the roles each learner played in the events.

I asked Angela if she agreed. She spoke about her feelings… Phil agreed with her stating the positive contributions quieter members…. I spoke about how women especially are socialized to defer to others… Angela agreed without prompting… Peter and I organized activities…. Phil listened and then gave his opinion.

A few of the other learners, it seemed, focused more on the role they personally played in events and gave an accounting of events from their perspective. Ben’s initial journal entries were generally of this sort. For example:

I gave my ideas. then I noticed myself to be quiet and just listened to what others had to say. I noticed that I wasn’t doing my part as a group member. So I did something about it. The next exercise, I started off by saying ‘this time lets work together’ … I felt that I was an active group member.

In describing events learners reflected from a variety of perspectives. These events were described through chronological order and at times through focusing on the roles each individual played in the events. These descriptions became the bulk of most of the journals as well as the appreciation papers where students were required to summarize the article or book they were reading.

Beliefs and Assumptions

In describing the events of the course, learners described more of the social elements of their learning context. Who they were working with, what these people were like, what was happening and how they were reacting to it were all significant areas of reflection. However, learners through the expression of their underlying assumptions and
beliefs described the more individual elements of the learning context about the nature of learning.

Lynn reflected a few times on assumptions and beliefs that she held. She put her opinions up front and used her experiences to illustrate why she thought that way. She would make comments like "I think it is important to say that I believe learning of any consequence is self-directed". In one of her appreciation papers Lynn focused on explaining her belief about the nature of knowledge:

Personally I am convinced that if we spent as much time teaching people to draw as we do teaching them math, everyone would be able to draw a little and only people with God given talent would be able to do math... the most important thing we can do as teachers is help students look deeply into what they believe and how those assumptions about themselves, their world and the nature of human knowledge impacts on their ability to learn.

Assumptions were also made about issues outside the context of the course. Sharon for example made a number of references to beliefs she held about relationships between men and women. She wrote in one of her journals that "women unfortunately tend to compete (unconsciously and consciously) with other women. Only some have the inner security and collaborative mindset that says the success and ability of one of us is not a threat to my success". At other times Sharon reflected on why she thought people were behaving in certain ways, saying things like: "I believe that his need for attention and control results from a need to feel safe" and "he only sees the emotion and to him emotion and logic do not go together". These assumptions and belief statements made up a significant part of Sharon’s journal entries; they provided her the opportunity to
speculate about how people learn and how she would react in different learning situations.

Students’ descriptions of the learning context, both the events and activities they were involved in and the assumptions and beliefs that directed their learning, were an important focal point of self-reflection.

*Affect*

After the initial coding of data a number of “emotional” statements were identified. Upon further exploration it seemed as though learners reflected on both their emotional reactions to what they were experiencing and how their self-image was affected by these experiences.

*Emotions*

Emotional statements could be found throughout the learners’ documents and interview summaries. In using the term “emotional” here, I am referring to the learners’ intense mental feelings. Even during the class discussions the respondents reflected on how the activities made them “feel”. These emotional reactions ranged from anger to peacefulness. However, three emotional reactions seemed to surface more consistently as a topic of reflection and among a larger number of learners; pride, comfort and nervousness.

*Pride.*

Pride was a central emotion expressed by learners and often related to their individual accomplishments. For example, after approaching a conflict in a different way then she normally would, Sharon wrote: “I am proud to say that I did not allow that to happen. I am proud of my conduct and arguments”. In Lynn’s final self-evaluation she
reflected on performance by saying: “I am proud of the fact that aside from that first moment of ‘what this again?’ I have been open to doing anything and everything that has been offered and it never occurred to me that I would be bored. I wasn’t”. She later went on to talk about her role in emotionally difficult tasks, saying: “Despite each of these points of emotional turmoil I took part and even lead… without any contamination from the point of vulnerability. I think this is a big, big achievement and I am proud of it”.

Pride was also an emotion used when describing group achievement or performance. In describing her surprise at accomplishing the class activity early, Kelly wrote: “I was very proud that we were able to answer that first question together” and later commented, “I was surprised and proud we answered both questions in the allotted time”. Anna used her final self-evaluation to reflect on her seminar group’s performance. She wrote about her experience in this group: “I think that this is probably the first group-planned activity in which I am actually viewing from the ‘pride of ownership’ point of view”.

*Comfort.*

Throughout the portfolio pieces, many participants reflected on the level of comfort they had during different activities, and in working with different people. Comfort seemed to be one criterion for a “good” experience. Respondents reflected on both “comfortable” and “uncomfortable” experiences.

Comfort seemed to play an important role in the initial course activities, likely because class members were still getting to know one another. Some individuals felt like John, who openly expressed that he wanted to be a “little bit uncomfortable” during the class and have his “boundaries challenged”. Kelly however, seemed more cautious:
For the first class of this course, I was grouped with four of my classmates, all of whom were strangers to me...I was surprised at how comfortable I felt with my fellow group members”.

In describing the various activities her group engaged in she reported feeling “very comfortable with [her] group members, especially after the Zoo Exercise.

 Jessica also reflected on how comfortable she felt in her first few classes: “During the sessions, I felt comfortable- I was not the leader or a follower...I was comfortable in my group of seven... I was never put in an uncomfortable situation”. When asked to give her reaction to one of the group activities, Veronica said she felt “comfortable because everyone was very respectful”. During one of the large group discussions in class Dawn and Phil both described feeling “comfortable” during their group activities. Phil later reflected on how he felt the class had “grown more comfortable with one another and become more cohesive”.

 Many of the learners reflected on times they felt uncomfortable. For example, when David asked for feedback for the initial class, Olivia reported feeling “uncomfortable and apprehensive” about some of the activities.

 James, in addition to reflecting on his emotional reaction, hypothesized about why he felt that way. In reflecting on the first day’s activities, James wrote about one class activity that involved answering personal questions:

 Most of them were too personal for me to answer. This made me feel uncomfortable, because I think the rest of the class felt uncomfortable, it gave off bad energy in the room, and unfortunately I think I thrive off of positive energy.
Another time he wrote: “I don’t know about Steve, but I felt pretty uncomfortable and that’s hard with me. I think it was because we were still talking about school and school isn’t really that intimate of a topic”.

Interestingly a number of other participants referred to the same activity. Anna “was quite uncomfortable with both sessions” and observed that she “wasn’t alone in [her] discomfort”. Jessica also referred to that day saying: “this activity made me more uncomfortable. I was surprised that my name came out a few times. I did not speak much, I left a good part of the list blank”.

*Anxious and Nervous.*

In talking with David about portfolio assessment he responded by talking about how these strategies cause people to be anxious sometimes because they get people to think in different ways and present their learning in different ways. David felt that there was a level of optimal anxiety that should operate in a classroom that “stretched” people to be to try new behaviours. From the learners’ self-reflections it appeared that there was a certain level of anxiety, whether it was optimal depended on the learner.

During the second class, David asked for feedback about the last class’s activities, Olivia, Kevin and Anna all commented about how it had initially made them anxious and apprehensive. David shared with them his theory about optimal anxiety saying: “learning can take place in the midst of anxiety and stress. It can be a place of breakthrough where you break walls and barriers... and push yourself”.

Interestingly after that, students’ comments reflected a different attitude towards being anxious. Many students reflected on how they overcame these emotions. Lynn in her final self-evaluation commented:
“I also took the risk of asking for feedback... I am often able to step outside myself and observe how I am effecting those around me but not when I am anxious... but I picked Caroline to see if she had a perception different then mine.

Sharon also wrote about how she was able to try a new pattern of behaviour in class despite bad past experiences. She wrote: “I was not defensive or nervous to speak today despite being with three strongly opinionated individuals... I was not threatened by them”.

When people did not feel they had overcome their anxiety, they still seemed to think they could work through it. For example, James was quite nervous about how his seminar group was going to work out: “The bottom line about this is I’m scared. I’m sacred that there is going to be too much analysis of our topic... and we will be rushing at the end to finish” yet he still saw potential: “Hopefully, I can input my sense and get the show on the road”.

Learners in this study seemed to put an emphasis in their self-reflections on their emotional reactions and feelings. Pride, comfort and anxiety were each a significant part of the students’ experience. Interestingly not everyone put forward ideas about why they thought they had those reactions. It appeared that these emotional statements were most often linked to perceptions of performance.

*Self-Image*

While not a major focus of self-reflective comments, reflections on one’s self-image were still apparent. These reflections on self-image ranged from descriptions of when students felt valued to discussions about their personality traits.
James, in his initial journal entries talked about how the contributions he made to the group improved his self-image.

It made me feel good to see the answers put up by other groups, because it made me feel valuable to the group. I was earning my way in the group to be listened to, not just to be looked at as the young man who doesn't know much.

Interesting another participant later reflected on how her image of him had improved. She wrote: “Last year I felt James was a class clown adolescent who was not serious in his learning. I have since seen, in this course, that he is reflective, insightful and does not need guidance of direction from an older adult”.

Sharon herself discussed at some length what she thought about herself and how she struggled to break free of her concern over how others perceived her. One of her journal entries illustrated this struggle.

Sometimes when challenged by an aggressive individual, I have become so introspective of how I will be perceived (what a bitch if I answer back or I bet she can’t find an answer to that one), that my emotions take over and logic and intellect are lost in the maze. I am proud to say I didn’t let this happen.

In her final self-evaluation, Sharon wrote about how she felt about being labeled and “intellectual”:

I have been called an intellectual lately… How funny is that. I have spent all of my life guided by my feelings and therefore begin afraid to voice an opinion… because I feared that I would sound stupid… This has been a great source of learning for me- I cannot, no matter what I do, control others
perceptions of me. They will think I am what my behaviour demonstrates I am.

 Actually, I like who I am, and that is a bit of both – emotional and intellectual”

 Others reflected briefly on how their performance shaped their self-image or vice versa. Ben for instance, felt that it was because he was shy, that he had difficulty making eye contact with people sometimes. Lynn commented once “I know I’m a wimp!” after describing how she didn’t hold people accountable for being late. Finally, Anna wrote about how she felt she was able to glean useful information from the course despite her personal preferences: “I don’t consider myself a ‘group person’. I enjoy working on my own and solving problems on my own. That’s just who I am”. These learners reflected on who they thought they were as individuals and how that could have affected what and how they learned.

 One major focus of self-reflections by participants in this study was on the affective elements of the learning process. Emotional reactions as well as self-image both appeared to be an important element of students’ self-reflective process and were thus given due consideration by the learners. The affective elements of self-reflection could be an important area of future research related to portfolio assessment.

 Cognitive Processes

 The third and final major focal area of students’ self-reflections related to their cognitive processes. Reflections on cognitive processes fell under one of two categories; goal-setting and self-awareness.

 Goal-Setting

 A great deal of the portfolio activities involved the process of goal setting. The learning contract had each participant outline specific things they wanted to learn or
accomplish during the course. The weekly self-evaluations asked students to reflect on what they could improve for the following weeks class. The fact that students showed a consistent tendency to set goals could be a credit to David’s adage “start as you mean to continue”, which he alluded to on a number of different occasions. When I asked David about the learning contracts he said that even though he thinks some people don’t really think about it and just pass it in, he is more concerned about “setting the stage right from the beginning” by getting them in a goal-setting frame of mind.

The spectrum of goals set by participants was quite broad and included references to skill acquisition, developing understanding and experiencing certain situations. Some participants were very specific about goals and referred back to them throughout the course, while others gave very general or vague objectives that didn’t appear to be thought of much in later reflections.

Some of the more general goals were things like “I want to understand group dynamics better” and “take care of myself and let others do the same”. Others gave more precise objectives: “I want to learn how groups can work effectively and with as much true collaboration as possible…where there is equal power in discourse activities”.

Some learners seemed more interested in gaining a knowledge base or “understanding” whereas others intended to learn more practical skills. Jesse for example stated that one of his goals for the course was to “probe, investigate and experiment into different approaches used to communicate in intimate group circles” yet he also set a goal to improve his skill at “being more assertive in the true sense of the word – that is clearly getting my point across without compromising the fellow group members”. Jesse’s reflections on the goals he wanted to accomplish reveals that one way goals can be
categorized is according to their function, i.e., skill development or general understanding.

Further reading also revealed that some learners set experiential goals. Take for example, Sharon. She described in her final self-evaluation how experiencing new things and trying new behaviours were important goals for her in the class.

I set out in this course, as I openly stated in the first class, to take care of myself… I set out in this course to test the waters of my new (to me) self-interest behaviour… I also set out to learn if asserting myself would help me in groups with dominant aggressive (as perceived by me) individuals… I wanted to work with those individual I would have previously avoided.

Interestingly, some individuals did not necessarily perceive the goal-setting activities like the learning contract to be all that useful to her learning. Lynn for example wrote in her self-evaluation: “I don’t have any idea what I will learn until the class is over. For me it seems an almost fruitless exercise to ask what are your goals. I wrote down that I wanted to be rather than do Group Dynamics”. I later asked her about her learning contract in an interview. Lynn remarked:

I always have trouble when somebody says, “What are your goals”, here I am and whatever is here for me to learn I will learn. I don’t structure it like that… what I want and here’s my path to get there… I don’t do that very often. I go blank and then I have to remember and talk about whether I did them when I really had no conscious plan.
Andre’s concerns over goal setting brought up a number of things to consider. When I asked him about the learning contract and the goals he had set for himself he had the following to say:

In all honesty I took this course for the three credits. I wouldn’t say my objectives were completely useless I just don’t know how sincere I was. I worded it so that it permit me to do assignments and portfolio pieces that I wanted to do. This is what I want to learn because I know it is going to be feasible to write about.

In understanding the process of goal-setting among adult learners engaged in portfolio assessment it becomes extremely important to understand the motivations they have and assumptions they bring to the task of setting goals. In the case of Andre he tailored his goals to fit a particular motivation – the three credits. Why individuals set the particular goals is critical to understanding the value of the goal. Andre’s example also brings up another concern. While virtually all learners in this study engaged in the cognitive process of goal-setting, how one measures the “validity” of those goals remains unanswered. What happens if learners “set goals” that they can already accomplish? Who should determine if the goal has set the bar high enough?

Self-Awareness

A considerable portion of participant’s reflections related to issues of self-awareness. These comments often involved the learners reflecting on what they had “realized”, “been made aware of”, “discovered” or “understood”. Though learners could have expressed their self-awareness in many forms, I found through my analysis that learners’ actions and understanding were both areas they reflected on their self-awareness.
Actions.

Being aware of one’s actions did not simply mean reflecting on what one had done, but why it that action was taken or behaviour exhibited. James reflected on his behaviour in his first journal entry: “what I noticed I did was trying to make everybody in our group feel comfortable with each other. I did this by cracking jokes. Laughing I feel is a good way to get relaxed”. James not only reflected on what he had done but reflected on why he thought he did it. It is this ability to think about one’s thinking that makes self-awareness a cognitive process. Sharon also reflected on her self-awareness saying:

As our small group convened I was aware of the fact that my anger had been triggered by some of the comments made by Peter in the large group....since I am aware that this is my trigger, I am better able to recognize that this is my issue and that I have choices as to how I deal with it.

The participants’ ability to be aware of the sources of their motivation and attitudes is an important part of the reflective process. Anna in reflecting on her group experience wrote: “I found it interesting today that I chose to change chairs and move to the end of the table so that my back was not towards the instructor...my motivation was my comfort”. Self-awareness in this case involved recognizing what motivated or precipitated her behaviour.

Self-awareness in my view, is more than observing your behaviour or remembering what you said and did in a given situation, these participants illustrated in their reflections that self-awareness involves self-analysis at a deeper level, where one begins to understand the motives and assumptions that have led to the action or behaviour.
Understanding.

While some students focused on how they were aware of their actions, others focused on how they were away of what they were learning. Lynn wrote about how she was becoming aware of her ability to set limits. She wrote: “I was aware of my own vulnerability enough to back off from playing the mother in the sketch. I'm really proud of recognizing my own limits. It is an ongoing struggle”. Self-awareness in this instance appears to move beyond simply reflecting on what you understand but how your understandings translated into action, or in some cases, inaction.

Anna also reflected on her self-awareness relating to her understanding. In her final self-evaluation she reflected back on what she had learned.

I feel that I have developed an understanding of how groups work, how people in groups connect... it has made me more aware of the differences and problems that may surface when diverse groups of individuals are placed in a confined space.

A significant amount of the group experience journals and the final self-evaluations included student reflections about what they had done and what they had learned. However, not all students demonstrated that they were self-aware, in that they could take their reflections the further step by looking at not only what they did and learned but why and how (their motivations and strategies).

Summary

One of the main issues guiding this research was an interest in exploring and understanding what it was that adult learners reflected on in their portfolios. This chapter described three major focal points of participants’ self-reflections: the learning context, affective elements of the learning process, and cognitive processes. The spectrum of self-
reflective statements included descriptions of events and assumptions, emotional reactions and self-image, as well as goals and self-awareness. This Chapter has tried to illustrate that there are multiple levels and contexts to learners' self-reflective statements. The content of these reflections illustrate both the social and individual nature of the learning process and the complex relationship between task-orientation and process-orientation in learning.

Learner's cognitive awareness points to the link between self-reflection and self-regulation. Bandura (1977, 1982, 1986) suggested that learners develop their ability to regulate learning situations by accumulating successful experiences to perform the given tasks. Learners' perceived competence and self-awareness were evidence in this study by reflections on their emotional reactions and feelings of success. What role do these affective elements of the learning process play in the process of self-regulation? What is the relationship between self-efficacy and self-reflection?

According to Shin (1993) feelings of self-efficacy affect behaviour in three ways: (a) the activities the learner chooses to engage in, (b) the effort given to accomplishing the task and (c) the persistence of the learner in completing the task. It is my view, therefore, that helping learners feel confident about their ability to self-reflect could be a key factor in fostering self-regulation. If the learners feel confident in their ability to self-reflect they may engage in more cognitively complex activities.
CONCLUSIONS

It was a wise professor and colleague who helped me learn that quality educational research should have implications for both theory and practice and that recognizing what the research does not say is often as important as recognizing what it does say. This chapter will discuss the theoretical and practical implications of this study's findings.

Implications for Educational Theory

Valid research studies should facilitate and encourage public debate of educational issues if they are to prove to be worthwhile investigations and I think this study does encourage this debate on a number of levels.

While there is a plethora of studies that have examined if learners are self-reflecting, there are virtually no studies looking at how they are self-reflecting and how different self-reflection strategies affect student performance and self-regulation. What strategies are learners currently employing to help them self-reflect? Are there certain strategies that are more useful or valuable in helping develop self-regulating skills? Can we embed activities into the portfolio process that "tap into" these strategies? These questions are of particular concern with adults since there is a general lack of scholarly research on portfolio assessment among this age group.

I would suggest that there is a need for multifaceted investigations of portfolio assessment at both the level of pedagogy and policy. The majority of research on portfolios has looked at how it has been implemented in the classroom but has not considered the curriculum directives that guide classroom integration. What do the policy
makers and curriculum developers see as the purpose and philosophy behind integrating portfolio assessment? Are policy objectives and teacher understanding of those objectives in sync?

In addition, as portfolio applications broaden to include digital formats (i.e. electronic portfolios), how learners reflect in a digital environment compared to paper-based portfolios becomes another important area of research. How do learners self-regulate in a digital environment as compared to a paper-based environment? Do students use different strategies for self-reflection in the digital environment than in a paper-based portfolio? Are students more or less successful at developing self-regulating skills in a digital portfolio? The findings of this study suggest that learners experience a great deal of difficulty when trying to grapple with new forms of assessment. The integration of portfolios does not simply involve using a new instructional "tool" but the reorientation of the classroom culture. In moving from a paper-based portfolio to a digital portfolio we must consider and explore how the culture of the classroom changes and how that in turn affects student learning,

A review of the literature has identified the need within the community of researchers investigating portfolio assessment to build a common language and theoretical framework for understanding: (a) the functional differences and definitions associated with instructional and assessment portfolios, (b) the potential differences between the concepts of self-reflection and self-evaluation, and (c) how issues of "quality" in self-reflection within portfolios can/should be measured. Continued rigor in the debate over the essential constructs involved in portfolios and self-reflection can only improve the theoretical arguments being made about what portfolio are and can do.
Finally, this research points to important social, systemic and individual factors that influence the way students reflect on and evaluate their learning. While the current trend is to measure the validity of portfolios vis-à-vis traditional instructional and assessment models, future research needs to focus on the local application of portfolios within these contextual factors. The learning environments that produce the most successful portfolio applications may be so completely different from environments where traditional instruction and assessment is conducted that static measures of "validity" are not reliable.

Implications For Educational Practice

It is my hope that the findings of this study resonate, experientially or phenomenologically with a broad cross section of readers including students, teachers, policy makers and researchers. While the studies cannot be generalized to every classroom where portfolios are being used I would suggest that important considerations could still be gleaned from this research. I see this happening in a number of ways.

First, while current applications of portfolios often promote reflection through checklists, annotations and short self-surveys, I would suggest that there are multiple strategies that can be used to encourage self-reflection among adult learners. The variety of strategies employed by learners in this study could be useful to teachers and curriculum developers trying to formulate new activities and practical ways to encourage self-reflection.

Second, I think this study points to a number of social and individual factors that can encourage or discourage self-reflection in portfolio assessment. Teachers and learners should be aware that things like feedback, task understanding and power hierarchies
could affect learners’ abilities to become more self-regulating. Even with adults, care should be taken to provide explanations of not only what portfolios are, but also the philosophy behind them. Having been socialized into very traditional conceptions of assessment, learners may need relevant task understanding in order to find these new assessment strategies meaningful.
References


Zimmerman (Eds.), Self-regulated learning from teaching to self-reflective practice. New York: Guilford Press.
Appendix A

Ethics Proposal- Summary Protocol Form

**Summary Protocol Form**

Date: September, 2001

Part One: Basic Information
1. Principal Investigator:
   Lori Wozney
   Department of Education
   Tel: (514) 989-8724
   E-mail: Lori_wozney@education.concordia.ca

2. Title: *Self-Reflective Processes in Portfolios*

3. N/A

4. Brief Description of the Research:
   In adopting educational policies that promote portfolio assessment, educational
   analysts and practitioners have argued that portfolios provide a framework within
   classrooms where self-regulated learning processes and higher order thinking skills can
   be nurtured. However, academic research in the field of portfolio assessment has focused
   largely on issues of design, academic achievement and validity and not on the
   metacognitive processes involved in learning within the portfolio context. This study
   proposes a single site case study analysis of a classroom using portfolios and aims to
   explore and describe the various forms and levels of self-reflections depicted throughout
   the portfolio process of the learners. Data collection methods include classroom
   observation, interviews and document analysis. The expected benefit of the project is a
   deeper understanding of self-reflection in this particular portfolio format as well as to
   provide enough of a detailed description for others to assess how and if they want to
   integrate similar portfolio formats in their own work.

1. See Attached Letter

**Part Two: Research Participants**

1. The research study will involve participants from a graduate course in education
   at a University in Canada. The course instructor will also be involved in the
   research.

2. Participants have been recruited via contact with the course instructor.
   Participants were addressed in their class and were informed about the research
topic, ethical issues (consent, and confidentiality). Participation in the project is not part of the ordinary course requirements.

3. (i) Due to the fact that the research objectives seek to describe and explore personal opinions, expressions and reflections the research design allows for a certain level of intrusive analysis. Participants will be forewarned (Consent Form) of what is expected of them in terms of allowing the researcher to analyze documents. Observations will be conducted during the classes but will not intrude on the instructor/learners exchanges and instruction.

(ii) N/A

(iii) N/A – subjects will not be payed for participation and interviews outside of class time will be strictly voluntary – Having no impact on regular course requirements. A small package of resource material will be distributed to participants after the thesis is completed.

(iv) Information supplied by subjects will be held strictly confidential with each participant being given a pseudonym and the name of the course and school being changed as well in the writing of the report.

Part III: Ethical Concerns

1. Participants will be given an oral description of the study, the terms of their participation and the issues of consent, confidentiality and the right to withdraw at any time. As well all participants will be required to complete and submit a consent form (see attached form).

2. N/A

3. Participants will be informed both in writing and verbally that they can discontinue at any time during the research.

4. In studying self-reflective processes there is a low-level risk of participants being uncomfortable sharing particular elements of the portfolio process. Subjects will be informed verbally and in writing that their names will not appear anywhere in the final report and that comments/ideas/opinions shared during interviews will not be communicated to the course instructor, the school administration or other students.

5. N/A

6. Because the participants' voices are paramount to the successful description and exploration of the self-reflection process participants will have the opportunity to engage in reviewing and commenting on the report to ensure that the essence and context of their comments is adequately represented in the report. A copy of the
thesis will also be made available to individual participants. Subjects will be
given contact information on the researcher including; address, e-mail, and
telephone number in order to contact the researcher about general research results.

7. Participants will be notified both verbally and in writing (consent form) that the
research will respect the confidentiality of the participants.
Appendix B

Consent Form to Participate in Research

Consent Form

This is to state that I agree to participate in a program of research being conducted by Lori Wozney as part of her thesis under the supervision of Dr. Alie Cleghorn of the Department of Education at Concordia University.

A. Purpose

I have been informed that the purpose of the research is to explore self-reflective processes in "portfolio" work. Specifically to explore how learners reflect on their work a) what they are learning (content) b) why they are learning (purpose) c) how they are learning (process) and d) where they want to go next in their learning (goals). The study also aims to describe these practices with sufficient detail so that others can decide how and if they want to use portfolios in their own teaching/learning.

B. Procedures

The research will be conducted during the weekly classes (Wednesday’s 12:30 and 3:30) from September through to December 2000. Participation in the project involves three possible levels of engagement.

☐ The researcher would observe the interactions, dialogue and discussions that occur during class time. Participants would not be required to do any extra work and the class would not be disrupted.

☐ The researcher would analyse the self-reflections, expressions and learning process by looking at the written assignments prepared as part of the course requirements. No extra written work will be required by those participating. The researcher will make copies of the assignments prior to the instructor making comments.

☐ The researcher would interview participants to get a more detailed description about their process of learning. Interviews would be strictly voluntary and would take place outside of class time at a convenient time for the participants.

C. Conditions of Participation

☐ I understand that I am free to withdraw my consent and discontinue my participation at anytime without negative consequences.

☐ I understand that my participation in this study is confidential (i.e. the researcher will know, but will not disclose my identity). The researcher will assign me a
pseudonym and will also change the name of the course and the university to ensure and information I provide remains confidential.

☐ I understand that the data from this study may be published.

☐ I understand the purpose of the study and know that there are no hidden motives of which I have not been informed.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THIS AGREEMENT. I FREELY CONSENT AND AGREE TO PARTICIPATE IN THIS STUDY. (please check off all levels to which you agree to participate)

☐ I AGREE TO BE OBSERVED DURING REGULAR CLASS TIME

☐ I AGREE TO HAVE MY WRITTEN ASSIGNMENTS EXAMINED

☐ I VOLUNTEER FOR AN INTERVIEW OUTSIDE OF CLASS TIME

NAME (please print)_________________________________________________________

SIGNATURE ______________________________________________________________

DATE ___________________________________________________________
Appendix C
Contact Form Provided to Students

GETTING IN TOUCH WITH ME..............LORI WOZNEY

Home Phone: (514) 989-8724

Work Address:
Centre for the Study of Learning and Performance
Concordia University
McConnell Building
1455 de Maisonneuve BLVD. (W) LB-581
Montreal, Quebec
H3G 1M8

Office Number: 659-6

Email: lori_wozney@education.concordia.ca
Appendix D

Participant Interview Guide (Student)

Interview Guide

SECTION A - General questions about portfolio

1. What is the purpose of the “learning contract” in your opinion?
2. What were the learning objectives you outlined in your learning contract for this course?
3. To what extent did the course requirements keep you in this course?
4. Looking back at your initial objectives for the course, were you able to meet your own objectives, surpass them or were you unable to meet them?
5. How much more/less have you learned with this approach compared to a more conventional format?
6. Judging from your own experience in this class, do you think “portfolio-based” assessment was better, as good, or poorer than the kinds of assessments you’ve had in other university courses? Why?
7. What set of criteria do you think the instructor will be using to grade your portfolio of work?

SECTION B - Self-reflection in portfolio-based assessment

1. What does self-reflection mean to you?
2. Thinking back over the course of the term what are the factors that facilitated your personal reflection on your work? What made it more difficult?
3. Now that you think back what were your reactions to the emphasis on self-reflection in your assignments?
4. Are there activities you completed this term where you didn’t spend time reflecting? Which ones and why?
5. In your view, did you reflect on content (what you were learning), process (how you were learning), purpose (why you were learning), or goals (how you would apply what you had learned)?
6. What does self-evaluation mean to you?
7. How did you feel about the self-evaluation?
8. In your view is there a difference between self-evaluation and self-reflection? Describe.
9. Could you please briefly describe what you thought about the weekly self-evaluations?
Appendix E
Participant Interview Guide (Instructor)

Instructor Interview Guide

"Portfolio" is defined here as the material that documents the nature and quality of learning serving as the basis to examine effort, improvement, processes and achievements

General Questions:
A. Why did you select portfolio strategies instead of the more conventional ways of evaluating student learning?
B. In general terms what were you looking for in the group experience journals?
   • Did you find students generally focused on their role in the group or the group at large (I versus we)
C. Did you find that students had a very good understanding of what each of the assignments required?
D. How would you respond to an argument that this type of portfolio assessment produces work of lesser quality, is less demanding and not as reliable as an indicator of student learning?
E. In the course outline you mention how important it was that the "make meaning of information without continuous and direct interpretation from the course leader"—how do you think the assignments contributed to helping students achieve this?
F. Why was it important for the course to make use of the learning contract?
G. What is your definition of self-directed learning?

Questions on Self-Reflection:
H. The course had a number of "self-evaluations"—do you see a difference between self-evaluation and self-reflection? How would you describe the difference?
I. What role, if any, does self-reflection playing in learners becoming self-directed?
J. How do you evaluate the quality of the self-evaluations and reflections in the journal?
### Key Code List

<table>
<thead>
<tr>
<th></th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Self-Reflective Strategies</strong></td>
</tr>
<tr>
<td>2.</td>
<td>Examples</td>
</tr>
<tr>
<td>3.</td>
<td>Speculation</td>
</tr>
<tr>
<td>4.</td>
<td>People</td>
</tr>
<tr>
<td>5.</td>
<td>Behaviour</td>
</tr>
<tr>
<td>6.</td>
<td>Comparison</td>
</tr>
<tr>
<td>7.</td>
<td>Past/present</td>
</tr>
<tr>
<td>8.</td>
<td>Theory/practice</td>
</tr>
<tr>
<td>9.</td>
<td>Question-posing</td>
</tr>
<tr>
<td>10.</td>
<td>Behaviours</td>
</tr>
<tr>
<td>11.</td>
<td>Emotions</td>
</tr>
<tr>
<td>12.</td>
<td>Decisions</td>
</tr>
<tr>
<td>13.</td>
<td>Metaphor</td>
</tr>
<tr>
<td>14.</td>
<td>Quotations</td>
</tr>
<tr>
<td>15.</td>
<td><strong>Inhibitors/Enhancers</strong></td>
</tr>
<tr>
<td>16.</td>
<td>Task Understanding</td>
</tr>
<tr>
<td>17.</td>
<td>Conceptualizing the Task</td>
</tr>
<tr>
<td>18.</td>
<td>Finding Meaning in the Task</td>
</tr>
<tr>
<td>19.</td>
<td>Where did things go wrong?</td>
</tr>
<tr>
<td>20.</td>
<td>Feedback</td>
</tr>
<tr>
<td>21.</td>
<td>Peer Feedback</td>
</tr>
<tr>
<td>22.</td>
<td>Instructor Feedback</td>
</tr>
<tr>
<td>23.</td>
<td>Power Relationship</td>
</tr>
<tr>
<td>24.</td>
<td>Who are you reflecting for? (Audience)</td>
</tr>
<tr>
<td>25.</td>
<td>Assumptions and Ideas</td>
</tr>
<tr>
<td>26.</td>
<td><strong>Content of Reflections</strong></td>
</tr>
<tr>
<td>27.</td>
<td>Learning Context</td>
</tr>
<tr>
<td>28.</td>
<td>Events</td>
</tr>
<tr>
<td>29.</td>
<td>Assumptions</td>
</tr>
<tr>
<td>30.</td>
<td>Affect</td>
</tr>
<tr>
<td>31.</td>
<td>Emotions</td>
</tr>
<tr>
<td>32.</td>
<td>Pride</td>
</tr>
<tr>
<td>33.</td>
<td>Comfort</td>
</tr>
<tr>
<td>34.</td>
<td>Anxiety</td>
</tr>
<tr>
<td>35.</td>
<td>Self-Image</td>
</tr>
<tr>
<td>36.</td>
<td>Cognitive Processes</td>
</tr>
<tr>
<td>37.</td>
<td>Goal-setting</td>
</tr>
<tr>
<td>38.</td>
<td>Self-awareness</td>
</tr>
</tbody>
</table>

---

153