Assessment of Graduate Human Resources Development Program for St. John Fisher College

Erin A. Glanton

St. John Fisher College

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Assessment of Graduate Human Resources Development Program for St. John Fisher College

Abstract

The first formal assessment of the Graduate Human Resource Development program at St. John Fisher College in Rochester, NY is conducted and reviewed. This assessment from the learners' perspective is examined at five levels: Kirkpatrick's (1998b) four levels of evaluation and the fifth by Hamblin (1974). The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. The assessment is conducted using self-report information about learners matriculated into the program, college-provided data about them, and input from their employers. The findings suggest that there are significant differences between groups of Learners in Level 2: Learning and Level 5: Ultimate Value. The study further suggests that the Graduate Human Resource Development program at St. John Fisher College is effective in carrying out its mission.

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for
St. John Fisher College

Erin A. Glanton
St. John Fisher College
April 16, 2001
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The first formal assessment of the Graduate Human Resource Development program at St. John Fisher College in Rochester, NY is conducted and reviewed. This assessment from the learners' perspective is examined at five levels: Kirkpatrick's (1998b) four levels of evaluation and the fifth by Hamblin (1974). The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. The assessment is conducted using self-report information about learners matriculated into the program, college-provided data about them, and input from their employers. The findings suggest that there are significant differences between groups of Learners in Level 2: Learning and Level 5: Ultimate Value. The study further suggests that the Graduate Human Resource Development program at St. John Fisher College is effective in carrying out its mission.
With thanks to everyone who, in ways great and small, helped me to learn throughout my experience at St. John Fisher College. Your encouragement, support, guidance, inspiration, and challenges enabled me to really stretch myself.

A special note of deepest appreciation to Al, my wonderful husband, for his love, patience, and generosity of spirit.
We approve this paper of Erin A. Glanton

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Table of Contents

Table of Figures / 8
Table of Appendixes / 10

Chapter 1. Overview / 11
  The Importance of the Research Problem / 11
  Purpose / 12
  The Hypotheses of the Research Study / 13
  Assumptions / 14
  Organization of the Paper / 15

Chapter 2. Background / 16
  Assessment Defined / 16
  Why Assess? / 18
  The GHRD Connection to Evaluation / 20
  Levels of Evaluation / 21
    Level 1: Reaction / 22
    Level 2: Learning / 23
    Level 3: Behavior / 23
    Level 4: Results / 24
    Level 5: Ultimate Value / 25
  Assessing the GHRD Program at St. John Fisher College / 25
Chapter 3. Methodology / 28
  Target Population / 28
  Data Collection / 29
  Survey Instruments / 29
  Confidentiality / 31
  Survey Administration / 31
  Extant Data / 32
  Data Analysis / 33
  Survey Response Analysis / 33
  Quantitative Data Analysis / 33
  Qualitative Data Analysis / 36
  Limitations / 38

Chapter 4. Key Research Findings / 39
  Survey Response Analysis / 39
  Response Rate / 39
  Demographic Information / 40
  Quantitative Data Findings / 47
    Level 1: Reaction / 52
    Level 2: Learning / 53
    Level 3: Behavior / 54
    Level 4: Results / 54
    Level 5: Ultimate Value / 55
Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Statement number, level of evaluation, and statement content from Learner and employer surveys</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>Content analysis rules for coding comments from Learner and employer surveys</td>
<td>37</td>
</tr>
<tr>
<td>3</td>
<td>Summary of responses to survey instruments from Program Graduates, Program Candidates, Program Leavers, Learners, and employers</td>
<td>40</td>
</tr>
<tr>
<td>4</td>
<td>Summary of Program Graduates, Program Candidates, Program Leavers, and Learners by gender</td>
<td>41</td>
</tr>
<tr>
<td>5</td>
<td>Summary of Program Graduates, Program Candidates, Program Leavers, and Learners by description</td>
<td>42</td>
</tr>
<tr>
<td>6</td>
<td>Summary of Learners by age group</td>
<td>43</td>
</tr>
<tr>
<td>7</td>
<td>Number of Program Graduates, Program Candidates, Program Leavers, and Learners by completion year of undergraduate degree</td>
<td>44</td>
</tr>
<tr>
<td>8</td>
<td>Summary of Program Graduates, Program Candidates, and Program Learners by GHRD program completion time</td>
<td>45</td>
</tr>
<tr>
<td>9</td>
<td>Summary of Program Graduates, Program Candidates, Program Leavers and Learners by field of work at start of GHRD program</td>
<td>46</td>
</tr>
<tr>
<td>10</td>
<td>Summary of GHRD Program Graduates, Program Candidates, Program Leavers, and Learners by current field of work</td>
<td>47</td>
</tr>
</tbody>
</table>
Figure 11. Summary of means and standard deviations for responses to survey statements by Program Graduates, Program Candidates, Program Leavers, and Learners / 50
Figure 12. Mean survey rating for Program Graduate, Program Candidate, and Program Leaver groups to survey statements / 51
Figure 13. Summary of means and standard deviations for responses to survey statements by evaluation levels en by Program Graduates, Program Candidates, Program Leavers, and Learners / 52
Figure 14. Mean survey rating for current and previous employers to survey statements / 57
Figure 15. Mean survey ratings for combined Program Graduates with Program Candidates and employers to survey statements common to both groups / 58
Figure 16. Summary of comment content analysis by Program Graduates, Program Candidates, Program Leavers, and Learners / 60
Figure 17. Summary of comment content analysis by percentage for Learners / 61
Figure 18. Summary of comment content analysis by employers / 62
Figure 19. Graphic summary of comment content analysis by employers / 63
Figure 20. Summary of suggestions by Learners and employers categorized by area / 64
Table of Appendixes

A. St. John Fisher College Institutional Review Board Application and Approval
B. Instrument I: Assessment—Program Candidate and Program Graduate Self Report
C. Instrument II: Assessment—Current Employer Report
D. Instrument III: Assessment—Previous Employer Report
E. Instrument IV: Assessment—Self Report (for Program Leavers)
F. Letters of Introduction to Learners Including Consent
G. Instructions for Completion of Survey
H. Letters of Introduction to Employers Including Consent
I. Reminder Postcard
J. St. John Fisher College Student Survey (Used Through Fall 1998)
K. St. John Fisher College Student Survey (Used Since Spring 1999)
L. Summary of Learners by Gender
M. Summary of Learners by Description
N. Summary of Learners by Age
O. Descriptive Statistics for Survey Statements by Learners
P. Analyses of Variance (ANOVA)
Q. Student Surveys Course Summary
R. Student’s Newman-Keuls Test and Descriptive Statistics
S. Summary of Learners’ Salaries
Chapter 1

Overview

This study examines the Graduate Human Resources Development program at St. John Fisher College and conducts an assessment of the program to determine its effectiveness. Chapter 1 presents an overview of the study, its importance to both St. John Fisher College and Learners, what the study hopes to accomplish, presents the five hypotheses of the study, and explains the assumptions that are made.

The Importance of the Research Problem

St. John Fisher College graduated its first class of six Masters of Science candidates from the Graduate Human Resource Development (GHRD) program in 1999. These six individuals led the way for what has grown to be an expected graduating class of 17 in the year 2001. Assessment of this program is not simply a requirement of St. John Fisher College, it is an important part in the continuous improvement of the course and program offerings of the college. According to McLagan (1989), “HRD [Human Resource Development] is the integrated use of training and development, organization development, and career development to improve individual, group, and organizational effectiveness” (p. 7). The program is still in its infancy and any new instructional program requires evaluation as an essential component of its development (Schwindt, 1995). The results obtained in this study are part of the annual assessment cycle and are to be integrated in planning for subsequent GHRD program assessment (Maley, 1999).

The mission of the MS in HRD program is to prepare graduates who can anticipate and recognize rapid changes in jobs, careers, work groups and organizations, contribute to workplace learning and take a leadership role in providing strategies and practical solutions to the global business challenges affecting the workplace. (Butler, 1999)
The extent to which the mission of the program is carried out and Learners, defined as students who matriculated into the GHRD program, are successful, determines program effectiveness. Learner success measures are assessed using Kirkpatrick’s (1998b) four-step hierarchy of evaluation model with the addition of Hamblin’s (1974) fifth level of focus. The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value.

Citing multiple studies, Haworth (1996) indicates there is a lack of research related to assessment at the postbaccalaureate level. It is the intention to provide some as a result of this study.

**Purpose**

The purpose of this study is to conduct an assessment of the Master of Science in Human Resource Development program at St. John Fisher College in Rochester, NY. Learners, who are separated into three groups: (a) graduates of the program, (b) current program candidates, and (c) candidates who matriculated into the program but have not taken a class in the previous year, are examined through extant data, self-report data, and employer-report data. Analyses of the data on these groups are conducted to determine program effectiveness. Program effectiveness is determined by the extent of perceived Learner success using Kirkpatrick’s (1998b) four-level hierarchy of evaluation model with the addition of Hamblin’s fifth level of focus. The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. Specific outputs are examined. These outputs include (a) satisfaction levels; (b) coursework scores and grade-point-averages (GPAs); (c) perceived behavioral changes—both in the classroom and on-the-job; (d) perceived anticipation and recognition of change, contributions
to workplace learning, and demonstrated leadership; and (e) career advancement and earnings increase.

Within the scope of this study, the GHRD program at St. John Fisher College is considered a learning intervention. A learning intervention is defined by Rothwell and Sredl (2000) as an action designed to energize change as it provides additional skill, knowledge, and realignment of Learner’s attitudes. This intervention, albeit a lengthy one for the Learners, is of the qualifying educational type in that it “provides individuals with the educational credentials necessary for advancement in their careers” (Rothwell & Sredl, p. 11). The study looks at the effects of this intervention.

Murphy and Harrold (1997) refer to assessment as “a moving target with rising expectations” (p. 1). “Institutions currently are at various stages in the implementation of assessment activities. Institutional activities can be identified along a continuum from inadequate through adequate to exemplary in relation to the moving target of expectations for assessment activities” (p. 3). This is the first assessment of the GHRD program at St. John Fisher College, but it is along this continuum toward exemplary that the researcher intends this study to move the college’s assessment activities.

The Hypotheses of the Research Study

The study poses five hypotheses:

H₀: There is no significant difference in satisfaction levels between the three groups of Learners.

H₁: There is no significant difference in coursework scores and grade-point-averages (GPAs) between the cohorts. A cohort is defined as the group of matriculated students beginning
the program together in the fall of any year. Students entering the program in either the spring or summer will be included in the cohort formed in the fall of that calendar year.

H2: There is no significant difference in perceived behavioral changes—both in the classroom and on-the-job—between the three groups of Learners.

H3: There is no significant difference in perceived anticipation and recognition of changes, contributions to workplace learning, and demonstrated leadership between the three groups of Learners.

H4: There is no significant difference in career advancement and earnings increase between the three groups of Learners.

**Assumptions**

Three assumptions are made regarding this study. First, that the Learners' perceptions and those of the employers selected by them, along with the extant data, provide the optimum basis for determining the success of the GHRD program. "Alumni are . . . a resource to measure effectiveness . . . and may be able to provide to faculty measures of satisfaction with the department/university and perceptions of assessment goals" (Lipschultz & Hilt, 1999, p. 79). It is believed that all Learners enrolled in the program provide a similar resource and can offer insight and value to this study.

Second, the input directly from Learner participants in the GHRD program and their employers is honest and complete.

Finally, it is assumed that changes made to improve the program thus far from semester to semester have not impacted the responses from members of individual groups or cohorts.
Organization of the Paper

The chapters that follow are: (a) background as provided in a literature review, (b) methodology for the study, (c) key research findings, (d) conclusions with an interpretation of the findings, and (e) an examination of relevance and future recommendations.
Chapter 2

Background

This study examines the Graduate Human Resources Development (GHRD) program at St. John Fisher College and conducts an assessment of the program to determine its effectiveness. Chapter 2 provides background on the assessment process in general and specifically as it applies to the GHRD program at St. John Fisher College. The differences between evaluation and assessment are reviewed. Five levels of evaluation—Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results (Kirkpatrick, 1998b), and Level 5: Ultimate Value (Hamblin, 1974)—the framework against which the survey results will be compared, are reviewed.

Assessment Defined

This study has as its title Assessment of Graduate Human Resources Development Program for St. John Fisher College. Assessment is clearly the preferred term for this process at St. John Fisher College. However, the means with which the assessment is conducted is through evaluation; the terms for this study are intertwined. Merriam-Webster (1999) defines assess as “to determine the importance, size, or value of” (p. 69) and defines evaluate as “to determine or fix the value of” (p. 401)—definitions which at first glance seem to be identical. The literature on the two terms, however, in the educational context, is not consistent. The term assessment has been defined in varying ways (Madaus & Kellaghan, 1992) and is not always understood clearly. The use of the word Evaluation creates similar confusion. The terms are frequently described in the literature as distinctly different, yet one author’s definition of one term may be the definition another author uses for the other term.
Madaus and Kellyahan (1992) "generally use the term 'assessment' to refer to the appraisal of individuals and the term 'evaluation' to refer to the appraisal of programs," noting that they themselves find the distinction difficult due to everyday use. Madaus and Kellyahan acknowledge the blurring in the definitions that occurs.

Conversely, Palomba and Banta (1999) assert that "assessment is the systematic collection, review, and use of information about educational programs...the ultimate emphasis of assessment is on programs rather than on individual students" (p. 4-5).

Both Gardner (1977) and Farmer and Napieralski (1997) discuss evaluation as measurement in a traditional and fairly narrow view. Ayers (1999) goes beyond measurement and maintains that "evaluating an instructional program...means collecting, organizing, analyzing, and reporting data about a number of features of the instructional program and its impact on the participants" (p. 2). Wright (1993) proposes that "assessment is a systematic, ongoing process of (1) setting goals or raising questions about the education we provide; (2) gathering information; (3) interpreting it; and (4) using it, to improve the effects of college on student learning and development" (p. 2).

Palomba and Banta (1999) provide some flexibility by stating that "the definition of assessment used on any particular campus may not work well on other campuses" (p. 3). The authors go on to say "the important question is not how assessment is defined but whether assessment information is used, and how assessment relates to well-established campus practices" (p. 298). The college itself can decide to use the terminology it finds most suitable. This is perhaps the most freeing advice; the authors recognize that the terminology has been, is, and will most likely continue to be used in varying, confusing, and sometimes contradictory ways. "Assessment [and evaluation] is more than counting, measuring, recording, or accounting;
... it is learning, developing, and building” (Ory, 2000, p. 17). It is within this spirit that this assessment of the GHRT program is conducted. For the purposes of this study assessment refers to the overall process of program appraisal to determine its effectiveness and value using the means of evaluation. Evaluation is the appraisal of each of the five levels—reaction, learning, behavior, results, and ultimate value—from the perception of the Learner, the employer, and faculty to determine Learner success. The value in conducting both (or either) assessment and (or) evaluation is the use of the information to improve the program and benefit the Learner (AAHE, 2001; Farmer & Napieralski, 1997; Haworth, 1996). Our “responsibility goes beyond the reporting of... information; our deeper obligation—to ourselves, our students, and society—is to improve” (AAHE, 1996).

Why Assess?

Farmer and Napieralski (1997) state: “Academic program assessment is not a new phenomenon” and refer to its existence in 1742. Madaus and Kellaghan (1992) trace the roots of assessment back to 1444. There is no question that the concept of assessment has been around for many years. Since the 1980’s, however, there has been increased emphasis to use assessment to improve the quality of learning (Angelo, 1999; Banta, Lunt, Black & Oblender, 1996; Lipschultz & Hit, 1999; Weise, 1992). “There has been relentless pressure for assessment (and the expectations associated with it) over the last ten to fifteen years” (Gray, 1997, p. 5). Students, faculty, courses, programs, departments, and institutions have all been the focus of assessment and evaluation efforts.

Palomba and Banta (1999) review some questions asked in the 1980’s about college graduates: “Were they learning what they should be learning? Were they able to apply
specialized knowledge and skills in the workplace?” (p. 1). These are questions that are appropriate to ask of today’s students in the GHRD program at St. John Fisher College.

The assessment movement is increasingly becoming more important (Donald, 1997). Bok (1986) acknowledges that it is unknown how much students learn in college and not an easy task to find out. The scope and difficulty of doing assessment present challenges to institutions. Lack of expertise and time coupled with the complexity of issues surrounding assessment limit progress. The interest in assessment, however, continues to build. “We need to hold fast to our highest ambitions for education and work hard at refining our assessments so that, in time, they may begin to reach the level of our educational ambitions for our students and for ourselves.” (Wright, 1993, p.7).

“A recent report from the Association of American Universities (1998) emphasizes the importance of tracking the graduates of post-baccalaureate programs” (Banta, Black, & Ward, 1999, p. 94). The authors point out that at the post-baccalaureate level, ensuring quality and improvement through program assessment is somewhat rare. Similarly, Haworth (1996) points to the scarcity of assessment beyond the undergraduate level and clearly emphasizes the “need for more assessment-related activity in graduate and professional education” (p. 91). “It appears that the recent assessment movement has ignored not only the most expensive component of our nation’s higher education system, but also the most influential in terms of its contributions to the advancement of knowledge and the development of future leaders” (Haworth, p. 89). Changes in graduate education are reflected by both students and employers (Syverson, 1996) and ongoing assessment activities may provide insight into these changes. It is anticipated that the study of the effects of graduate programs on students “would lead to more effective, less stressful, and more stimulating programs, which would lead to an absorbing expression of students’ highest

The GHRD Connection to Evaluation

The selection of the means with which to conduct this assessment by using levels of evaluation is one particularly suited to use for the GHRD program. Rothwell and Sredl (2000) present the use of these levels in conducting an evaluation, which “is the process of appraising something carefully to determine its value” (p. 275). The researcher acts within the role of evaluator in this study. This role is one of seven roles the authors present for HRD professionals to play to help organizations improve.

Kirkpatrick (1998a) maintains that:

The four levels are all important, and they should be understood by all professionals in the fields of education, training, and development, whether they plan, coordinate, or teach... whether the programs are conducted in education, business, or industry... In human resource development (HRD) circles, these four levels are recognized widely, often cited, and often used as a basis for research and articles dealing with techniques for applying one or more of the four levels” (pp. xv-xvi).

“The most successful program reviews are those that have been developed with a sensitivity to an individual institution’s culture, with a choice of an evaluational methodology appropriate to circumstances, and with a reasonable probability that the evaluation will serve a specified purpose” (Farmer & Napieralski, 1997, p.592). These authors, along with Banta (1997) and Palomba and Banta (1999), advise creating an imaginative and individualized assessment
approach for programs, one that reflects the character of the individuality of the program and local conditions. Evaluation is both a science and an art (Scriven, 1998).

At the same time, there must be a recognition that “the selection of a particular evaluation framework always entails certain consequences and constraints” (Gardner, 1977, p. 573). Madaus and Kellaghan (1992) maintain that disagreement about the chosen approach can always be found.

“We must first decide what we want to accomplish with a given program. We must develop broad goals, more specific objectives, and implementation strategies, then link evaluation methods to these components” (Banta, Black, & Ward, 1999, p. 87). The assessment must begin with a clear understanding of what the department’s “mission is, how they will ensure that it is met, and how they will show that they have succeeded” (Donald, 1997, p. 207). As Banta, Black, and Ward (1999) advise, the guidance for the methods chosen are based on the desires of the department as stated in the department’s mission statement.

“Learning is a complex process. It entails not only what students know but what they can do with what they know; it involves not only knowledge and abilities but values, attitudes, and habits of mind that affect both academic success and performance beyond the classroom” (AAHE, 1996). Incorporation of the five levels of evaluation in this assessment study is not only program appropriate, but provides the means to address the complexities of learning.

Levels of Evaluation

Kirkpatrick (1998a) originally introduced his concept of the four levels of evaluation in 1959; although he makes some changes to his guidelines, he currently concludes that the four levels—reaction, learning, behavior and results—to evaluate training programs have remained the same.
The standard and most prevalent evaluation model in the field of HRD is the four-level Kirkpatrick model (Holton, 1996; & Reynolds, 1998; Rothwell & Sredl, 2000). Holton, however, criticizes it, claiming it is "really a taxonomy of outcomes and is flawed as an evaluation model" (p. 5). Holton presents his alternate model and calls for more research. However, because of the widespread use of Kirkpatrick’s model as an evaluation tool in the field of HRD, it is used in this study to examine the preparation of those entering the field.

Level 1: Reaction

“Evaluation on this level measures how those who participate in the program react to it” (Kirkpatrick, 1998b, p. 19). This first level evaluation in essence, according to Kirkpatrick, is measuring customer satisfaction, not any of the learning that may have occurred. This level evaluation is, however, an important one according to Kirkpatrick. The measurement is made through both the results of the Student Survey administered by St. John Fisher College at the conclusion of each course as well as the survey data collected in this study.

Student surveys to evaluate classes are a familiar feedback mechanism (Ewell, 1997). These surveys are one way to “encourage careful, systematic student evaluation of courses that will help instructors discover areas in which their teaching and course materials need improvement (Bok, 1986, p. 174).

These surveys “may lead students to place the burden of responsibility on the professor’s shoulders rather than approaching learning as a shared enterprise” (Donald, 1997, p. 214).

“While the primary focus of assessment has been on student achievement or outcomes, a close look at most university assessment procedures reveals that teaching evaluation is a component in virtually all of them” (Ory, 2000, p. 14). St. John Fisher College currently uses the student surveys completed at the conclusion of courses in this capacity.
Level 2: Learning

Gagne (1985) presents five types of learning outcomes: intellectual skills, verbal information, cognitive strategies, motor skills, and attitudes. These five types of learning outcomes may be further distilled down into three categories: skills, knowledge, and attitude. Kirkpatrick (1998b) defines learning “as the extent to which participants [Learners] change attitudes, improve knowledge, and/or increase a skill as a result of attending the program” (p. 20). Learning needs to be measured in an objective and quantifiable way and is not related to use on-the-job. For the purposes of this study, this measurement is made via coursework scores, grade-point-averages (GPAs), and survey responses.

Professors, teachers, and peers make student assessments during course work. These assessments are based on research papers, reaction papers, exams, individual and group presentations, class participation, and facilitation skills demonstrated by Learners. While the grade-point-averages (GPAs) are the aggregate outcomes of the grades awarded, they are “a unidimensional conceptualization of student success as academic achievement” (Haworth, 1996, p. 92). Nevertheless, grades continue to be the most prevalent appraisal of students’ achievements.

Kirkpatrick (1998b) suggests that the Level 2 evaluation measures not only the learning of the program participants, but the effectiveness of the instructors. If failure occurs, it provides the opportunity to look for ways of being more effective in the future.

Level 3: Behavior

Kirkpatrick (1998b) defines this level “as the extent to which change in behavior has occurred because the participant attended the . . . program” (p. 20). The third level of evaluation measures the use of learning on the job, in other words, how well did the learning transfer? This
study measures perceived behavioral changes—both in the classroom and on-the-job—from the perspective of the Learner and the employer.

Although Van Dyke and Williams (1996) are specifically referring to the technical fields, it seems reasonable to agree with them that “the importance of employers’ satisfaction with graduates and graduates’ satisfaction with employment cannot be overstated” (p. 99).

Kirkpatrick (1998b) suggests that evaluation at this level may include the option of surveying the learners and their immediate supervisors, as well as subordinates and others. He notes that supervisors may not be able to provide the most accurate evaluation due to the possible limited amount of time spent with the Learner.

“The outcomes expected by society and confirmed by research include knowledge and intellectual skills, values and attitudes learned” (Donald, 1997, p. 67).

**Level 4: Results**

Kirkpatrick (1998b) defines his fourth and final level of evaluation “as the final results that occurred because the participants attended the program” (p. 23). The Learners’ perceived anticipation and recognition of change, contributions to workplace learning, and their demonstrated leadership are measured in this study via the surveys completed by both Learners and their employers.

While Kirkpatrick (1998b) viewed this fourth level as the final and most important level of evaluation, Hamblin (1974) sees it as “the crucial half-way stage between training and its ultimate effects” (p. 111).

Kirkpatrick (1998b) notes that there may be other factors that influence the results that occur and force us to use the term evidence in place of proof. “Be satisfied with evidence because proof is usually impossible to get” (p. 66).
Kirkpatrick (1998b) recommends allowing time to elapse before evaluating at this level because time between program completion and on-the-job application may vary by individual.

**Level 5: Ultimate Value**

Hamblin (1974) takes the concept of evaluation to an even higher level than did Kirkpatrick. The ultimate value level or fifth level of evaluation examines the valued ends, which Hamblin equates to financial and economic outcomes—an organization's profit and loss. For the Learner, financial and economic outcomes are most evident through career advancement and earnings increase. Furthering their career is the reason most people undertake the costly and challenging quest of an advanced degree (Baxter, 1993-1994).

The Learners themselves assess their perceived career advancement and earnings increase in this study for the Level 5: Ultimate Value assessment. Employers provide information about career advancement potential for the Learners.

**Assessing the GHRD Program at St. John Fisher College**

The current study is the first assessment of the GHRD program at St. John Fisher College. The study is based on the assessment plan submitted by Butler (1999) to fulfill the college's department assessment requirement. “Program review has become a necessary component of the assessment of institutional effectiveness” (Farmer & Napieralski, 1997, p.592). Banta, Lund, Black, and Oblender (1996) maintain that there is increasing pressure for academics “to provide tangible, systematic evidence of what students know and can do as a result of their collective college experiences” (p. xvii).

“Carefully crafted mission statements truly reflect what matters most . . . and become solid foundations upon which to build assessment programs” (Banta, Lund, Black, & Oblender, 1996, p. 4). Although it may be challenging to convert a mission statement into the classroom
(Donald, 1997), the HRD department mission statement is used as the basis for some of the questions posed in this study.

Haworth and Conrad (1996) propose that assessment of programs be focused on “a learning-centered view—that places student learning at the center of our understanding of program quality” (p.45) rather than “in terms of where a particular program stands in relation to others” (p. 49), or the prestige model of assessment. This study strives to do just that.

Palomba and Banta (1999) propose that “one of the most useful approaches for addressing question about the preparation of graduates for the workplace is to ask graduates themselves” (p. 213). The authors further suggest using parallel mail surveys to alumni and employers, noting the insight employers may be able to provide. “For most programs, the success of graduates in their academic, research, or professional careers is paramount. Information on the activities and accomplishments of graduates can be most conveniently obtained from surveys of the graduates themselves, although independent assessments of graduates’ performance can be obtained from employers” (Baird, 1996, p. 79).

While assessment at the undergraduate level has proliferated, Haworth (1996) maintains that “a systematic approach to ongoing assessment—particularly of student learning outcomes—has been virtually nonexistent at the postbaccalaureate level” (p. 90).

Time is an important factor is assessment. It is important to view data from studies over time (Haworth, 1996), use it as an iterative process, and recognize that the power of its effects are cumulative (AAHE, 1996).

“Assessment information is of little use if it is not shared with appropriate audiences and used in meaningful ways” (Palomba & Banta, 1999, p. 297). Assessment is ineffective in an unsupportive environment (Banta, Lund, Black, & Oblender, 1996). The “purpose is not to
determine if desired changes did occur, but rather to **determine what should happen next** [emphasis by the author], by discovering what changes (undesired as well as desired) have occurred and are occurring” (Hamblin, 1974, p. 72).

Given the “growing demand for professionally oriented graduate programs” (Syverson, 1996, p. 28), evaluating the effectiveness of the program at St. John Fisher College is a key component in determining its future. The emphasis that is put on assessment indicates the commitment the school has to providing high quality programs that help students both learn and develop (Palomba and Banta, 1999). The “sea-change in graduate education will mean changes in the way students assess graduate opportunities and in the way institutions assess programs. Students will increasingly be interested in the outcomes of graduate education, looking beyond the degree credential to the impact on their careers” (Syverson, p. 28).

Ewell (1994) claims that graduate study, unlike undergraduate study, has its content and credibility maintained as a shared responsibility of faculty and the entire academy. At this level assessment is done with vigor and there is continuous improvement. He maintains that the commitment to assessment is just the beginning and will lead to other questions.

Chapter 3 explains the methodology used in the project and presents the hypotheses and the assumptions made in the study.
Chapter 3
Methodology

The purpose of this study is to conduct a performance assessment of graduates, current candidates, and previous candidates of the Master of Science in Human Resource Development (GHRD) program at St. John Fisher College in Rochester, NY. Specifically, through extant data, self-report data, and employer-report data about these Learners, analyses are conducted to determine program effectiveness. Program effectiveness is determined by Learner success. Learner success measures are assessed using Kirkpatrick’s (1998b) four-step hierarchy of evaluation model with the addition of Hamlin’s (1974) fifth level of focus. The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. Specific outputs are assessed. Examined outputs include (a) satisfaction levels; (b) coursework scores and grade-point-averages (GPAs); (c) perceived behavioral changes—both in the classroom and on-the-job; (d) perceived anticipation and recognition of change, contributions to workplace learning, and demonstrated leadership; and (e) career advancement and earnings increase.

Target Population

The population (N = 70) consists of three categories of Learners: (a) graduates of, (b) current candidates for, and (c) candidates who matriculated in, but have not taken a class in the previous year, the Master of Science in Human Resource Development (GHRD) program at St. John Fisher College. For the purposes of this examination, this entire population is surveyed. Participants in category (a), graduates, are referred to as Program Graduates; participants in category (b), current candidates, are referred to as Program Candidates; and participants in category (c), candidates who matriculated, but have not taken a class in the previous year, are
referred to as Program Leavers. To more accurately measure specific aspects of Levels 3, 4 and 5, current and/or former employers of Program Graduates and Program Candidates are surveyed.

Data Collection

The conduct of the study includes collecting data from:

(a) Program Graduates and Program Candidates of the Master of Science HRD
(b) Their employers
(c) Program Leavers, that is candidates who matriculated, but have not taken any classes in the previous year

Survey research and an examination of extant data are employed. Four survey instruments are used. Three instruments assess Program Graduates and Program Candidates and one instrument assesses Program Leavers.

Instrument I: Assessment—Program Candidate and Program Graduate Self Report
Instrument II: Assessment—Current Employer Report
Instrument III: Assessment—Previous Employer Report
Instrument IV: Assessment—Program Leaver Self Report

Extant data was made available to the researcher through the GHRD program director, the registrar’s office, and the assessment department of St. John Fisher College.

Survey Instruments

All four surveys employ Likert-type scales for response to statements and the opportunity for open-ended comments. Each survey also solicits demographic information as well as responses to open-ended questions.

Instrument I: This survey, copied on white paper, is comprised of two sections. Section A provides data on ten demographic items such as gender, race, age, graduation information, and
salary. Section B is comprised of twelve statements to which the Program Graduate and Program Candidate will select from a five-step Likert-type scale rating the response from 1 (Strongly disagree) to 5 (Strongly agree). Section B also provides the opportunity for open-ended comments (see Appendix B).

Instrument II. This survey, copied on yellow paper, is comprised of two sections. Section A provides data on four demographic items which include gender, type of work, length of employment, and GHRD program completion. Section B is comprised of eight statements to which the current employer selects from a five-step Likert-type scale rating the response from 1 (Strongly disagree) to 5 (Strongly agree). Section B also provides the opportunity for open-ended comments (see Appendix C).

Instrument III. This survey, copied on green paper, is comprised of two sections. Section A provides data on four demographic items which include gender, type of work, length of employment, and GHRD program completion. Section B is comprised of eight statements to which the previous employer selects from a five-step Likert-type scale rating the response from 1 (Strongly disagree) to 5 (Strongly agree). Section B also provides the opportunity for open-ended comments (see Appendix D).

Instrument IV. This survey, copied on blue paper, is comprised of two sections. Section A provides data on twelve demographic items such as gender, race, age, and GHRD program participation information. Section B is comprised of twelve statements to which the Program Leaver will select from a five-step Likert-type scale rating the response from 1 (Strongly disagree) to 5 (Strongly agree). Section B also provides the opportunity for open-ended comments (see Appendix E).
Confidentiality

All participants’ responses are kept confidential. Surveys include demographic information as the only source of identification. Any information received is confidential, not linked to any individual respondent, and is reported on only in aggregate to preserve the anonymity of the participant. The only person having access to the data is the researcher. The results are kept secured at the researcher’s home for up to six months and are not and will not be made available to the program director.

Extant data is kept confidential by the researcher, not linked to any individual student or professor, and is reported on only in aggregate to preserve the anonymity of the Learners.

Survey Administration

Surveys were administered as unsupervised mail-response-questionnaires. Program Graduates, Program Candidates, and Program Leavers received their surveys in a packet containing a letter of introduction that included Consent (see Appendix F). As detailed below and as appropriate, Program Graduates, Program Candidates, and Program Leavers received envelope(s) printed with instructions for the process to complete and return the survey (see Appendix G), the appropriate letter(s) of introduction to the current and/or previous employer (see Appendix H), the appropriate assessment instrument(s), and postage-paid return envelope(s) addressed to Erin A. Glanton, 91 Village Lane, Rochester, NY, 14610. Packets were sent via first-class mail by the US Postal Service.

Program Candidates were divided into two groups. Group one consisted of Program Candidates who matriculated into the program prior to fall 2000. Group two consisted of Program Candidates who matriculated into the program no earlier than fall 2000.
Group one received Instruments I, II, and III. Program Candidates in this group were asked to complete Instrument I. They were asked to forward Instrument II to their current employer, and/or, forward Instrument III to their previous employer as applicable. In order to reduce any possible risk to participants, participants were able to select to whom they forwarded employer instruments.

Group two received instruments I and II. These Program Candidates were asked to complete and return Instrument I. In addition, they were asked to forward Instrument II to their current employer. Again, in order to reduce any possible risk to participants, participants were able to select to whom they forwarded the employer instrument.

Program Leavers received and were asked to complete Instrument IV only. These Learners were not asked to send surveys to their employers.

Postcards reminding Learners to return their surveys were mailed out ten days following the initial mailing (see Appendix I).

**Extant Data**

Extant data includes data collected through the St. John Fisher College Student Survey that is administered at the conclusion of each GHRD course. The form in previous use (through fall 1998), designed to obtain course feedback, instructor feedback, and information on the class environment, is comprised of fifteen statements to which Learners select from a seven-step Likert-type scale rating their response from 1 (Disagree) to 7 (Agree) (see Appendix J). The form in current use (since spring 1999), also designed to obtain course feedback, instructor feedback, and information on the class environment, is comprised of fifteen statements to which Learners select from a seven-step Likert-type scale rating their response from 1 (Disagree) to 7 (Agree) (see Appendix K). Although the two surveys contain the same number of statements, the
statements on the newer survey are phrased and sequenced differently from the first survey.

There is no direct match between the two sets of statements. Both of these student surveys are a Level 1 evaluation designed to measure learner satisfaction and provide St. John Fisher College faculty evaluations.

Additional extant data made available through St. John Fisher College were from student transcripts provided without names of students. From the transcripts, overall GPA by course; overall GPA by course and cohort; and overall program GPA by cohort were compiled.

Data Analysis

Data were analyzed using quantitative and qualitative methods. Data from the Program Graduate Self Report, Program Candidate Self Report, Current Employer Report, Previous Employer Report, and Program Leaver Self Report, student surveys, and all GPA data were entered into Microsoft Excel spreadsheets.

Survey Response Analyses

Demographic information for the entire population and each of the three groups was summarized to provide descriptions of their characteristics. Attributes such as gender, age, year of undergraduate degree receipt, and field of work were examined.

Quantitative Data Analysis

Data were examined at each of the five levels of evaluation using descriptive statistics. For ease of comparison between the three groups of Learners, the twelve statements from each survey are numbered sequentially from 1 through 12, regardless of the actual number that was associated with the statement originally (see Figure 1).
<table>
<thead>
<tr>
<th>Number</th>
<th>Evaluation Level/Description</th>
<th>Statement Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>1/Reaction</td>
<td>Satisfaction with the courses in the GHRD program</td>
</tr>
<tr>
<td>S2</td>
<td>1/Reaction</td>
<td>Satisfaction with the quality of the instructors in the GHRD program</td>
</tr>
<tr>
<td>S3</td>
<td>1/Reaction</td>
<td>Satisfaction with the intellectual challenge of the GHRD program</td>
</tr>
<tr>
<td>S4</td>
<td>2/Learning</td>
<td>Level of skill</td>
</tr>
<tr>
<td>S5</td>
<td>2/Learning</td>
<td>Level of knowledge</td>
</tr>
<tr>
<td>S6</td>
<td>2/Learning</td>
<td>Assessment of attitude</td>
</tr>
<tr>
<td>S7</td>
<td>3/Behavior</td>
<td>Transfer of learning to the job.</td>
</tr>
<tr>
<td>S8</td>
<td>4/Results</td>
<td>Anticipation and recognition of rapid changes in jobs, careers, work groups, and organizations</td>
</tr>
<tr>
<td>S9</td>
<td>4/Results</td>
<td>Contribution to workplace learning</td>
</tr>
<tr>
<td>S10</td>
<td>4/Results</td>
<td>Demonstration of leadership in providing strategies and practical solutions to the business challenges affecting the workplace</td>
</tr>
<tr>
<td>S11</td>
<td>5/Ultimate Value</td>
<td>Enhanced job/career opportunities</td>
</tr>
<tr>
<td>S12</td>
<td>5/Ultimate Value</td>
<td>Increased earning potential/financial benefit</td>
</tr>
</tbody>
</table>

Figure 1: Statement number, level of evaluation, and statement content from Learner and employer surveys.
Level 1 evaluation: Reaction. Mean, median, mode, standard deviation, and variances were calculated for statements S1, S2, and S3 to assess perceived reaction for Program Graduates, Program Candidates, Program Leavers, and all Learners. Analysis of variance (ANOVA) was conducted to determine statistical differences and test the null hypothesis, $H_0$, which states that there is no significant difference in satisfaction levels between the three groups of Learners. Mean, median, mode, and standard deviation satisfaction results from the student surveys conducted at the conclusion of each course were calculated and compared.

Level 2 evaluation: Learning. Mean, median, mode, standard deviation, and variances were calculated for course grades and GPAs from the student transcripts by each of the four cohorts. A cohort is defined as a group of Learners who start the program together in the fall of any year. Students entering the program in either the spring or summer are included in the cohort formed in the fall of that calendar year. ANOVA was conducted to determine statistical differences and test the alternate hypothesis, $H_1$, which states that there is no significant difference in coursework scores and grade-point-averages (GPAs) between the cohorts. Mean, median, mode, standard deviation, and variances were also calculated for the responses to statements S4, S5, and S6 to assess perceived learning for Program Graduates, Program Candidates, Program Leavers, and all Learners. ANOVA was conducted to determine statistical differences.

Level 3 evaluation: Behavior. Mean, median, mode, standard deviation, and variances were calculated for statement S7 to assess perceived behavior for Program Graduates, Program Candidates, Program Leavers, and all Learners. ANOVA was conducted to determine statistical differences and test the alternate hypothesis, $H_1$, which states that there is no significant
difference in perceived behavioral changes—both in the classroom and on-the-job—between the three groups of Learners.

**Level 4 evaluation: Results.** Mean, median, mode, standard deviation, and variances were calculated for statements S8, S9, and S10 to assess perceived results for Program Graduates, Program Candidates, Program Leavers, and all Learners. ANOVA was conducted to determine statistical differences and test the alternate hypothesis, $H_a$, which states that there is no significant difference in perceived anticipation and recognition of change, contributions to workplace learning, and demonstrated leadership between the three groups of Learners.

**Level 5 evaluation: Ultimate value.** Mean, median, mode, standard deviation, and variances were calculated for statements S11 and S12 to assess perceived ultimate value for Program Graduates, Program Candidates, Program Leavers, and all Learners. ANOVA was conducted to determine statistical differences and test the alternate hypothesis, $H_a$, which states that there is no significant difference in career advancement and earnings increase between the three groups of Learners.

**Student survey satisfaction levels and course grades.** The mean satisfaction rating for each course determined through student surveys was compared to the mean grade for that course by correlation testing to determine if a relationship exists.

**Qualitative Data Analysis**

Content analysis was done on the comments made by Learners and employers. Each comment made by Program Graduates, Program Candidates, Program Leavers, current employers, and previous employers was entered into a spreadsheet. Nine concept categories were created: (a) very positive; (b) positive; (c) neutral; (d) negative; (e) very negative; (f) future focused; (g) too soon; (h) suggestion; and (i) miscellaneous. For consistency, rules for the use of
each category were determined (see Figure 2). Each of the comments at the phrase level was
coded into one of these nine concepts. Frequencies were determined for Program Graduates,
Program Candidates, Program Leavers, all Learners, and employers.

<table>
<thead>
<tr>
<th>Code</th>
<th>Content Category</th>
<th>Coding Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very positive</td>
<td>Uses modifier (i.e., very, great) or superlative form of approval or acceptance</td>
</tr>
<tr>
<td>2</td>
<td>Positive</td>
<td>States approval or acceptance (i.e., good, beneficial)</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
<td>Neither positive nor negative; not relevant; not currently possible; no opportunity; already knew or did; no change</td>
</tr>
<tr>
<td>4</td>
<td>Negative</td>
<td>States disapproval or rejection (i.e., not challenging, not worthwhile)</td>
</tr>
<tr>
<td>5</td>
<td>Very negative</td>
<td>Uses modifier (i.e., very, not at all) or superlative form of disapproval or rejection</td>
</tr>
<tr>
<td>6</td>
<td>Future focused</td>
<td>Optimistic toward future; not yet</td>
</tr>
<tr>
<td>7</td>
<td>Too soon</td>
<td>Too soon, too early, or too new to evaluate</td>
</tr>
<tr>
<td>8</td>
<td>Suggestion</td>
<td>Ideas for improvements</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous</td>
<td>Don’t understand; unsure of meaning</td>
</tr>
</tbody>
</table>

Figure 2. Content analysis rules for coding comments from Learner and employer surveys.
Comments in the suggestion category were reviewed and organized into areas to provide considerations for possible future program improvements. The areas are (a) course improvements, (2) instructor improvements, (3) program improvements, and (4) improvements through connections with local businesses.

Limitations

This study has four limitations. First, the population is small. A total of 70 matriculated Learners have entered the program since its inception in 1997.

Next, the researcher is one of the Learners—a Program Candidate—which leads to the possibility of bias in both the creation of the survey instruments and in the reporting and interpretation of the results of the study.

Third, the self-report data from Learners and their ability to select to whom (and if) employer surveys were sent may provide information which is incomplete, inaccurate, and/or biased.

Finally, the phrasing of the fourth question on Instrument II: Assessment—Current Employer Report and Instrument III: Assessment—Previous Employer did not permit the researcher to determine whether or not the Learner had graduated from the GHRD program. Instead, the question only allowed the researcher to determine whether or not the Learner graduated while employed by the employer.
Chapter 4

Key Research Findings

This study examines the Graduate Human Resources Development (GHRD) program at St. John Fisher College and conducts an assessment of the program to determine its effectiveness. Chapter 4 represents a summary of key research findings from the study.

The data from the survey instruments and extant data are described and data analysis methods summarized. Chapter 4 presents the findings of the analysis. Chapter 5 offers a discussion about the conclusions from the study and offers recommendations for further examination.

Survey Response Analysis

Learners (N = 70) were mailed survey packets containing self-report and employer-report instruments. Surveys were returned to the researcher via US mail.

Response Rate

The overall response rate from the Learners is 64.29% (N = 45). The combined response rate for Program Graduates and Program Candidates is 76.00% (n = 38). There were a low number of responses from Program Leavers (n = 7) and previous employers (n = 3). Figure 3 details the survey return information from the various groups.
<table>
<thead>
<tr>
<th>Respondent</th>
<th>Possible Responses</th>
<th>Received Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Graduates</td>
<td>15</td>
<td>13</td>
<td>86.67</td>
</tr>
<tr>
<td>Program Candidates</td>
<td>35</td>
<td>25</td>
<td>71.43</td>
</tr>
<tr>
<td>Program Leavers</td>
<td>20</td>
<td>7</td>
<td>35.00</td>
</tr>
<tr>
<td>All Learners</td>
<td>70</td>
<td>45</td>
<td>64.29</td>
</tr>
<tr>
<td>Current Employers</td>
<td>Unknown</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Previous Employers</td>
<td>Unknown</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3.** Summary of responses to survey instruments from Program Graduates, Program Candidates, Program Leavers, Learners, and employers.

Program Leavers comprise 20 of the 70 Learners, producing an attrition rate for the GHRD program of 28.57%. However, 42.86% of the Program Leavers that responded to the survey indicate that they plan on completing the GHRD program.

**Demographic Information**

The population is comprised of 42.22% male and 57.78% female Learners (see Figure 4 and Appendix I). 80.00% of the population is Caucasian, followed equally by African Americans and Hispanics at 8.89% each (see Figure 5 and Appendix M). The ages of the Learners are somewhat evenly distributed across the age brackets with the exception of the 51 or over category, which is the smallest at 6.67% (see Figure 6 and Appendix N).
Figure 4. Summary of Program Graduates (n = 13), Program Candidates (n = 25), Program Leavers (n = 7), and Learners (N = 45) by gender.
Figure 5. Summary of Program Graduates (n = 13), Program Candidates (n = 25), Program Leavers (n = 7), and Learners (N = 45) by description.
Learners completed their undergraduate degrees beginning in 1970. The number of Program Candidates completing their undergraduate degrees between 1995 and 1999 is the largest segment of the population, with the years 1975-1979 the least represented segment by Learners (see Figure 7).
Figure 7. Number of Program Graduates (n = 13), Program Candidates (n = 25), Program Leavers (n = 7), and Learners (N = 45) by completion year of undergraduate degree.

Most Program Graduates (92.31%) completed the GHRD program in two years or less. However, among the Program Candidates, 32.00% anticipate the program will take between two and three years to complete (see Figure 8).
<table>
<thead>
<tr>
<th>Learners</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Two (2) years or less</td>
<td>12</td>
<td>92.31</td>
<td>14</td>
<td>56.00</td>
</tr>
<tr>
<td>Less than three (3) years, but more than two (2) years</td>
<td>1</td>
<td>7.69</td>
<td>8</td>
<td>32.00</td>
</tr>
<tr>
<td>Less than four (4) years, but more than three (3) years</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td>4.00</td>
</tr>
<tr>
<td>Don't know</td>
<td>0</td>
<td>0.00</td>
<td>1</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Figure 8. Summary of Program Graduates, Program Candidates, and Program Learners by GHRD program completion time. Note: Program Leavers were not asked to respond to this survey question.

The study of these results indicates that close to half the Learners (48.89%) work outside the field of human resources upon starting the GHRD program (see Figure 9). Very few Learners enter the GHRD program working solely in the HRD field (6.67%); 20.00% enter the program working in both HRD and HR management. Program Graduates report only a slight increase in the percentage of work in the HRD field after graduation from that of all Learners at the start of the program--up to 7.69% from 6.67% for working in HRD only and up to 23.08% from 20.00% working in both HRD and HR management (see Figure 10). Overall, 55.56% of the Learners...
report they are currently working in the HR field in development, management, or a combination of the two.

<table>
<thead>
<tr>
<th>Learners</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (N = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>In the HRD field only</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>12.00</td>
</tr>
<tr>
<td>In the HR management field only</td>
<td>1</td>
<td>7.69</td>
<td>4</td>
<td>16.00</td>
</tr>
<tr>
<td>In both the HRD and Management fields</td>
<td>2</td>
<td>15.38</td>
<td>4</td>
<td>16.00</td>
</tr>
<tr>
<td>Outside the field of Human Resources</td>
<td>8</td>
<td>61.54</td>
<td>11</td>
<td>44.00</td>
</tr>
<tr>
<td>Did not work at the time</td>
<td>2</td>
<td>15.38</td>
<td>3</td>
<td>12.00</td>
</tr>
</tbody>
</table>

*Figure 9.* Summary of Program Graduates, Program Candidates, Program Leavers and Learners by field of work at start of GHRD program.
<table>
<thead>
<tr>
<th>Learners</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (N = 46)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>In the HRD field only</td>
<td>1</td>
<td>7.69</td>
<td>6</td>
<td>24.00</td>
</tr>
<tr>
<td>In the HR management field</td>
<td>4</td>
<td>30.77</td>
<td>2</td>
<td>8.00</td>
</tr>
<tr>
<td>only</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In both the HRD and</td>
<td>3</td>
<td>23.08</td>
<td>5</td>
<td>20.00</td>
</tr>
<tr>
<td>Management fields</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside the field of Human</td>
<td>4</td>
<td>30.77</td>
<td>9</td>
<td>36.00</td>
</tr>
<tr>
<td>Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not working at this time</td>
<td>1</td>
<td>7.69</td>
<td>3</td>
<td>12.00</td>
</tr>
</tbody>
</table>

Figure 10. Summary of GHRD Program Graduates, Program Candidates, Program Leavers, and Learners by current field of work.

Quantitative Data Findings

Descriptive statistics on the responses to the series of twelve survey statements, numbered S1 through S12, were run for Program Graduates, Program Candidates, Program Leavers, and Learners (see Appendix O). The response scale ranges from 1 (Strongly disagree) to 5 (Strongly agree). Program Graduates and Program Candidates had mean scores for every statement that rated above the scale’s midpoint of 3.00. Program Leavers had mean scores above the midpoint of 3.00 for every statement with the exception of one; the only statement that received a mean from Program Leavers that was below the midpoint of 3.00 was S12, which is about increased earning potential.
In general, the standard deviations are smaller for Program Graduates than they are for Program Candidates, which in turn are smaller than they are for Program Leavers. Variations to this generality are noted in statements S10, S11, and S12.

As shown in Figure 11 which provides the means and standard deviation for the responses by Program Graduates, Program Candidates, and Program Leavers to the 12 survey statements, Program Graduates rated almost every one of the statements more highly than either Program Candidates or Program Leavers. The exception is S9, which measures the perceived contribution to workplace learning. Here Program Candidates rated just slightly higher than Program Graduates (a mean of 3.88 compared to a mean of 3.85 for Program Graduates). For all statements the means for the Program Candidates are higher than the means for the Program Leavers.

Graphic representation of the mean responses by Program Graduates (the filled circles), Program Candidates (the open circles), and Program Leavers (the triangles) to the 12 survey statements is provided in Figure 12. The statements are grouped and labeled by level of evaluation. The closeness of the responses by Program Graduates and Program Candidates to the middle statement (perceived contribution to workplace learning) makes it appear that the symbol for Program Graduates (the filled circle) is missing; it is hidden below the symbol for Program Candidates Program Candidates (the open circle).

An examination of the medians for the Learners—Program Graduates, Program Candidates, and Program Leavers—for all the statements reveals that every median is at or above the midpoint of 3.00. A comparison of the medians for each group by statement reveals a similar pattern to the one that was found with the means. The median for each statement for Program Graduates is greater than or equal to the median for each statement for both Program Candidates
and Program Leavers. The median for each statement for Program Candidates is greater than or equal to the median for each statement for Program Leavers with one exception. Program Leavers have a median score of 4.00 out of 5.00 compared to a median score of 3.50 for Program Candidates for S7, transfer of learning to the workplace.
<table>
<thead>
<tr>
<th>Level 1: Reaction</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 28)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1 Courses</td>
<td>4.48 ± 0.66</td>
<td>4.08 ± 0.70</td>
<td>3.71 ± 1.25</td>
<td>4.13 ± 0.81</td>
</tr>
<tr>
<td>S2 Instructors</td>
<td>4.38 ± 0.65</td>
<td>4.16 ± 0.55</td>
<td>3.86 ± 1.35</td>
<td>4.18 ± 0.75</td>
</tr>
<tr>
<td>S3 Intellectual Challenge</td>
<td>4.62 ± 0.65</td>
<td>4.20 ± 0.82</td>
<td>3.86 ± 1.35</td>
<td>4.27 ± 0.89</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2: Learning</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 28)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4 Skill Improvement</td>
<td>4.69 ± 0.48</td>
<td>4.42 ± 0.81</td>
<td>3.71 ± 1.38</td>
<td>4.39 ± 0.88</td>
</tr>
<tr>
<td>S5 Knowledge Improvement</td>
<td>4.85 ± 0.38</td>
<td>4.46 ± 0.61</td>
<td>3.86 ± 0.69</td>
<td>4.48 ± 0.64</td>
</tr>
<tr>
<td>S6 Attitude Improvement</td>
<td>4.42 ± 0.67</td>
<td>3.72 ± 0.79</td>
<td>3.57 ± 0.98</td>
<td>3.89 ± 0.84</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3: Behavior</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 28)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S7 Transfer Learning</td>
<td>4.08 ± 1.04</td>
<td>3.79 ± 1.10</td>
<td>3.57 ± 1.40</td>
<td>3.64 ± 1.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 4: Results</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 28)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S8 Anticipate Changes</td>
<td>4.15 ± 0.69</td>
<td>3.88 ± 0.74</td>
<td>3.43 ± 0.53</td>
<td>3.89 ± 0.72</td>
</tr>
<tr>
<td>S9 Contribute to Learning</td>
<td>3.85 ± 0.80</td>
<td>3.88 ± 0.74</td>
<td>3.57 ± 1.40</td>
<td>3.82 ± 0.87</td>
</tr>
<tr>
<td>S10 Leadership Role</td>
<td>4.09 ± 1.04</td>
<td>3.83 ± 0.76</td>
<td>3.29 ± 1.50</td>
<td>3.81 ± 0.99</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 5: Ultimate Value</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 28)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S11 Enhanced Opportunities</td>
<td>3.92 ± 1.12</td>
<td>3.78 ± 0.82</td>
<td>3.00 ± 1.29</td>
<td>3.70 ± 1.01</td>
</tr>
<tr>
<td>S12 Increased Earnings</td>
<td>4.08 ± 1.19</td>
<td>3.74 ± 1.09</td>
<td>2.71 ± 1.25</td>
<td>3.68 ± 1.20</td>
</tr>
</tbody>
</table>

Figure 11. Summary of means and standard deviations for responses to survey statements by Program Graduates, Program Candidates, Program Leavers, and Learners. The highest rating possible is 5.
Figure 12. Mean survey rating for Program Graduate (n = 13), Program Candidate (n = 25), and Program Leaver (n = 7) groups to survey statements. Statements are grouped by level of evaluation. The highest rating possible is 5.

Each of the survey statements were then categorized into the five levels of evaluation and descriptive statistics run for Program Graduates, Program Candidates, Program Leavers, and Learners by level of evaluation (see Figure 13). As was the case when the twelve survey statements were looked at individually, the Program Graduates rated the areas most highly of the three Learner groups. The Program Candidates followed, with the Program Leavers rating the means of each of the five levels of evaluation the lowest of the groups. The median rating for the Learners as a single group is 4.00 in each of the levels of evaluation.
Figure 13. Summary of means and standard deviations for responses to survey statements by evaluation levels and by Program Graduates, Program Candidates, Program Leavers, and Learners. The highest rating possible is 5.

<table>
<thead>
<tr>
<th>Level</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Level 1</td>
<td>4.49</td>
<td>0.54</td>
<td>4.15</td>
<td>0.50</td>
</tr>
<tr>
<td>Level 2</td>
<td>4.64</td>
<td>0.42</td>
<td>4.20</td>
<td>0.56</td>
</tr>
<tr>
<td>Level 3</td>
<td>4.08</td>
<td>1.04</td>
<td>3.79</td>
<td>1.10</td>
</tr>
<tr>
<td>Level 4</td>
<td>4.00</td>
<td>0.64</td>
<td>3.85</td>
<td>0.65</td>
</tr>
<tr>
<td>Level 5</td>
<td>4.00</td>
<td>1.02</td>
<td>3.76</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Level 1: Reaction

From the descriptive statistics for Program Graduates, Program Candidates, and Program Leavers for statements S1, S2, and S3, the three statements that comprise Level 1: Reaction, ANOVA is conducted (see Appendix P) to determine statistical differences and test the null hypothesis, $H_0$. This hypothesis states that there is no significant difference in satisfaction levels between the three groups of Learners for Level 1. ANOVA simultaneously compares Program Graduates, Program Candidates, and Program Candidates. The ANOVA produces a p-value of .10. This result, being greater than .05, indicates that the $H_0$ fails to be rejected. There are, therefore, no significant differences in satisfaction levels between the three groups of Learners.
Satisfaction, Level 1, is also determined by the aggregate responses on the student surveys that are completed at the conclusion of each course. The mean, median, mode, and standard deviation for each of the 34 courses for which data are available are calculated. This summary, without identification as to the course or instructor, is examined (see Appendix Q). The mean ratings, out of a scale high of 7.00, range from 4.63 to 6.89. The standard deviations range from 0.09 up to 1.36 with only five over 0.50. Of the courses, 28 of 34 had mean ratings of 6.00 or higher. Only one course mean rated below 5.00.

Level 2: Learning

Descriptive statistics for mean course grades and GPA’s from the student transcripts are calculated by cohort. A cohort is defined as the group of matriculated students beginning the program together in the fall of any year. Students entering the program in either the spring or summer are included in the cohort formed in the fall of that calendar year. ANOVA is conducted (see Appendix P) to determine statistical differences and test the alternate hypothesis, $H_1$. This hypothesis states that there is no significant difference in coursework scores and grade-point-averages (GPAs) between the cohorts. The p-value is 0.31, which is greater than .05, the selected level of statistical significance, and therefore the hypothesis fails to be rejected.

Additional comparisons are made from the data for the Learners for survey statements S4, S5, and S6, the three statements that encompass Level 2: Learning. Although this is not presented as one of the hypotheses of this study, ANOVA is conducted (see Appendix P) to determine if there is a significant difference in learning between the three groups of Learners. The ANOVA produces a p-value of 0.01. This result indicates that there is a significant difference in perceived learning between Program Graduates, Program Candidates, and Program Leavers. To determine between which groups the difference(s) lie, a follow-up analysis is...
conducted using a Student’s Newman-Keuls test (see Appendix R). This test reveals that there is a statistically significant difference between Program Graduates and Program Leavers. There is no statistically significant difference, however, between Program Candidates and either of the other two groups (S. Lotyczewski, personal communication, April 12, 2001).

Level 3: Behavior

From the data for Program Graduates, Program Candidates, and Program Leavers for statement S7 to assess behavior, ANOVA is conducted (see Appendix P) to determine statistical differences and test the alternate hypothesis, H2. This hypothesis states that there is no significant difference in perceived behavioral changes—both in the classroom and on-the-job—between the three groups of Learners. Program Graduates, Program Candidates, and Program Leavers, are compared simultaneously. The ANOVA produces a p-value of 0.61. This result, being greater than 0.05, indicates that the H2 fails to be rejected. There are, therefore, no significant differences in perceived behavioral changes—both in the classroom and on-the-job—between the three groups of Learners.

Level 4: Results

From the data for Program Graduates, Program Candidates, and Program Leavers for statements S8, S9, and S10, the three statements that encompass Level 4: Results, ANOVA is conducted (see Appendix P) to determine statistical differences and test the alternate hypothesis, H3. This hypothesis states that there is no significant difference in perceived anticipation and recognition of changes, contributions to workplace learning, and demonstrated leadership between the three groups of Learners. Program Graduates, Program Candidates, and Program Leavers are compared simultaneously. The ANOVA produces a p-value of 0.23. This result, being greater than .05, indicates that the H3 fails to be rejected. There is, therefore, no significant
difference in anticipation and recognition of changes, contributions to workplace learning, and demonstrated leadership between the three groups of Learners.

**Level 5: Ultimate Value**

From the descriptive statistics for Program Graduates, Program Candidates, and Program Leavers for statements S11 and S12, the two statements that encompass Level 5: Ultimate Value, ANOVA is conducted (see Appendix P) to determine statistical differences and test the alternate hypothesis, $H_a$. This hypothesis states that there is no significant difference in career advancement and earnings increase between the three groups of Learners. Program Graduates, Program Candidates, and Program Leavers are compared simultaneously. The ANOVA produces a $p$-value of 0.04. This result indicates that there is a significant difference in perceived career advancement and earnings increase between Program Graduates, Program Candidates, and Program Leavers. To determine between which groups the difference(s) lie, a follow-up analysis is conducted using a Student’s Newman-Keuls test (see Appendix R). This test reveals that there is a statistically significant difference between Program Graduates and Program Leavers. There is also a statistically significant difference between Program Candidates and Program Leavers. There is no statistically significant difference, however, between Program Graduates and Program Candidates (S. Lotyczewski, personal communication, April 12, 2001).

Examination of the research data on salaries reveals a mean annual salary for Learners entering the program is $32,741 (SD = $21,964), with a median salary of $29,500. (see Appendix S). Learners report a current mean annual salary of $44,228 (SD = $27,989) and a median salary of $36,750.

The mean annual difference between salaries at the time Learners enter the program and their salaries at the time of the survey is $11,487, or a mean increase of 35.1% (the median
annual difference is $7251, or a median increase of 24.6% in salary). Salary information
provided from all Learners, including those who had answered with a salary of zero, was
computed as part of the mean and median. The zero salaries for a respondent who reported being
a non-paid religious worker were not included.

Using median as the measure of central tendency to disregard the extremes at either end
of the reported data, salaries at the start of the program for Program Graduates are lower than
those of Program Candidates ($27,500 and $30,000 respectively). Current median salaries for the
same two groups are $40,000 and $35,000 respectively. (The Bureau of Labor Statistics (2001)
reports the median 1998 salary for human relations, training, and labor relations specialists at
$37,710.) The percentage increase for Program Graduates is 45.5% in contrast to 16.7% increase
for Program Candidates.

Response by Employers

The response from previous employers is very low (n = 3). This group is combined with
current employers (n = 20) for a total employer group (N = 23). Although employers responded
to survey statements similar to those given to the Learners, employers were not expected to
evaluate the satisfaction level (Level 1) or evaluate whether the Learner had learned as a result of
the GHRD program (Level 2) and were therefore not given statements in these areas. They were,
however, asked to evaluate to what degree the Learner demonstrates appropriate skill,
knowledge, and attitude for his or her position (Level 3: Behavior); to what degree the Learner
achieved the intended results of the program in the areas of anticipating and recognizing change,
contributing to workplace learning, and taking a leadership role (Level 4: Results); and to what
degree the Learner has or will have enhanced career opportunities and has financially benefited
the organization (Level 5: Ultimate Value). The mean responses by employers are all above 4.00, with the highest rating in the area of attitude (see Figure 14).

![Survey Rating Chart]

**Figure 14.** Mean survey rating for current and previous employers to survey statements. Highest possible rating is 5.

Program Graduates and Program Candidates, here combined into a single group, and employers responded in common to seven statements. These are statements S4, S5, S6, S8, S9, S10, and S11. In order, statements S4, S5, S6 relate to perceived skill, knowledge, and attitude (Level 3). Statements S8, S9 and S10 relate to anticipation and recognition of change, contribution to workplace learning, and taking a leadership role (Level 4). Statement S11 addresses perceived career opportunities (Level 5). The mean responses by both groups (Program Graduates & Program Candidates and employers) are illustrated in Figure 15. With the
exception of S5 concerning knowledge, employers consistently rate the Program Graduates and Program Candidates higher than the program participants rate themselves.

Figure 15. Mean survey ratings for combined Program Graduates with Program Candidates (n = 38) and employers (N = 23) to survey statements common to both groups.

Satisfaction Levels and Course Grades

The mean satisfaction rating for each course determined in the Level 1 evaluation through student surveys conducted at the conclusion of courses was compared to the mean grade for that course by correlation testing to determine if a relationship exists. The correlation coefficient value is 0.351, indicating a fair correlation between the two variables.

The scale for the student survey conducted at the conclusion of courses is based on a high value of seven and the scale for grades is based on a high value of four; it is difficult to compare
the two ratings. To convert them to the same scale, each mean response from the student survey at the conclusion of a course is divided by 7.00 and each mean grade for a course is divided by 4.00 to obtain percentages. Pairs of corresponding percentages for specific courses were examined. The findings indicate that of the 28 GHRD courses for which both sets of data are available, a rating below 90.00% on the student surveys directly correlates with a rating below 90.00% on the grade in that class in 4 instances. For 10 other classes that received ratings below 90.00% in either the response from the student survey or in the grade, there is no such match.

**Qualitative Data Findings**

Content analysis is conducted on the comments made by Learners and employers by categorizing comments at the phrase level into of the nine concept categories. These categories are: (a) very positive; (b) positive; (c) neutral; (d) negative; (e) very negative; (f) future focused; (g) too soon; (h) suggestion; or (i) miscellaneous. Examples of these phrases by category are as follows:

- **Very positive:** “excellent,” “format is great,” “great alternative to MBA”
- **Positive:** “comprehensive,” “ability to apply learning in my daily work,” “would recommend”
- **Neutral:** “not in my current position,” “the opportunity never presents itself,” “no change”
- **Negative:** “not everyone is challenged,” “improvement not commensurate with investment of time and money,” “didn’t learn any new skills”
- **Very negative:** “not challenging at all,” “instructor very disorganized,” “statistics and data analysis very difficult”
- **Future focused:** “not yet,” “hope to,” “anticipate increased earnings in future”
• Too soon: “too soon to tell,” “still too new”
• Suggestion: “include more practical applications,” “mentor program would be helpful for newcomers,” “would like more in-depth work”
• Miscellaneous: “not sure what this means,” “don’t understand the question,” “good luck to the program”

Frequencies are determined for Program Graduates, Program Candidates, Program Leavers, and Learners (see Figure 16 and Figure 17).

<table>
<thead>
<tr>
<th>Learners</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All learners (N = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Very positive</td>
<td>9</td>
<td>19.57</td>
<td>25</td>
<td>14.29</td>
</tr>
<tr>
<td>Positive</td>
<td>27</td>
<td>58.70</td>
<td>73</td>
<td>40.11</td>
</tr>
<tr>
<td>Neutral</td>
<td>7</td>
<td>15.22</td>
<td>35</td>
<td>19.23</td>
</tr>
<tr>
<td>Negative</td>
<td>1</td>
<td>2.17</td>
<td>18</td>
<td>9.89</td>
</tr>
<tr>
<td>Very negative</td>
<td>0</td>
<td>0.00</td>
<td>6</td>
<td>3.30</td>
</tr>
<tr>
<td>Future focused</td>
<td>0</td>
<td>0.00</td>
<td>16</td>
<td>8.79</td>
</tr>
<tr>
<td>Too soon</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>1.10</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>2</td>
<td>4.35</td>
<td>6</td>
<td>3.30</td>
</tr>
</tbody>
</table>

Figure 16. Summary of comment content analysis by Program Graduates, Program Candidates, Program Leavers, and Learners.
Figure 17. Summary of comment content analysis by percentage for Learners (N = 45).

Frequencies from the content analysis on the comments by current employers and previous employers, combined into a single group, are shown in Figure 18 and Figure 19. Comments that are considered negative constitute 6.76% of the total comments. The very positive and positive categories together account for 63.51% of employer comments.
<table>
<thead>
<tr>
<th>Employers</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive</td>
<td>10</td>
<td>13.51</td>
</tr>
<tr>
<td>Positive</td>
<td>37</td>
<td>50.00</td>
</tr>
<tr>
<td>Neutral</td>
<td>11</td>
<td>14.86</td>
</tr>
<tr>
<td>Negative</td>
<td>5</td>
<td>6.76</td>
</tr>
<tr>
<td>Very negative</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Future focused</td>
<td>5</td>
<td>6.76</td>
</tr>
<tr>
<td>Too soon</td>
<td>5</td>
<td>6.76</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
<td>1.35</td>
</tr>
</tbody>
</table>

Figure 18. Summary of comment content analysis by employers.
Figure 19. Graphic summary of comment content analysis by employers (N = 23).

Suggestions

Suggestions made in the survey by Learners and employers are categorized into four areas. The areas are (a) course improvements, (2) instructor improvements, (3) program improvements, and (4) improvements through connections with local businesses (see Figure 20). Text is paraphrased for readability and consistency.
Suggestions

Course improvements
- Include more practical and tactical applications
- Enhance project development and management
- Refine statistics area (i.e., designing surveys and questionnaires, interpreting data)
- Offer variety (i.e., HR management, business, HRD related)
- Offer more in-depth course work
- Provide more role play or simulation exercises
- Teach strategic importance of HR to organization

Instructor improvements
- Provide different instructor for each class
- Improve program director availability to concentrate on student needs, questions, and direction

Program improvements
- Strengthen with seminars/discussion groups
- Create mentor program for newcomers

Improvements through connections with local businesses
- Include an internship within the program
- Create team of alumnas, current students, Fisher faculty and local business & community leaders
- Develop placement program with program advising members, area and national business
- Connect with local businesses for job shadowing, mentoring opportunities, and announcement of job vacancies

Figure 20. Summary of suggestions by Learners and employers categorized by area.
Chapter 5 offers a discussion about the conclusions of the study and makes recommendations for further examination.
Chapter 5
Research Analysis

The purpose of this study is to conduct a performance assessment of graduates, current candidates, and previous candidates of the Master of Science in Human Resource Development (GHRD) program at St. John Fisher College in Rochester, NY. A literature review pertaining to assessment and evaluation was conducted. Based on Kirkpatrick’s (1998b) four levels of evaluation and Hamblin’s (1974) fifth level of focus, five hypotheses were formulated. The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. Data were gathered from survey instruments from Learners and employers, student transcripts, and student survey course evaluations. Descriptive statistics and analysis of variance (ANOVA) were then generated from the data to test the hypotheses. Content analysis was conducted on the comments provided by the Learners and employers.

With the above mentioned prerequisite steps complete, the interpretation and importance of this study can be discussed. The interpretation of assessment illustrates how assessment is not a scientific experiment but a messy and challenging exercise in human judgment (Wright, 1993, p.4). Chapter 5 further examines the data to seek possible interpretations, to lead to a deeper understanding of its importance, and to make recommendations for future research.

**Interpretation**

The size of the population in any study is a concern; using evidence gained from and about a small group, in this case, Learners, may lead to drawing erroneous conclusions. With that said, however, this first study to assess the GHID program at St. John Fisher must begin with the Learners who have thus far participated in the program. The response rates for this evaluation of the program from Program Graduates and Program Candidates are 86.67% and 71.43%
respectively. “Graduates’ loyalty is to their faculty and their programs” (Eliza, Rodriguez, & Rosario, 1999, p. 7); possibly this loyalty accounts for the high response rate from Program Graduates and perhaps from Program Candidates as well. In contrast, the Program Leavers have a low, but probably more typical, response rate of 35.00%.

Demographic Information

The demographic data from the study can provide us with a description of the typical GHRD student at St. John Fisher. Describing this Learner, however, would seem to serve little purpose. The population is small and individuals are unique.

The population is predominantly female, although the Program Candidate group is fairly evenly split. A much higher percentage of the Program Leaver group are female--71.43%. This is an area that may deserve further study. It should be noted that the numbers of Learners graduating each year are increasing, an indication that the program is growing, as is the demand for master’s degrees in general (Baxter, 1993-1994). This may be in part due to “rapid changes in knowledge and technology [that] have significantly increased employer demand for advanced professional development and that demand is reflected in recent enrollment increases” (Svyerson, 1996). This growth in the number of Learners reinforces the importance of assessment as a tool to improve the program.

The population is 80.00% Caucasian with no African American Program Graduates. This information seems to point to considering ways to increase the diversity of the Learner base with incoming Learners.

The range of ages is dispersed somewhat equally among the Between 26 and 30, Between 31 and 40, and Between 41 and 50, with the final quarter of Learners being either 25 or under or Over 51. This information doesn’t focus on the fact that 42.22% of the Learners are under 30.
The program is heavily drawing the under 30 Learner. However, with 57.78% of the Learners over 31, it is important to note “the growing importance of education to older people of all ages and the experience that these adults bring to share with faculty and students make this task [of education] all the more worthwhile” (Bok, 1986, p. 166).

To date, 92.10% of Learners do complete or plan to complete the program in less than three years, with 68.42% finishing in two years or less. The program seems to fit the need for obtaining a degree in a relatively short time period.

Findings indicate that there is an increase in the number of Learners entering the program who are already in the field of Human Resources, either in development or management (i.e., compensation, benefits, labor relations, employee assistance) or in a combination of both development and management. This may indicate increasing interest in and acceptance of the program by professionals already in the field. Graduates, based on the responses, are finding jobs in the field. When they started the program, only 23.07% of Program Graduates were in the HR field; 61.54% of them currently are. There is a less dramatic, but nevertheless actual, shift by Program Candidates to more into HR related positions, indicating that they are finding new positions in the field prior to completing their degrees. It seems logical to assume, based on this evidence, that Learners are realizing enhanced career opportunities by being in the GHRD program; this is born out in their responses to Level 5: Ultimate Value statements, as well.

**Survey Findings**

It seems reasonable to expect the Program Graduates rate highest in their responses to the twelve statements on the survey and the Program Leavers to rate lowest in their responses to the twelve statements on the survey, with the Program Candidates somewhere in between. The quantitative findings do indeed bear this out overall. Within the Program Candidates are Learners
who began the program recently and have thus far have had one semester of classes. It may be premature to survey these individuals as part of the evaluation. The group of Program Candidates also may contain individuals who may, at some future date, become Program Leavers, deciding to complete the program.

The responses to all statements for all groups with only one exception were above the midpoint of 3.00, indicating an overall positive measure of Learner success. Program Leavers have the one exception in the area of increased earnings in which they did not rate as highly as either Program Graduates or Program Candidates. It may be reasonable to conclude that increased earnings are a longer-term result of the program. The high standard deviations within Level 3: Behavior and Level 5: Ultimate Results are an indication of the variety within the responses of Program Graduates and Program Candidates, as well as for Program Leavers. All three groups, Program Graduates, Program Candidates, and Program Leavers, had their highest ratings—means of 4.85, 4.46, and 3.86 (which tied with two other statements for Program Leavers), respectively—in knowledge improvement. Level 2: Learning, was the highest rating of the five levels for both Program Graduates and Program Candidates. Perhaps these ratings are tied to expectations of a college education. Program Leavers had their highest rating in Level 1: Reaction, indicating a high level of satisfaction.

For the group classified as Program Leavers, the name is misleading, at least for those who responded. Had more of those that have not taken a class in the last year responded, the results may have indicated otherwise. Although almost 43% of the Program Leavers responding to the survey plan to complete the program, it seems reasonable that there would be a lower rating from the group as a whole when compared to Program Graduates and Program Candidates. There is to some degree, a perceived lack of value in the program for some to leave
the program, but people may leave for many reasons. Reasons given by Program Leavers for leaving the program include program did not meet my expectations, coursework/ load was not challenging enough, and family demands/personal issues. Because so few Program Leavers responded, it is difficult to identify any trend in why Learners leave the program. Obtaining this information through some other means may provide valuable insight.

Although the overall means ratings for the statements and the levels of evaluation decrease from Program Graduates to Program Candidates and decrease further from Program Candidates to Program Leavers, there is no statistically significant difference between the groups in perceived satisfaction levels; perceived behavioral changes; and perceived anticipation and recognition of changes, contributions to workplace learning, and demonstrated leadership. Level 2: Learning, when evaluated using data from transcripts and examined on the basis of cohorts rather than on the three groups of Learners indicates no statistically significant difference between the cohorts in learning.

Statistically significant differences were found in two levels of evaluation between groups—Level 2: Learning and Level 5: Ultimate Value.

Summary Analysis of Hypotheses

The first null hypothesis poses that there is no significant difference in satisfaction levels between the three groups of Learners. All Learners rated their perceived satisfaction levels highly on the survey. This high rating is echoed by the satisfaction findings in examining the student surveys completed at the conclusion of each course. The aggregate responses have mean ratings that range from 4.63 to 6.89 on a scale with a high of 7.00. A high percentage of the courses—82.35%—received both mean and median ratings of 6.00 or higher from the Learners. This provides consistent evidence that the GHRD courses are perceived with a high level of
satisfaction. While there is some variation in response, as indicated by the standard deviations, in only one case—interestingly, the one course with the lowest mean and median ratings—is the standard deviation above 1.0, indicating that overall, the Learners agree with each other in their high satisfaction ratings.

The second hypothesis poses that there is no significant difference in coursework scores and grade-point-averages (GPA) between the cohorts. Statistically, none was found. The supplemental findings from the ANOVA and additional testing that identified statistical differences between Program Graduates and Program Leavers supports the idea that Program Graduates are perhaps more learned, possessing more advanced skills, increased knowledge, and improved attitudes than Program Leavers. Program Candidates are in the middle and not statistically different from either group. It seems the best strategy to increase perceived learning for the Program Candidates to continue to move toward graduation and become Program Graduates.

It is interesting to note that the mean GPA, out of a high of 4.00, for the cohorts drops slightly every year (3.80 for the cohort that began in 1997, 3.74 for the cohort that began in 1998, 3.71 for the cohort that began in 1999, and 3.55 for the cohort that began in 2000). This raises questions as to the possibility of the program becoming increasingly more demanding over time, possible early program grade inflation, or the possibility that the admissions process has become less demanding.

The third hypothesis is unable to be rejected; findings show there is no significant difference in perceived behavioral changes between the three groups of Learners. Both Program Graduates and Program Candidates rated themselves highly in the area of behavior. This is supported by the employers’ ratings of appropriate level of skill, appropriate level of knowledge,
and appropriate attitude demonstrated by the Program Graduate and Program Candidate in his or her position in the workplace, leading to the conclusion that the Program Graduate and Program Candidate do, indeed, transfer learning to the job. It’s important to keep in mind that, according to Kirkpatrick (1998b), even if the Learner has the “opportunity to apply the learning, he or she may not do it immediately. In fact, change in behavior may occur at any time after the first opportunity, or it may never occur” (p. 48). Changes in future behavior need to be measured in subsequent studies.

The three statements on the survey used to test the fourth hypothesis are drawn directly from the mission of the program. The findings show no significant difference in perceived anticipation and recognition of changes, contributions to workplace learning, and demonstrated leadership between the three groups of Learners. Although Program Graduates rated themselves just slightly lower than Program Candidates rated themselves in the means for contribution to learning, the job requirements or workplace situation for the Program Graduate may be a limiting factor.

The study finds a statistically significant difference in career advancement and earnings increase between the groups of Learners, the topic of the final hypothesis. Program Graduates and Program Candidates, although not significantly different from each other, are both different from Program Leavers. As was mentioned earlier, more Program Candidates are entering the program already in the field of HRD and entering at higher salaries than did Program Graduates. The positive response to statement S12 is verified by the examination of salary information from the demographic portion of the study. While career opportunity and growth cannot necessarily be measured in increased salary dollars, a study of the data shows that Program Graduates have, indeed, advanced their careers and increased their median income by 45.5% since beginning the
program. Because Program Candidates are entering the program with higher median salaries to start, future increases may not be as dramatic. On the other hand, graduates of the program have had, at most, two years since graduation. It may be that Ultimate Value takes time to ascertain. Examination of the increase in earnings for Learners is an area for ongoing assessment.

The positive response to the survey questions about Learners—ratings in all categories were above 4.00 on a scale with a high of 5.00—by employers can be interpreted to reflect well on both the caliber of the Learners as employees and the possible impact the program has made on them. Palomba and Banta (1999) point out that employer ratings do tend to be higher than those of the alumni. It is not possible to attribute the high scores to participation in the GHRD program, but it seems likely there may be some degree of correlation.

The slight correlation found between grades and the faculty evaluation ratings from the student surveys completed at the conclusion of courses indicates that as grades increase, student satisfaction increase—or is it the other way around? This relationship between grades and satisfaction requires further study, as Manges (2000) indicates on this subject.

Content Analysis

The results from the portion of the study that examined comments present a good amount of information, both qualitative and quantitative, and a number of suggestions to be considered and pursued if deemed appropriate. Over three-quarters of the Program Graduates have comments that were either very positive or positive. This proportion diminishes with the comments of the Program Candidates and diminishes further with the comments of Program Leavers.

The positive responses of the Program Graduates may be a result of the loyalty that Eliza, Rodriguez and Rosario (1999) mentioned and may therefore be inflated. On the other hand, it
may be that “since they are now independent professionals who are not subject to the direct
dower of the faculty, [graduates] may be especially likely to provide frank assessments” (Baierd,
1996, p. 82). If the latter thinking is accepted, it follows that the results from Program Graduates
are candid and an accurate portrayal of their perceptions. Future research may indicate that as
Program Candidates become Program Graduates they assess the benefits of the program more
highly. Indeed, “most faculty assert that post-baccalaureate outcomes cannot be assessed
adequately until program graduates have applied their education for a number of years” (Banta,
Black, & Ward, 1999, p. 93). It should be remembered that Program Graduates have, at most,
two years since graduation.

The percentage of comments that are classified as future focused for Learners is slightly
over 8%, indicating an optimistic point of view. At this point in time the Learner can’t respond
positively to the statement, but they anticipate that at some time in the future they will be able to.
Fewer than 1% of the responses indicated that it was too soon to give an accurate assessment.
Employers, on the other hand, gave equal rating, 6.76% for each, to future focused and too soon
again indicating some optimism and simultaneously some reservation about Learners in their
comments. The small percentage of negative and very negative comments—just over 13% for
Learners and just under 6.76% for employers—reflect well on the program and at the same time
indicate that there is room for improvement.

Suggestions for improving the program by both Learners and employers provide some
specific recommendations and should be considered a rich source of information to be
considered as improvements.
Relevance of Findings

This study has achieved its goal of conducting a performance assessment of graduates, current candidates, and previous candidates of the Master of Science in Human Resource Development program at St. John Fisher College. The findings of statistically significant differences between groups of learners at two of the five levels of evaluation, indicate benefits of the GHRD program in the areas of learning and ultimate value. Although there are no found significant differences between Program Graduates, Program Candidates, and Program Leavers in satisfaction, behavior, or results levels, the study provides evidence of agreement on all levels of evaluation from both learners and employers, indicating learner success (especially for Program Graduates in learning and ultimate value) and program effectiveness.

Like Coon and Scanlon (1997) and Kalmbach, Jobst and Meese (1986), I hope that this study of a small population will provide information to improve the program. “We learned about our [students], but the data…must be interpreted with an understanding of its narrow scope” (Kalmbach, Jobst, & Meese, p. 21).

Banta, Lund, Black, and Oblander (1996) reinforce the importance of assessment in the following:

Assessment data and results that are not used toward the purpose of improving the teaching and learning environment on campus, nor incorporated into the overall institutional mission and goals, fall far short of their potential in terms of creating exciting, beneficial, and lasting change for institutions. (p. 63)

“Assessment is about learning. Much of what is learned is about the assessment process itself” (Palomba & Banta, 1999, p. 15) and presents ways for future improvements to the process. Ewell (1997) reminds us that “data are used to raise questions and not to provide final
answers (p. 625). It is this spirit of raising questions that presents the opportunity for program improvements and for recommendations for future research.

**Recommendations for Improved Future Research Methodology**

The researcher recommends the following improvements be incorporated into future research methodology for subsequent studies: (a) maintain a database for GHRD Learner grades; (b) create a baseline by surveying Learners entering the program to provide a means of comparison; (c) incorporate several focus groups, possibly with each composed of a separate group of Program Graduates, Program Candidates, employers, and faculty; (d) consider a study of admissions criteria for those entering the program (Donald, 1997); (e) consider conducting a web-based survey for Learners and employers; (f) conduct formal interviews with Program Graduates just prior to graduation; and (g) conduct formal exit interviews with individuals identified as true Program Leavers, that is, those that indicate they are not going to complete the program.

Haworth (1996) points out "the need to examine more systematically the linkages between graduate student retention and institutional and departmental cultures, policies, and practices" (p. 94). She also points out the need to investigate the possible differences in various factors such as gender and age on leavers’ decisions not to complete the program.

It is the recommendation of the researcher that a second study be conducted in another three years, creating an ongoing three-year assessment cycle. “Credibility depends on whether an evaluation’s findings can be replicated” (Berthahal, 1998, p.51). Additional questions about Program Graduates may be included to assess what they have done over time. Are they publishing? Have they received community recognition or awards? To what professional organizations do they belong? "The ultimate meaning of quality lies in the nature of the effect an
academic program has on the growth and development of students as learners" (Farmer & Napieralski, 1997, p. 602). What are the St. John Fisher College Learners doing to continue to learn?

Program assessment provides an excellent opportunity for the involvement of Learners, either as large or small-scale projects. Inclusion of interested parties by “participating in the process and in communicating the results” (Farmer & Napieralski, 1997, p.601) is an important part of evaluation that leads to improvement of programs. Specifically, this study to assess the GHRD Program at St. John Fisher College provides the researcher with a key attribute, according to Haworth and Conrad (1996), of a high-quality program. The researcher has the opportunity to produce a “tangible product [that] is . . . the culminating program requirement [that] provides [the] student . . . an important opportunity to demonstrate mastery of the necessary knowledge, skills, and practices to contribute meaningfully to [the] chosen fields of study” (p. 57).

Conclusion

An assessment study of the GHRD program was conducted. The study consists qualitative and quantitative analysis of the extant and generated data, in the form of descriptive statistics, ANOVA and content analysis. The researcher concludes that there are statistically significant differences between Program Graduates, Program Candidates, and Program Leavers at certain levels of evaluation. The researcher further concludes that on all five levels of evaluation— Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value—the Learners, employers, and extant data are in agreement in highly rating the program’s effectiveness based on Learners’ success. The GHRD department at St. John Fisher College must keep in mind that in spite of the positive responses in this study, there
are many suggestions to improve the program and the department should not become complacent as Schwindt (1995) advises based on his study. Possible program improvements are presented and recommendations for future improvements to subsequent studies are noted.

Developing an assessment program is complex and time consuming (Banta, Lund, Black, & Oblander, 1996; Barker & Folger, 1996; Gray, 1997). Barker and Folger go on to point out that consistency in leadership is a crucial factor. It is also critical to note that “assessment is most effective when undertaken in an environment that is receptive, supportive, and enabling” (Banta, Lund, Black, & Oblander, 1996, p. 62). Huberman (1995) advises that they [assessments] don’t necessarily bring about desirable changes.

Cousins and Earl (1995) ask “why on earth would . . . [educators] want to become involved in applied research activities, ventures that are entirely likely to spell hard work, heightened anxiety, tension and stress, and general disequilibrium?” (p. 3). The answer lies in obtaining the results and in the opportunity for growth and change they present for improvement in individuals, groups, and organizations.

Assessment is a “continuing process” (Farmer & Napieralski, 1997, p.593) and it is important “to think of assessment not as a linear process with a beginning and an end, but as a circle, a loop that must be closed and then retraced again and again” (Wright, 1993, p.4). This study is the first in the GHRD program assessment, but it is just one part of that ongoing iterative process.

“A spirit of open inquiry and communication should characterize the conduct of the assessment; the results of the assessment should likewise be broadly shared” (Farmer & Napieralski, 1997, p. 602). It is important that the results of this assessment are reviewed by the program director, the School of Adult and Graduate Education, and other individuals or
administrators at St. John Fisher College as appropriate. The results “must ‘count,' in promotion and tenure decisions, in planning, and in budget allocations” (Murphy & Harrold, 1997, p.5).

We must recognize that assessment methods and tools are not perfect (Banta, 1997).

Education, like the workplace, is dealing with forces such as “rapid movement from industrial to technology-based economies; aging populations; cultural, religious and ethnic diversity; individual rights and freedoms; and the evolving role of the family and its implication for children’s educational [and adult work] experiences—[forces that provide a] dynamic and turbulent backdrop” (Cousins & Earl, 1995, p. 4) to our world. Bok (1996) suggests that the change in educational progress is a “process [that] typically resembles the growth of a coral reef more than the eruption of a volcano” (p. 186). Whether we are dealing with turbulence or slower adaptation, change is a reality. Throughout the changes that occur, Cross (1998) advises that “students and their learning should become the focus of everything” (p. 1) higher education does.
References


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http://www.usnews.com/usnews/edu/beyond/gradrank/ghesup8.htm


Appendix A

St. John Fisher College Institutional Review Board Application and Approval
APPLICATION FOR EXPEDITED REVIEW

Assessment of Graduate Human Resource Development Program
for St. John Fisher College

Submitted by Erin A. Glanton

GHRD 590: Applied Research

St. John Fisher College

Rochester, New York

December 1, 2000
(Revised January 22, 2001)
Table of Contents

I. IRB Application for Expedited Review
II. Introduction and Purpose
III. Methodology
IV. Sample
V. Dissemination
VI. Attachments
   A. Letter of Introduction that includes Consent for Program Candidate One and Program Graduate
   B. Letter of Introduction that includes Consent for Program Candidate Two
   C. Letter of Introduction that includes Consent for Program Leaver
   D. Instructions to appear on envelope for the Program Candidate One, Program Candidate Two, Program Graduate, and Program Leaver to complete and return the survey
   E. Instructions to appear on envelope for Program Candidate One, Program Candidate Two, and Program Graduate to send survey to current employer
   F. Instructions to appear on envelope for Program Candidate One and Program Graduate to send survey to previous employer
   G. Letter of Introduction that includes Consent for Current Employer
   H. Letter of Introduction that includes Consent for Previous Employer
   I. Instrument I: Assessment--Program Candidate and Program Graduate Self Report
   J. Instrument II: Assessment--Current Employer Report
   K. Instrument III: Assessment--Previous Employer Report
   L. Instrument IV: Assessment--Program Leaver Self Report
Application for Expedited Review

Please submit three (3) copies of this form to the SAGE Office, K-202, Attention: Lil Harris.

Investigator(s): Erin A. Glanton

Address: 91 Village Lane, Rochester, NY 14610

Telephone: (585) 268-5810 Day (585) 441-3031 Evening

E-mail Address: glanton2@roc.edu, com FAX (510) 546-5930

Faculty/Staff Sponsor (if different): Marilyn Butler

Title of Project: Assessment of Graduate Human Resource Development Program (GHRD) for St. John Fisher College (SJFC)

Description of Project:

This project enhances the departmental assessment plan for the GHRD program at SJFC and provides data to measure the program’s success in meeting its mission.

Role of Investigator and Nature of Activity (check one):

- Faculty or staff at St. John Fisher College  
- Student of St. John Fisher College X

Individuals other than faculty, staff, or students of St. John Fisher College. (Please identify investigator and explain nature of each activity.) All applications from students and from persons outside of the College must be signed by the faculty, staff, or administrator supervising the research activity.

Please answer the following questions with regard to the proposed research activity. (An affirmative response to any of these questions necessitates formal review.)

Does the research involve:

- drugs or other controlled substances
- access to subjects through a cooperating institution?
- subjects taking internally or having externally applied any substance?
- removing any fluids (e.g., blood) or tissues from subjects?
- subjects experiencing stress (physiological or psychological) above a level that would be associated with their normal everyday activity?
- misleading subjects about any aspect of the research?
- subjects who would be judged to have limited freedom of consent (e.g., minors, mentally retarded, aged)?
- any procedures or activities that might place the subjects at more than minimal risk (psychological, physical, or social/economic)?
- sensitive aspects of the person’s own behavior, such as illegal conduct, drug use, sexual behavior, or alcohol use?
for which of the following categories are you applying for expedited review? (check one)

1. Voice recordings made for research purposes such as investigations of speech defects.
2. Moderate exercise by healthy volunteers.
3. The study of existing data, documents, records, pathological specimens, or diagnostic specimens, if the individual from whom the data were collected are identifiable.
4. Research on individual or group behavior or characteristics of individuals, such as studies of perception, cognition, game theory, or test development, where the investigator does not manipulate subjects' behavior and the research will not involve stress to subjects.
5. Collection of body habitus, such as anthropometric data, weight, and height.
6. Collection of excreta and external secretions including sweat, unemulsified saliva, placenta removed at delivery, and amniotic fluid at that time of rupture of the membranes prior to or during labor.
7. Recording of data collected from subjects 18 years of age or older in the course of noninvasive procedures routinely employed by professionally certified/licensed individuals in the clinical practice of medicine, psychology, and social work. This includes the use of physical procedures or therapies that are applied either to the surface of the body or at a distance and do not involve invasive procedures that are applied either to the surface of the body or at a distance and do not involve exposure to electromagnetic radiation outside the visible range (e.g., ultrasound).
8. Collection of blood samples by venipuncture, in amounts not exceeding 450 milliliters in an eight-week period and no more often than two times per week, from subjects 18 years of age or older who are in good health and not pregnant.
9. College of both supra- and subgingival dental plaque and calculus, provided the procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques.

Signature

I am familiar with the policies and procedures of St. John Fisher College regarding human subjects. I subscribe to the standards described in the document, IRB Policies and Procedures for the Protection of Human Subjects.

I am familiar with the published guidelines for the ethical treatment of subjects associated with my particular field of inquiry (e.g., as published by the American Psychological Association, American Sociological Association).

I am familiar with and will adhere to any official policies in my department concerning research with human subjects.

I understand that upon consideration of the nature of my project, the IRB may request a full application for review of my research at their discretion and convenience.

If changes in procedures involving human subjects become necessary, I will submit these changes for review before initiating the changes.

Date & Signature - Investigator(s)

Date & Signature - Collaborator(s) and/or Student Investigator

Date & Signature - Faculty/Staff Sponsor

I student applications and applications from outside the College must have a College sponsor.

Date & Signature - Researcher
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| Research | The proposed project has no research component and does not need to be in further compliance with Article 24-A. |
| Risk     | The proposed project has a research component but does not place subjects "At Risk" and need not be in further compliance with Article 24-A. |
| search & Risk | The proposed project has a research component, and places subjects at risk. The proposal must be in compliance with Article 24-A. |
| person, Institutional Review Board    | Date |

3/99 th
Assessment of Graduate Human Resource Development Program
for St. John Fisher College

II. Introduction and Purpose

The purpose of this study is to conduct an assessment of the Master of Science in Human Resource Development (GHRD) program at St. John Fisher College in Rochester NY. Through extant data, self-report data, and employer-report data on current candidates, candidates who matriculated, but left, and graduates, analyses will be conducted to determine program effectiveness. Program effectiveness will be defined by learner success. Learner success measures will be assessed using Kirkpatrick’s four-level hierarchy of evaluation model with the addition of Hamblin’s fifth level of focus. The five levels are Level 1: Reaction, Level 2: Learning, Level 3: Behavior, Level 4: Results, and Level 5: Ultimate Value. Here specific outputs will be examined. These outputs to be examined include (a) satisfaction levels; (b) coursework scores and grade-point-averages (GPA); (c) perceived behavioral changes—both in the classroom and on-the-job; (d) perceived contributions to workplace learning and demonstrated leadership, and (e) career advancement and earnings increase.

The project is being conducted as a GHRED 590 Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the formal program evaluation of the GHRED Program at St. John Fisher College.

III. Methodology

Data Collection

The conduct of the study includes collecting data from:
(a) Current Program Candidates and Program Graduates of the Master of Science HRD
(b) Their employers
(c) Program Leavers, that is candidates who matriculated, but left the program

Survey research and an examination of extant data will be employed. Four survey instruments will be developed. Three instruments will be utilized to assess Program Candidates and Program Graduates and one instrument will be administered to Program Leavers.

Instrument I: Assessment—Program Candidate and Program Graduate Self Report
Instrument II: Assessment—Current Employer Report
Instrument III: Assessment—Previous Employer Report
Instrument IV: Assessment—Program Leaver Self Report

Survey Administration

Program Candidates, Program Graduates, and Program Leavers will receive their surveys in a packet containing a letter of introduction that includes Consent (see Attachments A, B and C). As detailed below and as appropriate, Program Candidates, Program Graduates, and Program Leavers will receive envelope(s) printed with instructions for the process to complete and return the survey (see Attachments D, E, and F), the appropriate letter(s) of introduction to the current and/or previous employer (see Attachments G and H), the appropriate assessment instrument(s) (see Attachments I, J, K, and L), and postage-paid return envelope(s) addressed to St. John Fisher College, E. A. Glanton, 91 Village Lane, Rochester, NY, 14610. Packets will be sent via the US Postal Service.

Surveys will be administered as unsupervised-mail-response-questionnaires. Here, Program Candidates will be divided into two groups. Group one will consist of Program Candidates who matriculated into the program prior to Fall 2000. Group two will consist of Program Candidates who matriculated into the program no earlier than Fall 2000.

Group one will receive Instruments I, II, and III. Program Candidates in this group will be asked to complete Instrument I. They will be asked to forward Instrument II to their current employer, and/or, forward Instrument III to their previous employer as applicable. In order to reduce any possible risk to participants, participants will be able to select to whom they forward employer instruments.

Group two will receive instruments I and II. These Program Candidates will be asked to complete and return Instrument I. In addition, they will be asked to forward Instrument II to their current employer. Again, in order to reduce any possible risk to participants, participants will be able to select to whom they forward the employer instrument.

Program Leavers will receive and be asked to complete Instrument IV only.

Confidentiality

All participants’ responses will be kept confidential (see Attachments A, B, C, G, and H). Surveys will include demographic information as the only source of identification. Any identifying information included on a survey by a participant will be removed researcher. Extant data and any information received from surveys will be confidential; not linked to any individual respondent, and reported on only in aggregate to preserve the anonymity of the
participant. The two people only person who will have access to the data are the researcher and the researcher's advisor. The results will be kept in a locked cabinet secured at the researcher's home for up to six months and will not be made available to the program director.

Survey Instruments
All four surveys will employ Likert-type scales for response to statements. Each survey will also solicit demographic information as well as responses to open-ended questions.

Instrument I. This survey, copied on white paper, is comprised of two sections. Section A will provide data on ten demographic items such as gender, race, age, graduation information, and salary. Section B is comprised of twelve statements to which the Program Candidate and Program Graduate will select from a five-step Likert-type scale rating the response from "Strongly disagree" to "Strongly agree." Section B also provides the opportunity for open-ended comments (see Attachment I).

Instrument II. This survey, copied on yellow paper, is comprised of two sections. Section A will provide data on four demographic items such as gender, type of work, length of employment and GHrd program completion. Section B is comprised of eight statements to which the current employer will select from a five-step Likert-type scale rating the response from "Strongly disagree" to "Strongly agree." Section B also provides the opportunity for open-ended comments (see Attachment J).

Instrument III. This survey, copied on green paper, is comprised of two sections. Section A will provide data on four demographic items such as gender, type of work, length of employment and GHrd program completion. Section B is comprised of eight statements to which the previous employer will select from a five-step Likert-type scale rating the response from "Strongly disagree" to "Strongly agree." Section B also provides the opportunity for open-ended comments (see Attachment K).

Instrument IV. This survey, copied on blue paper, is comprised of two sections. Section A will provide data on twelve demographic items such as gender, race, age, and GHrd program participation information. Section B is comprised of twelve statements to which the Program Leaver will select from a five-step Likert-type scale rating the response from "Strongly disagree"
to "Strongly agree." Section B also provides the opportunity for open-ended comments (see Attachment I).

Data
Extant data includes data collected through the St. John Fisher College Student Survey that is administered at the conclusion of each GHRD course (a Level 1 evaluation designed to measure learner satisfaction); overall GPA by course, overall GPA by cohort, and overall GPA by course and cohort.

Analysis
All collected data will be aggregated then analyzed using quantitative and qualitative data analysis techniques. Descriptive statistics will be calculated. Content analysis will be employed on the answers to the open-ended questions.

IV. Sample

The sample will consist of current candidates, candidates who matriculated, but left, and graduates of the Master of Science in Human Resource Development (GHRD) program at St. John Fisher College.

V. Dissemination

All research study activities lead to completion of GHRD 590: Applied Research. The course is the final master’s project in which students create, develop, implement and evaluate a complete HRD research study. The study results will be used as course material for completion of the final project as well as a report of the findings will be produced and will become part of the formal program evaluation of the GHRD Program at St. John Fisher College. The final document consists of a hard-bound copy of the project report to be placed in the St. John Fisher College Library.
January 11, 2001

Ms. Erin Glanton
91 Village Lane
Rochester, NY 14610

Dear Ms. Glanton:

Thank you for submitting your research proposal to the Institutional Review Board.

The Board has approved the proposal for Expedited Review for the project, “Assessment of Graduate Human Resource Development Program for St. John Fisher College.”

Should you have any questions about this process or your responsibilities, please contact me at 385-8471 or by e-mail to mccloskey@sjfc.edu, or if unable to reach me, please contact the Secretary to the IRB, Lillian Harris, at 385-8468, e-mail harris@sjfc.edu.

Sincerely,

Cynthia Ricci McCloskey, DNS
Chair, Institutional Review Board

CRM: lnh

Copy: SAGE IRB
IRB: Approve expedited.doc
Appendix B

Instrument 1: Assessment--Program Candidate and Program Graduate Self Report
Assessment of Graduate Human Resource Development Program
for St. John Fisher College

Instrument I: Assessment—Program Candidate and Program Graduate
Self Report

Section A
Demographic Information

Please fill in completely (like this: ●) the circle corresponding to your answer to the question or, where appropriate, write in your answer.

1. What is your gender?
   □ Male
   □ Female

2. Which best describes you?
   □ American Indian/Alaskan Native
   □ Asian/Pacific Islander
   □ African American (non-Hispanic)
   □ Caucasian (white)
   □ Hispanic

3. What is your age?
   □ 25 or under
   □ Between 26 and 30
   □ Between 31 and 40
   □ Between 41 and 50
   □ 51 or over

4. What is the year in which you received your undergraduate degree?

5. What is the date of your graduation with MS in HRD?
   □ May 1998
   □ December 1998
   □ May 1999
   □ December 1999
   □ May 2000
   □ December 2000
   □ May 2001
   □ December 2001
   □ May 2002
   □ December 2002
   □ I don’t know
   □ I’m not planning to graduate from the program

Please continue to the back of this page ➔
6. How long did it (will it) take you to complete the GHRD program?
   - Two (2) years or less
   - Less than three (3) years, but more than two (2) years
   - Less than four (4) years, but more than three (3) years
   - More than four (4) years
   - I don’t know

7. When you began the program, where were you working?
   - In the HR Development field only
   - In the HR Management field only
   - In both the HR Development and Management fields
   - I worked outside the field of Human Resources
   - I did not work at the time

8. Where are you currently working?
   - In the HR Development field only
   - In the HR Management field only
   - In both the HR Development and Management fields
   - I work outside the field of Human Resources
   - I am not working at this time

9. What was your annual salary when you began the HRD program?

   ______________________________________________________

10. What is your annual salary now?

   ______________________________________________________

Please continue to the next page ➔
Section B
GHRD Assessment Information

Please circle the number that most closely matches your response to the statement. Where appropriate, please add your comments.

11. I am satisfied with the courses in the GHRD program at St. John Fisher College.

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Please comment:

12. I am satisfied with the quality of the instructors in the GHRD program at St. John Fisher College.

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Please comment:

13. I am satisfied with the intellectual challenge of the GHRD program at St. John Fisher College.

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Please comment:

Please continue to the back of this page ➔
15. I improved my knowledge in the GHRD program at St. John Fisher College.

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Please comment:
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16. I improved my attitudes in the GHRD program at St. John Fisher College.

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Please comment:
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17. I transferred the learning from the GHRD program at St. John Fisher College to my job.

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Please comment:
________________________________________________________________________________________
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18. I anticipate and recognize rapid changes in jobs, careers, work groups, and organizations as a result of the GHRD program at St. John Fisher College.

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Please comment:
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Please continue to the next page ➔

4
19. I contribute to workplace learning as a result of the GHRD program at St. John Fisher College.

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Please comment:


20. I take a leadership role in providing strategies and practical solutions to the business challenges affecting the workplace as a result of the GHRD program at St. John Fisher College.

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Please comment:


21. I have had enhanced job/career opportunities as a result of the GHRD program at St. John Fisher College.

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Please comment:


22. I have increased my earning potential as a result of the GHRD program at St. John Fisher College.

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Please comment:


Please continue to the back of this page ➔
Please use the space below for any additional comments about the Graduate Human Resource Development program at St. John Fisher College:
Appendix C

Instrument II: Assessment--Current Employer Report
Assessment of Graduate Human Resource Development Program
for St. John Fisher College

Instrument II: Assessment–Current Employer Report

Section A
Demographic Information

Please fill in completely (like this: ●) the circle corresponding to your answer to the question or, where appropriate, write in your answer.

1. This employee is:
   ○ Male
   ○ Female

2. This employee works:
   ○ In the Human Resources Development field only
   ○ In the Human Resources Management field only
   ○ In both the HR Development and Management fields
   ○ Works outside the field of Human Resources

3. How long has this employee worked for you?
   ___________ year(s) ___________ month(s)

4. This employee completed the Master of Science in Human Resources Development at St. John Fisher College while employed by you.
   ○ Yes
   ○ No
   ○ Don't know

Please continue to the back of this page ➔
Section B
GHRD Assessment Information

Please circle the number that most closely matches your response to the statement. Where appropriate, please add your comments.

5. This employee demonstrates the appropriate level of skill for his/her position.

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Please comment:

6. This employee demonstrates the appropriate level of knowledge for his/her position.

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Please comment:

7. This employee demonstrates the appropriate attitude for his/her position.

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Please comment:

8. This employee anticipates and recognizes rapid changes in jobs, careers, work groups, and organizations.

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Please comment:

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9. This employee contributes to workplace learning.

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Please comment:

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10. This employee takes a leadership role in providing strategies and practical solutions to the business challenges affecting the workplace.

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Please comment:

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11. This employee has (will have) enhanced job/career opportunities.

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Please comment:

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12. This employee has financially benefited my organization by being employed here.

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Please comment:

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Please use the space below for any additional comments about the Graduate Human Resource Development program at St. John Fisher College:

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Appendix D

Instrument III: Assessment--Previous Employer Report
Assessment of Graduate Human Resource Development Program
for St. John Fisher College

Instrument III: Assessment–Previous Employer Report

Section A
Demographic Information

Please fill in completely (like this: ●) the circle corresponding to your answer to the question or, where appropriate, write in your answer.

1. This previous employee is:
   ○ Male
   ○ Female

2. This previous employee worked:
   ○ In the Human Resources Development field only
   ○ In the Human Resources Management field only
   ○ In both the HR Development and Management fields
   ○ Works outside the field of Human Resources

3. How long did this employee work for you?
   ____________ year(s) ____________ month(s)

4. This employee completed the Master of Science in Human Resources Development at St. John Fisher College while employed by you.
   ○ Yes
   ○ No
   ○ Don’t know

Please continue to the back of this page ➔
Section B
GHRD Assessment Information

Please circle the number that most closely matches your response to the statement. Where appropriate, please add your comments.

5. This previous employee demonstrated the appropriate level of skill for his/her position.

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Please comment:

6. This previous employee demonstrated the appropriate level of knowledge for his/her position.

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Please comment:

7. This previous employee demonstrated the appropriate attitude for his/her position.

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Please comment:

8. This previous employee anticipated and recognized rapid changes in jobs, careers, work groups, and organizations.

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Please comment:

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9. This previous employee contributed to workplace learning.

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Please comment: 

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10. This previous employee took a leadership role in providing strategies and practical solutions to the business challenges affecting the workplace.

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Please comment: 

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11. This previous employee had enhanced job/career opportunities.

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Please comment: 

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12. This previous employee had financially benefited my organization by being employed here.

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Please comment: 

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Please use the space below for any additional comments about the Graduate Human Resource Development program at St. John Fisher College:

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Appendix E

Instrument IV: Assessment—Self Report (for Program Leavers)
Assessment of Graduate Human Resource Development (GHRD) Program for St. John Fisher College

Instrument IV: Assessment–Self Report

Section A
Demographic Information

Please fill in completely (like this: ●) the circle corresponding to your answer to the question or, where appropriate, write in your answer.

1. What is your gender?
   ○ Male
   ○ Female

2. Which best describes you?
   ○ American Indian/Alaskan Native
   ○ Asian/Pacific Islander
   ○ African American (non-Hispanic)
   ○ Caucasian (white)
   ○ Hispanic

3. What is your age?
   ○ 25 or under
   ○ Between 26 and 30
   ○ Between 31 and 40
   ○ Between 41 and 50
   ○ 51 or over

4. What is the year in which you received your undergraduate degree?
   __________________________

5. In what did you received your undergraduate degree?
   __________________________

6. What is the month and year you took your first GHRD class at St. John Fisher College?
   ___________ month ___________ year

7. What is the month and year you took your last GHRD class at St. John Fisher College?
   ___________ month ___________ year

Please continue to the back of this page ➔
8. How many credits have you completed toward your GHRD degree at St. John Fisher College?

9. Although you are currently inactive, what is your current status in the GHRD program?
   ○ I am planning to complete the program
   ○ I am not planning to complete the program
   ○ I don’t know if I will complete the program

10. If you are not planning to complete the GHRD program, what is (are) the reason(s)?
    ○ Program did not meet my expectations
      Please comment:

        ○ Coursework/load was too challenging
        ○ Coursework/load was not challenging enough
        ○ I am not interested in a career in Human Resource Development
        ○ Family demands/personal issues
        ○ Relocated
        ○ Health
        ○ Military
        ○ Financial
        ○ Other (please specify)

11. When you began the program, where were you working?
    ○ In the HR Development field only
    ○ In the HR Management field only
    ○ In both the HR Development and Management fields
    ○ I worked outside the field of Human Resources
    ○ I did not work at the time

12. Where are you currently working?
    ○ In the HR Development field only
    ○ In the HR Management field only
    ○ In both the HR Development and Management fields
    ○ I work outside the field of Human Resources
    ○ I am not working at this time

Please continue to the next page ➔
Section B
GHRD Assessment Information

Please circle the number that most closely matches your response to the statement. Where appropriate, please add your comments.

13. I am satisfied with the courses in the GHRD program at St. John Fisher College.

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Please comment:

14. I am satisfied with the quality of the instructors in the GHRD program at St. John Fisher College.

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Please comment:

15. I am satisfied with the intellectual challenge of the GHRD program at St. John Fisher College.

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Please comment:

16. I improved my skills in the GHRD program at St. John Fisher College.

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Please comment:

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17. I improved my knowledge in the GHRD program at St. John Fisher College.

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Please comment: 

18. I improved my attitudes in the GHRD program at St. John Fisher College.

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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment: 

19. I transferred the learning from the GHRD program at St. John Fisher College to my job.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment: 

20. I anticipate and recognize rapid changes in jobs, careers, work groups, and organizations as a result of the GHRD program at St. John Fisher College.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment: 

Please continue to the next page ➔
21. I contribute to workplace learning as a result of the GHRD program at St. John Fisher College.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment:

22. I take a leadership role in providing strategies and practical solutions to the business challenges affecting the workplace as a result of the GHRD program at St. John Fisher College.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment:

23. I have had enhanced job/career opportunities as a result of the GHRD program at St. John Fisher College.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment:

24. I have increased my earning potential as a result of the GHRD program at St. John Fisher College.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
</tbody>
</table>

Please comment:

Please continue to the back of this page ➔
Please use the space below for any additional comments about the Graduate Human Resource Development program at St. John Fisher College:
Appendix F

Letters of Introduction to Learners Including Consent
February 2, 2001

Dear Graduate/Current Candidate:

The Graduate Human Resource Development (GHRD) Program at St. John Fisher College in Rochester, New York is being assessed. A Master of Science degree candidate currently enrolled in the GHRD Program at St. John Fisher College is conducting this project.

The study is being conducted as an Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the assessment of the GHRD Program at St. John Fisher College. The focus of the study is to provide data to measure the program’s success in meeting its mission.

As someone who is either a graduate of or a current candidate for the Master of Science HRD, you are asked to complete the enclosed survey in which you will evaluate the program and its impact on your career. This activity will take approximately one-half hour to complete. In addition, you are asked to forward both the Current Employer Report and Previous Employer Report (as applicable) to individuals of your choice for whom you work(ed). Please follow the instructions on each of the three (3) large envelopes enclosed for specific instructions.

Your identity will be kept confidential unless otherwise specified by you in writing. Due to the sensitivity of the content of this study, please be assured that Dr. Butler will view group data only to ensure individual respondent anonymity. Your participation in this study authorizes your consent. This study has been reviewed and approved by St. John Fisher College’s Institutional Review Board for the Protection of Human Subjects. If you have any questions or concerns about this study, please contact Erin Glanton at (716) 442-3021.

Thank you in advance for agreeing to be part of this important study.

Regards,

Erin A. Glanton
Graduate Student of GHRD 590,
Applied Research
St. John Fisher College, Rochester, New York
February 2, 2001

Dear Student:

The Graduate Human Resource Development (GHRD) Program at St. John Fisher College in Rochester, New York is being assessed. A Master of Science degree candidate currently enrolled in the GHRD Program at St. John Fisher College is conducting this project.

The study is being conducted as an Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the assessment of the GHRD Program at St. John Fisher College. The focus of the study is to provide data to measure the program's success in meeting its mission.

As someone matriculated into the Master of Science HRD program, you are asked to complete the enclosed survey in which you will evaluate the program and its impact on your career. This activity will take approximately one-half hour to complete. Please return the survey upon its completion in the postage-paid envelope supplied.

Your identity will be kept confidential unless otherwise specified by you in writing. Due to the sensitivity of the content of this study, please be assured that Dr. Butler will view group data only to ensure individual respondent anonymity. Your participation in this study authorizes your consent. This study has been reviewed and approved by St. John Fisher College's Institutional Review Board for the Protection of Human Subjects. If you have any questions or concerns about this study, please contact Erin A. Glanton at (716) 442-3021.

Thank you in advance for agreeing to be part of this important study.

Regards,

Erin A. Glanton  
Graduate Student of GHRD 590,  
Applied Research  
St. John Fisher College, Rochester, New York
February 2, 2001

Dear Candidate:

The Graduate Human Resource Development (GHRD) Program at St. John Fisher College in Rochester, New York is being assessed. A Master of Science degree candidate currently enrolled in the GHFD Program at St. John Fisher College is conducting this project.

The study is being conducted as an Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the assessment of the GHFD Program at St. John Fisher College. The focus of the study is to provide data to measure the program’s success in meeting its mission.

As someone who is a current candidate for the Master of Science HRD, you are asked to complete the enclosed survey in which you will evaluate the program and its impact on your career. This activity will take approximately one-half hour to complete. In addition, you are asked to forward the Current Employer Report (as applicable) to the individual of your choice for whom you work. Please follow the instructions on each of the two (2) large envelopes enclosed for specific instructions.

Your identity will be kept confidential unless otherwise specified by you in writing. Due to the sensitivity of the content of this study, please be assured that Dr. Butler will view group data only to ensure individual respondent anonymity. Your participation in this study authorizes your consent. This study has been reviewed and approved by St. John Fisher College’s Institutional Review Board for the Protection of Human Subjects. If you have any questions or concerns about this study, please contact Erin A. Glanton at (716) 442-3021.

Thank you in advance for agreeing to be part of this important study.

Regards,

Erin A. Glanton
Graduate Student of GHFD 590,
Applied Research
St. John Fisher College, Rochester, New York
Appendix G

Instructions for Completion of Survey
Self Report Envelope

*Please complete this and mail back within a week.*

Instructions:

1. Remove the contents of this envelope:
   - Survey for you to complete
   - Postage-paid return envelope for you to use to return the survey to Erin Glanton
2. Complete the survey
3. Place survey in the return postage-paid envelope addressed to Erin Glanton
4. Seal and mail the envelope.

Please note: To ensure confidentiality, your name will not appear on the survey; please do not write your name on the survey or return envelope.
Current Employer Report Envelope
(Discard if not applicable)

Please mail out within three days.

Instructions:

1. Remove the contents of this envelope:
   - Letter of introduction to your current employer
   - Envelope for you to send to your current employer (postage-paid)
   - Survey for your current employer to complete
   - Postage-paid return envelope for your current employer to use to return the survey to Erin Glanton

2. Please sign your name at the bottom of the letter of introduction (and add a personal note, if you choose)

3. Fill in the name and address of the individual of your choice at your current employer in the address area of the supplied postage-paid envelope. Place your name and return address in the upper left area (sender address).

4. Place the letter of introduction, the survey, and the return postage-paid envelope addressed to Erin Glanton inside the envelope addressed to your current employer.

5. Seal and mail the envelope.

Please note: To ensure confidentiality, your name will not appear on the survey, nor will the name of the person completing it.
Previous Employer Report Envelope
(Discard if not applicable)

Please mail out within three days.

Instructions:

1. Remove the contents of this envelope:
   - Letter of introduction to your previous employer
   - Envelope for you to send to your previous employer (postage-paid)
   - Survey for your previous employer to complete
   - Postage-paid return envelope for your previous employer to use to return the survey to Erin Glanton

2. Please sign your name at the bottom of the letter of introduction (and add a personal note, if you choose)

3. Fill in the name and address of the individual of your choice at your previous employer in the address area of the supplied postage-paid envelope. Place your name and return address in the upper left area (sender address).

4. Place the letter of introduction, the survey, and the return postage-paid envelope addressed to Erin Glanton inside the envelope addressed to your previous employer.

5. Seal and mail the envelope.

Please note: To ensure confidentiality, your name will not appear on the survey, nor will the name of the person completing it.
Appendix H

Letters of Introduction to Employers Including Consent
February 1, 2001

Dear [Name]:

The Graduate Human Resource Development (GHRD) Program at St. John Fisher College in Rochester, New York is being assessed. A Master of Science degree candidate currently enrolled in the GHRD Program at St. John Fisher College is conducting this project.

The study is being conducted as an Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the assessment of the GHRD Program at St. John Fisher College. The focus of the study is to provide data to measure the program’s success in meeting its mission.

[Name], an employee of yours, is either a graduate of or a current candidate for the Master of Science in Human Resource Development at St. John Fisher College. Please complete the enclosed survey in which you will evaluate this employee/student. This activity will take approximately one-half hour to complete. Upon completion of the survey, please place it in the provided return postage-paid envelope addressed to Erin Glanton, seal the envelope and mail.

Your identity will be kept confidential unless otherwise specified by you in writing. All information collected in this study will be grouped ensuring individual response anonymity. Your participation in this study authorizes your consent. This study has been reviewed and approved by St. John Fisher College’s Institutional Review Board for the Protection of Human Subjects. If you have any questions or concerns about this study, please contact Erin A. Glanton at (716) 442-3021.

Thank you in advance for agreeing to be part of this important study.

Regards,

Erin A. Glanton
Graduate Student of GHRD 590,
Applied Research
St. John Fisher College, Rochester, New York

Information requested by [Name] on [Date]
February 1, 2001

Dear (name of previous employer):

The Graduate Human Resource Development (GHRD) Program at St. John Fisher College in Rochester, New York is being assessed. A Master of Science degree candidate currently enrolled in the GHRD Program at St. John Fisher College is conducting this project.

The study is being conducted as an Applied Research course requirement. Upon completion, a report of the findings will be produced and will become part of the assessment of the GHRD Program at St. John Fisher College. The focus of the study is to provide data to measure the program’s success in meeting its mission.

(name of previous employee/student in GHRD program), previously employed by you, is either a graduate of or a current candidate for the Master of Science in Human Resource Development at St. John Fisher College. Please complete the enclosed survey in which you will evaluate this employee/student. This activity will take approximately one-half hour to complete. Upon completion of the survey, please place it in the provided return postage-paid envelope addressed to Erin Glanton, seal the envelope and mail.

Your identity will be kept confidential unless otherwise specified by you in writing. All information collected in this study will be grouped ensuring individual response anonymity. Your participation in this study authorizes your consent. This study has been reviewed and approved by St. John Fisher College’s Institutional Review Board for the Protection of Human Subjects. If you have any questions or concerns about this study, please contact Erin A. Glanton at (716) 442-3021.

Thank you in advance for agreeing to be part of this important study.

Regards,

Erin A. Glanton
Graduate Student of GHRD 590,
Applied Research
St. John Fisher College, Rochester, New York

Information requested by (name of employee/student) on (date)
Appendix I
Reminder Postcard
Reminder...

Have you completed your survey of the GHRD Program at St. John Fisher College and mailed it back to Erin Glanton?

Have you sent out the appropriate survey(s) to your employer(s) as applicable?

If you have, thank you. If you haven’t, please do so as soon as possible. Your input is an important part of the program assessment!

Please call me at (716) 442-3021 if you have questions or have not received a survey package.

Thank you. Erin Glanton
Appendix J

St. John Fisher College Student Survey
(Used Through Fall 1998)
This questionnaire gives you an opportunity to express anonymously your views of this course and the way it has been taught. Your thoughtful answers will provide valuable information to your instructor about how to improve the course. After the semester is over, the tabulated results of the survey will be shared with your instructor, his or her department chair, and the academic dean.

DIRECTIONS: Please fill in completely (like this: ●) the circle corresponding to your answer to each question or, where appropriate, give your comments.

1. On the average, the number of hours per week I spent outside of class on this course was:
   ○ 0-2 ○ 2-4 ○ 4-6 ○ 6-8 ○ more than 8

2. My grade point average is:
   ○ 0.00-1.49 ○ 1.50-1.99 ○ 2.00-2.49 ○ 2.50-2.99 ○ 3.00-3.49 ○ 3.50-4.00

3. For me, this course is:
   ○ College Core Course ○ Major Requirement ○ Minor Requirement ○ Elective

4. Class Status: ○ Senior ○ Junior ○ Sophomore ○ Freshman ○ Non-degree ○ MBA ○ MS

5. Enrollment Status: ○ Full-time ○ Part-time

6. Gender: ○ Male ○ Female

7. Which aspects of the course did you find most beneficial?

8. Do you have suggestions for improving any aspects of this course?
For the following questions, indicate the response closest to your view by filling in the appropriate circle (like this: O). The scale is from 1-7, with 1 representing **strongly disagree** and 7 representing **strongly agree**. You should choose the response NA (not applicable) if the question is not relevant for the course or for your particular situation.

<table>
<thead>
<tr>
<th>9. The course material corresponded to the stated objectives of the course.</th>
<th>O</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. The course as a whole was well organized.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>11. The grading process was fair.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>12. The examinations/assignments were reasonable and fair.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>13. The examinations represented course content.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>14. The papers/projects/assignments were useful.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>15. The instructor was well prepared for class.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>16. The instructor presented subject matter clearly.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>17. The instructor dealt with questions effectively.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>18. The instructor managed class time effectively.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>19. The instructor was accessible outside of class.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>20. The instructor provided useful feedback on examinations/assignments.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>21. The instructor encouraged students to think and use their judgment.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>22. The instructor encouraged active student involvement in the learning process.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
<tr>
<td>23. I am satisfied with the quality of instruction for this course.</td>
<td>O</td>
<td>Disagree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

**Instructor Questions:**

| 24. | O | Disagree | Agree |
| 25. | O | Disagree | Agree |
| 26. | O | Disagree | Agree |

27. Please feel free to elaborate on any of your responses to the above questions.

---

26. Any additional comments you would like to share?
Appendix K
St. John Fisher College Student Survey
(Used Since Spring 1999)
St. John Fisher College
STUDENT SURVEY

This questionnaire gives you an opportunity to express anonymously your views of this course and how it has been taught. Your thoughtful answers will provide valuable information to your instructor about how to improve the course. After the semester is over, the tabulated results of the survey will be shared with your instructor, his or her department chair, and the provost.

DIRECTIONS: Please fill in completely (like this: ○ ) the circle corresponding to your answer to each question or, where appropriate, give your comments.

1. On average, the number of hours per week I spent outside of class on this course was:
   ○ 0-2        ○ 2-4        ○ 4-6       ○ 6-8       ○ more than 8

2. My Fisher grade point average is:
   ○ 0.00-1.99  ○ 2.00-2.49  ○ 2.50-2.99  ○ 3.00-3.49  ○ 3.50-4.00  ○ not available

3. For me, this course primarily fulfills (please mark only one):
   ○ an undergraduate core requirement  ○ a major or minor or program requirement  ○ an elective

4. Class Status:  ○ senior  ○ junior  ○ sophomore  ○ freshman  ○ MBA  ○ MS  ○ non-degree

5. Enrollment Status:  ○ full-time  ○ part-time

6. Gender:  ○ male  ○ female

7. Class meetings were:
   ○ primarily lecture based  ○ primarily discussion based  ○ other

8. Were the course objectives clearly stated?  ○ yes  ○ no
   Please Comment:__________________________________________

9. Were the goals of this course met?  ○ yes  ○ no
   Please Comment:__________________________________________

10. Which aspects of the course did you find most beneficial to your learning?
    Please Comment:__________________________________________

11. What could have been done differently to improve your learning?
    Please Comment:__________________________________________

(over)
For the scaled questions, indicate the response closest to your view by filling in the appropriate circle (like this: ●). The scale is from 1-7, with 1 representing strongly disagree, 4 representing neither agree nor disagree, and 7 representing strongly agree. You should choose the response NA (not applicable) if the question is not relevant for the course or for your particular situation.

What are your impressions of the instructor’s knowledge of the subject?

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The instructor was well prepared for class.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>2. The instructor displayed a clear understanding of course topics.</td>
<td>○</td>
<td>NA</td>
</tr>
</tbody>
</table>

What are your reactions to the instructor’s delivery skills?

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. The instructor expressed ideas clearly.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>4. The instructor encouraged active learning.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>5. The instructor coordinated the different activities of the course effectively.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>6. The instructor managed class time effectively.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>7. The instructor promoted an atmosphere conducive to working and learning.</td>
<td>○</td>
<td>NA</td>
</tr>
</tbody>
</table>

What are your perceptions of the design of this course?

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. The instructor's performance expectations were clear.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>9. The instructor's policies (about attendance, lateness, dates, academic honesty, etc.) were clear.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>10. The instructor readily provided assistance outside of class.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>11. The assignments/projects/papers helped me to develop a better understanding of course content.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>12. My grades accurately reflect my performance in this class.</td>
<td>○</td>
<td>NA</td>
</tr>
</tbody>
</table>

What are your overall impressions of the course and the instructor?

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. I learned a lot in this course.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>14. I am satisfied with the quality of instruction in this course.</td>
<td>○</td>
<td>NA</td>
</tr>
<tr>
<td>15. I would recommend this instructor to another student.</td>
<td>○</td>
<td>NA</td>
</tr>
</tbody>
</table>

Additional comments you would like to share:

Please do not write in box.
Appendix L

Summary of Learners by Gender
### Summary of Learners by Gender

<table>
<thead>
<tr>
<th></th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>38.46</td>
<td>12</td>
<td>48.00</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>61.54</td>
<td>13</td>
<td>52.00</td>
</tr>
</tbody>
</table>
Appendix M

Summary of Learners by Description
### Summary of Learners by Description

<table>
<thead>
<tr>
<th>Learners</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (n = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>African</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American</td>
<td>0</td>
<td>0.00</td>
<td>3</td>
<td>12.00</td>
</tr>
<tr>
<td>Caucasian</td>
<td>10</td>
<td>76.92</td>
<td>20</td>
<td>80.00</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>15.38</td>
<td>2</td>
<td>8.00</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>7.69</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Appendix N

Summary of Learners by Age
## Summary of Learners by Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Graduates (n = 13)</th>
<th>Candidates (n = 25)</th>
<th>Leavers (n = 7)</th>
<th>All Learners (N = 45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>%</td>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>25 or under</td>
<td>1 7.69</td>
<td>6 24.00</td>
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Appendix O

Descriptive Statistics for Survey Statements by Learners
### Descriptive Statistics for Survey Statements by Learners

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Analyses of Variance (ANOVA)
Level 1: Reaction for Program Graduates, Program Candidates, and Program Leavers

**ANOVA: Single Factor**

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Level 2: Learning for Cohorts

### Anova: Single Factor

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Total: 7.02 52
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### ANOVA: Single Factor

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#### ANOVA

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Level 4: Results for Program Graduates, Program Candidates, and Program Leavers

**Anova: Single Factor**

**SUMMARY**

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**ANOVA**

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Level 5: Ultimate Value for Program Graduates, Program Candidates, and Program Leavers

ANOVA: Single Factor

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Appendix Q

Student Surveys Course Summary
# Level 1: Reaction

## Student Surveys Course Summary

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Note: For confidentiality, courses are not identified.
Appendix R

Student's Newman-Keuls and Descriptive Statistics
The GLM Procedure

Class Level Information

Class  Levels  Values
  group    3  C G L

Number of observations  45

Patterns
Dependent Variables With Equivalent Missing Value

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NOTE: Variables in each group are consistent with respect to the presence or absence of missing values.
The GLM Procedure

Dependent Variable: reaction

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R-Square  Coeff Var  Root MSE  reaction Mean
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<td>Mean Square</td>
<td>F</td>
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<tr>
<td>------------------</td>
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<tr>
<td>Model</td>
<td>2</td>
<td>4.06522112</td>
<td>2.03261056</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>42</td>
<td>15.30683666</td>
<td>0.36444849</td>
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</tr>
<tr>
<td>Corrected Total</td>
<td>44</td>
<td>19.37205778</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
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<th>F</th>
</tr>
</thead>
<tbody>
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<td>2</td>
<td>4.06522112</td>
<td>2.03261056</td>
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</tbody>
</table>

R-Square: 0.209850
Coef Var: 14.19867
Root MSE: 0.603896
Mean: 4.251778
The GLM Procedure

Dependent Variable: results

<table>
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<tr>
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<tbody>
<tr>
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<td>1.52010909</td>
<td>0.76005454</td>
<td></td>
</tr>
<tr>
<td>Error</td>
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<td>20.92168202</td>
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<td>Corrected Total</td>
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R-Square 0.068653 Coeff Var 18.29738 Root MSE 0.700709 results Mean 3.829556

<table>
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The GLM Procedure

Dependent Variable:  ultvalue

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<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>3.50</td>
<td>6.22730150</td>
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<td>37.41714266</td>
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R-Square Coeff Var Root MSE ultvalue Mean
0.142683 0.58675 0.943867 3.688889

<table>
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<th>Pr &gt; F</th>
<th>DF Type III SS</th>
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<th>F</th>
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The GLM Procedure

Student-Newman-Keuls Test for reaction

NOTE: This test controls the Type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha 0.05
Error Degrees of Freedom 42
Error Mean Square 0.463415
Harmonic Mean of Cell Sizes 11.54822

NOTE: Cell sizes are not equal.

Number of Means 2 3
Critical Range 0.571725 0.6882692

Means with the same letter are not significantly different.

<table>
<thead>
<tr>
<th>SNK Grouping</th>
<th>Mean</th>
<th>N</th>
<th>group</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4.4877</td>
<td>13</td>
<td>G</td>
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<tr>
<td>A</td>
<td>4.1472</td>
<td>25</td>
<td>C</td>
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<tr>
<td>A</td>
<td>3.8086</td>
<td>7</td>
<td>L</td>
</tr>
</tbody>
</table>
The GLM Procedure

Student-Newman-Keuls Test for learning

NOTE: This test controls the Type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha  0.05
Error Degrees of Freedom  42
Error Mean Square  0.364448
Harmonic Mean of Cell Sizes  11.54822

NOTE: Cell sizes are not equal.

Number of Means  2
Critical Range  0.6070144  0.6103876

Means with the same letter are not significantly different.

<table>
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<tr>
<th>SNK Grouping</th>
<th>Mean</th>
<th>N</th>
<th>group</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4.5415</td>
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<td>G</td>
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<tr>
<td>A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>4.1996</td>
<td>25</td>
<td>C</td>
</tr>
<tr>
<td>B</td>
<td>3.7143</td>
<td>7</td>
<td>L</td>
</tr>
</tbody>
</table>
The OLM Procedure

Student-Newman-Keuls Test for results

NOTE: This test controls the Type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

<table>
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<tr>
<th>Alpha</th>
<th>Error Degrees of Freedom</th>
<th>Error Mean Square</th>
<th>Harmonic Mean of Cell Sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>42</td>
<td>0.490992</td>
<td>11.54822</td>
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NOTE: Cell sizes are not equal.

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<th>Critical Range</th>
<th>Mean</th>
<th>N</th>
<th>group</th>
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<tbody>
<tr>
<td>2</td>
<td>0.6884907</td>
<td>0.7084526</td>
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Means with the same letter are not significantly different.

<table>
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<tr>
<th>SNK Grouping</th>
<th>Mean</th>
<th>N</th>
<th>group</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0008</td>
<td>13</td>
<td>G</td>
</tr>
<tr>
<td>A</td>
<td>3.8528</td>
<td>26</td>
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<td>A</td>
<td>3.4286</td>
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<td>L</td>
</tr>
</tbody>
</table>
The OLS Procedure

Student-Newman-Keuls Test for ultvalue

NOTE: This test controls the Type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

Alpha: 0.05
Error Degrees of Freedom: 42
Error Mean Square: 0.890884
Harmonic Mean of Cell Sizes: 11.54822

NOTE: Cell sizes are not equal.

Number of Means: 2
Critical Range: 0.7927073  0.9542982

Meas with the same letter are not significantly different.

<table>
<thead>
<tr>
<th>SNK Grouping</th>
<th>Mean</th>
<th>N</th>
<th>group</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.000</td>
<td>13</td>
<td>G</td>
</tr>
<tr>
<td>A</td>
<td>3.750</td>
<td>25</td>
<td>C</td>
</tr>
<tr>
<td>B</td>
<td>2.857</td>
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<td>L</td>
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### The GLM Procedure

#### Level of results

<table>
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<th>reaction Mean</th>
<th>reaction Std Dev</th>
<th>learning Mean</th>
<th>learning Std Dev</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>25</td>
<td>4.14720000</td>
<td>0.50095342</td>
<td>4.19960000</td>
<td>0.56107397</td>
</tr>
<tr>
<td>G</td>
<td>13</td>
<td>4.48769231</td>
<td>0.63769976</td>
<td>4.64153846</td>
<td>0.41884456</td>
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<td>L</td>
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<td>3.80857143</td>
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#### Level of ultvalue

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<th>ultvalue Std Dev</th>
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<td>L</td>
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<td>1.24680986</td>
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The OLM Procedure

Dependent Variable: behavior

<table>
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<th>Source</th>
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<th>Mean Square</th>
<th>F</th>
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</thead>
<tbody>
<tr>
<td>Model</td>
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<td></td>
</tr>
<tr>
<td>Error</td>
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<td>52.595559597</td>
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</tr>
<tr>
<td>Corrected Total</td>
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R-Square Coeff Var Root MSE behavior Mean
0.023952 0.48826 1.132617 3.840909

<table>
<thead>
<tr>
<th>Source Value</th>
<th>Pr &gt; F</th>
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<th>Mean Square</th>
<th>F</th>
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<tbody>
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<td>group</td>
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<td>2</td>
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The OLM Procedure

Student-Newman-Keuls Test for behavior

NOTE: This test controls the Type I experimentwise error rate under the complete null hypothesis but not under partial null hypotheses.

<table>
<thead>
<tr>
<th>Alpha</th>
<th>0.05</th>
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<tbody>
<tr>
<td>Error Degrees of Freedom</td>
<td>41</td>
</tr>
<tr>
<td>Error Mean Square</td>
<td>1.282822</td>
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<tr>
<td>Harmonic Mean of Cell Sizes</td>
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NOTE: Cell sizes are not equal.

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Means with the same letter are not significantly different.

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<th>SNK Grouping</th>
<th>Mean</th>
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<th>group</th>
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</thead>
<tbody>
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<td>G</td>
</tr>
<tr>
<td>A</td>
<td>3.7917</td>
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<tr>
<td>A</td>
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<td>7</td>
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The OLM Procedure

<table>
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<th>Std Dev</th>
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<td>A</td>
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<td>1.10253331</td>
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<tr>
<td>B</td>
<td>13</td>
<td>4.07692308</td>
<td>1.03774904</td>
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<td>L</td>
<td>7</td>
<td>3.67142857</td>
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Appendix S

Summary of Learners' Salaries
## Summary of Learners’ Salaries

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Mean Difference</th>
<th>Median Difference</th>
<th>Median % Difference</th>
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<tbody>
<tr>
<td><strong>Graduates</strong></td>
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<tr>
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<td>$30,000</td>
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<td>Current</td>
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<td>$8,530</td>
<td>25.70%</td>
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<td>$37,149</td>
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<td>$27,989</td>
<td>$11,487</td>
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<td>$7,251</td>
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