**REGIS UNIVERSITY**

School for Professional Studies
**Center for the
Study of
Accelerated Learning**

# Research Report

# *Accelerated Learning*

# *Online Research Project*
*Phase 1*
*September 2003 to August 2004*

**Raymond J. Wlodkowski, Ph.D.
Director**

**Jerome Stiller, M.S.
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**Published October 2005**

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# Table of Contents

# Executive Summary

The School for Professional Studies (SPS) at Regis University has been a leader in the development of accelerated online courses and programs. Currently, there are approximately 250 online courses offered in its Distance Learning Program that serve roughly 5000 students per year. Generally, these courses are eight weeks long with a maximum of 15 students.

Although research in classroom-based accelerated programs indicates that adults learn satisfactorily and in a manner that meets the challenge of conventional college course work (Wlodkowski, 2003), there appear to be no reported studies that have examined learning and student perceptions in *accelerated* online courses. In Fall of 2003, researchers from CSAL began a series of studies to evaluate online accelerated courses in the Undergraduate Programs at SPS. The overall goal of this research project is to assess the quality of online accelerated courses and to obtain information to enhance student learning and persistence in these courses and their related programs.

The questions that guided the Phase I study were:

- What are students' perceptions of the quality of teaching in their courses and how well do their courses support their motivation to learn?
- At the end of a course, how do business students perform in terms of their critical thinking, writing, practical application, and application of knowledge base skills when assessed on major course objectives?
- At the end of a course, how well do algebra students perform on problems across the entire spectrum of end-of-chapter exercises?
- Do students' online readiness, self-efficacy, self-regulation skills, motivation, or peer and faculty relationships relate to their performance or persistence in online courses?
- When students' performance and attitudes in online courses are considered in light of previous studies of classroom-based accelerated courses, what are some insights to be considered?

To answer these questions, researchers investigated all online course sections of BA 461: Management, BA 452: Management of Human Resources, and MT 201: College Algebra for Fall 2003, Spring 2004, and Summer 2004. A total of 172 students participated in this study. All students in the study completed the *Adult Learning Survey* (Appendix A), The *Online Readiness Survey* (Appendix B), and the *End of Course Evaluation* (Table 8). Those in the two business courses wrote responses to authentic

case studies (Appendix C) that were constructed and evaluated with criteria (Appendix D) created by faculty experts. The students in the College Algebra Course submitted their selected representative sample solutions to weekly assigned problems.

The findings indicate that online accelerated courses are an effective format for learning. Students perceive their courses as well taught and motivating. They learn well and more than satisfactorily perform on rigorous summative assessments that comprehensively measure college level outcomes. Nearly nine out of ten online students perceive their courses as fostering inclusion among students, a positive attitude, meaningful engagement, and personal competence to encourage learning. Students appreciate the curricular and instructional quality of their courses.

The study provides evidence of effective learning in online accelerated courses. For the two business courses, 81% of the students demonstrated learning and subject mastery that was rated from satisfactory to excellent. In College Algebra, 82% of the students correctly answered problems at levels that ranged from satisfactory to excellent. However, over a year's time only 28 students (44%) of the original sample completed the course.

The study found modest relationships between motivation, self efficacy, and performance, indicating that the more a student sees his or her course having practical value, the better the student will perform in critical thinking, applying the course's knowledge base, developing practical applications in problem solving, and writing well.

In this study it was difficult to identify at-risk students. Most of the students were confident and experienced online learners with 73% of them having taken more than one online course previous to this study. Not a single item on the *Online Readiness Survey*, including discomfort with technology, indicated a significant difference between students who persisted and those who did not.

Comparisons with previous classroom-based studies suggest that students in the online business courses learn as well or more effectively than students in the classroom-based business courses.

## Recommendations:

- Continue to reconstruct classroom-based accelerated courses into online courses. In 8 weeks duration, they appear to be an effective format for college courses.
- Review the curriculum of existing online courses for their practical value to adult students. Where appropriate, deepen the instruction and extend the

knowledge base to increase the course's relevance and utility in students' lives and jobs.

■ Conduct institutional research that determines those online courses where early lack of student success, such as in College Algebra, leads to prompt student exit from the course. Revise those courses to measure the necessary prerequisite skills and/or to provide more immediate, effective tutorial assistance.

■ Continue this line of research – i.e. the Online Research Project – to further investigate online students' experience and performance and to further establish and refine the psychometric properties of the instruments used in the study.

■ For the next study, examine the relationship of self-efficacy to learning. If the relationship is significant and stronger, consider self-efficacy training as part of early student orientation.

■ Develop mechanisms to disseminate the study's findings to relevant administration and faculty for their feedback and consideration.

# Purpose

This report presents the findings of the first phase of a research project conducted by the Center for the Study of Accelerated Learning (CSAL) in the School for Professional Studies at Regis University. The purpose of this project is to investigate the quality of online accelerated courses at Regis University. The findings from this study will inform actions to improve student learning, persistence, and degree completion. The goals for Phase 1 of the Online Research Project are to:

- Assess online courses in terms of learning outcomes and student perceptions;
- Better understand characteristics of online accelerated learning students;
- Understand the relationship of attitudes, motivation, and other factors to student performance and persistence; and
- Identify variables that may indicate students who are at risk.

This research continues a series of studies that have investigated the academic quality of accelerated courses in the undergraduate programs of the School for Professional Studies at Regis University and Regis New Ventures Partner Schools. These classroom-based investigations were initiated in 1996 and continued until 2001.

The rapid growth of online accelerated courses has deepened the need for research focused on the quality of these courses. The information in this report is intended to contribute to the enhancement of student persistence and academic learning at Regis University, particularly in the School for Professional Studies and New Ventures of Regis University Partner Schools.

# Introduction

The demand for non-traditional, post-secondary programs for working adults has increased steadily in recent decades (Aslanian, 2001). In response to these evolving social expectations and market forces, there has been widespread growth of accelerated courses and programs. In 2005, CSAL identified at least 280 universities and colleges with accelerated programs, many of them with multiple campuses. In the last five years, there has been rapid growth of online accelerated courses among these schools.

Research in classroom-based accelerated programs indicates that adults learn satisfactorily and in a manner that meets the challenge of conventional college course work (Wlodkowski, 2003). Adults also consistently report a positive outlook toward their accelerated learning experiences.

Over a five-year period involving seven private colleges, Regis University researchers assessed current student performance and attitudes as well as alumni attitudes for three accelerated undergraduate courses: Management, Management of Human Resources, and Corporate Finance (Wlodkowski, Gonzales, & Mauldin, 2002). Their findings indicated:

- Most current student perceptions of accelerated courses are positive, e. g., "Overall this course is a valuable learning experience." (97.5% strongly agree or agree)
- Most alumni perceptions of accelerated courses are positive, e. g., "Overall this course was a valuable learning experience." (91.8% strongly agree or agree)
- In academic performance, nearly seven out of ten current students (69.3%) meet a standard of satisfactory to excellent, as judged by faculty experts in their field of study. (Interrater reliability is 90% or higher.)
- Seventy-seven percent of current students and 84% of the alumni indicate they would return to their respective college if they could start college again.

There are very few reported studies that focus on persistence or degree completion in accelerated programs. Although the range varies widely among individual colleges with accelerated programs, the undergraduate degree completion rate for adult students averages close to 40 percent within six years (Wlodkowski, 2003). To provide a context nationally, the six-year graduation rate is 38 percent for traditional undergraduate students, regardless of age, in large urban state colleges and universities (American Association of State Colleges and Universities, 1997). Most accelerated programs are located in urban areas.

Research of online courses has been extensive. In the last decade there have been over 500 studies comparing learning in online courses with learning in classroom-based courses. In general, these studies indicate that students in online course learn as well as students in classroom-based courses (e.g. McLaren, 2004). However, there appear to be no reported studies that have examined learning and student perceptions in *accelerated* online courses.

Studies comparing online course retention rates with traditional courses have been inconclusive (Howell, Williams, & Lindsay, 2003). As of the date of this publication, there appear to be no studies reporting course completion rates for accelerated online courses. Given these finding and the general lack of research reported for accelerated online programs, researchers at CSAL in Fall 2003 began a series of studies to evaluate online accelerated courses in SPS at Regis University. Raymond Wlodkowski, Director of CSAL, and Jerome Stiller, Research Associate at CSAL met with Marie Friedemann, Associate Dean of SPS Undergraduate Programs and Ellen Waterman, Director of SPS Distance Learning to plan a research investigation of accelerated online courses. The overall goal of this research project was to assess the quality of online accelerated courses and to obtain information to enhance student learning and persistence in these courses and their related programs.

Since BA 461: Management and BA 452: Management of Human Resources had been extensively studied for five years as accelerated classroom-based courses and were well enrolled as online accelerated courses, they were selected to be part of the study. MT 201: College Algebra was the final course selected because it is an academic subject that is part of the curriculum sequence for advanced courses in computer science and statistics.

## Sample Selection

The sampling frame was all online course sections in BA 461, BA 452, and MT 201 for Fall 2003, Spring 2004, and Summer 2004. Total student sample sizes for this period of time were: BA 461, n = 84, BA 452, n = 68, and MT 201, n = 63. For students in the study (n = 172), the average age was 36 with 33 percent men and 67 percent women. See Table 1.

# Methodology and Findings

**Student Perceptions and Attitudes from the End of Course Evaluation**

Since 1996, all studies conducted by CSAL have used a 22-item self-report, *End of Course Evaluation* (Table 8) that combines items from the Motivational Framework for Culturally Responsive Teaching (Wlodkowski & Ginsberg, 1995) with indicators of instructional quality. The framework provides a holistic model directly applicable to adult learning in accelerated courses (Wlodkowski, 1999) and is based on the premise that most people are highly motivated to learn when they feel included (respected in the learning group), have a positive attitude (find the subject matter relevant), can make learning meaningful (find learning engaging and challenging), and are becoming competent (effective at what they value). Responses to this survey indicate whether the students perceive the conditions for learning as intrinsically motivating. Reliability analysis for this survey yielded a Cronbach's alpha of .93.

| Table 1 Description of Students in Study (n=172) | | |
|---|---|---|
| **Average Age** | | 36 |
| | | |
| **Gender** | Male | 33% |
| | Female | 67% |
| | | |
| **Top 2 reasons for attending this college:** | Accelerated Courses | 55% |
| | Type of Programs Available | 54% |
| | Academic Reputation | 49% |
| | Location | 15% |
| | Cost | 10% |
| | Atmosphere | 2% |
| | | |
| **Would you choose this college again?** | Yes | 82% |
| | Uncertain | 12% |
| | No | 6% |
| | | |
| **Would you choose the same major again?** | Yes | 74% |
| | Uncertain | 14% |
| | No | 12% |

The *End of Course Evaluation* was completed by a total of 172 students during their final class week. One of the more general questions asked students to choose two primary reasons for attending Regis University. (See Table 1.) The three responses selected most often were: accelerated courses (55%), type of programs available (54%), and academic reputation (49%). Another question asked, "If you could start college over, would you choose to attend this college?" Eighty-two percent of the students answered yes, while 12% were uncertain and 6% said no. These responses suggest that the accelerated format is a factor for the majority of students choosing Regis online programs and that most of them are satisfied with their education.

The main body of survey items offered four categories of response: strongly agree, agree, disagree, and strongly disagree. Student responses to question items of particular importance to motivation are summarized in Table 2.

| Table 2 Items Related to Motivation (n=172) | |
|---|---|
| **Survey Item** | **Strongly Agree or Agree** |
| 1.  Overall, this course was a valuable learning experience. | 91% |
| 7.  The teacher respected student opinions and ideas. | 94% |
| 8.  I have used information or skills that I have learned in this course. | 83% |
| 10. This course was relevant to my goals. | 88% |
| 11. This course helped me to be effective at what I value. | 81% |
| 12. The classroom climate for this course was friendly and respectful. | 93% |
| 14. This course challenged me to think. | 94% |
| 19.  I felt included in this course. | 91% |
| 20. This course was meaningful for me. | 89% |
| **Average Agreement** | **89%** |

The ratings for the motivational questions suggest that students find their courses to be inclusive, relevant, and meaningful. When Strongly Agree and Agree categories are combined, the average for these nine items is 89% while the average for all 22 items in the survey is 90%.

Historically, research studies have found that the interaction between student motivation and instruction is strongly related to student achievement (Uguroglu & Walberg, 1979). To document the instruction side of this interaction, a second tier of items dealing directly with instruction and materials was included in the survey and is reported in Table 3. The average proportion of agreement for the eight items is 89%, suggesting that students are generally satisfied with how they are taught and assessed in their courses.

| Table 3 | |
|---|---|
| **Items Related to Instruction and Materials (n=172)** | |
| **Survey Items** | **Strongly Agree or Agree** |
| 2. The course text was a good resource for achieving the course objectives. | 89% |
| 4. The teacher was a skilled instructor. | 89% |
| 6. The course module and/or syllabus served as an effective learning guide. | 87% |
| 16. This course was well taught. | 89% |
| 17. The teaching methods in this course helped me to learn. | 84% |
| 18. The grading standards for this course required college level performance. | 96% |
| 21. The way I have been evaluated in this course, thus far, seems fair. | 91% |
| 22. The way I have been evaluated in this course, thus far, seems sensitive to my capabilities. | 86% |
| **Average Agreement** | **89%** |

An item response to focus on is #18 where 96% of the students agreed that "the grading standards for this course required college level performance." In terms of conventional wisdom, when students respect the grading standards by which they are evaluated, it denotes their perception that the course is reasonably rigorous.

## Student Perceptions and Attitudes
## from the *Adult Learning Survey* (ALS)

The *Adult Learning Survey* (Wlodkowski, Mauldin, and Gahn, 2001) was developed to assess: student self-regulation skills, student motivation, the four conditions of the Motivational Framework for Culturally Responsive Teaching (Wlodkowski & Ginsberg 1995), and positive interactions with peers and faculty. These variables have been associated with higher achievement and persistence in numerous studies of classroom-based programs (Miltiadou & Savenye, 2000; Tinto, 1998; Wlodkowski, 1999). Appendix A provides the items found in the *Adult Learning Survey* and student mean scores for each item. Reliability analysis for the survey indicates an overall Cronbach's of .93. Since the *ALS* is only beginning to be used extensively, its psychometric properties have not been fully evaluated. Work continues to assess and develop the validity and reliability of this instrument.

The *ALS* was administered to students in the fourth week of classes. Overall, student mean scores were high with no item average falling below 4.7 on a seven point rating scale. The averages of those items which assessed self-regulation skills such as figuring out mistakes, asking the instructor for help, and going back over assignments that

were not well understood were uniformly high ranging from 5.7 to 6.2. In general, the students who completed these courses were confident learners who knew how to prepare and study for them.

From a motivational perspective, findings from the *ALS* support the findings from the *End of Course Evaluation*. Students generally felt included. Their average for the item: "This program makes efforts to accommodate adult students." was 6.2. In addition, their average for, "finding the (online) classroom atmosphere friendly and respectful," was 6.2. This finding is particularly important because so often the stereotype of online courses is that they are sterile and cold learning environments.

Students again noted that their learning was relevant, averaging 5.9 on the item assessing this variable. They also found their courses to be meaningful, indicating that they were "very interested in the content areas" of their courses (5.9 average). For the items that assessed the degree to which students believed they were becoming more competent as a result of their coursework: "… acquired knowledge and skills applicable to a specific job or type of work …," …"academic work fits with my work experience…," and " … becoming more effective at things I regard as important…", their averages were 5.9, 5.9, and 5.8 respectively. The latter averages are particularly important because competence has been strongly associated for more than thirty years with adult motivation to learn (Wlodkowski, 2004). In general, the findings from the *ALS* provide another strong indication that students who complete these courses find them to be highly motivating.

## Student Perceptions and Attitudes
## from the *Online Readiness Survey*

Student readiness to take an online course was assessed with the *Online Readiness Survey* (Stiller and Wlodkowski, 2003) at the first class session. See Appendix B.

At least 80% of the students in this study had taken an online course before and 73% had taken more than one online course. It seems safe to generalize that most of the students were fairly experienced with online learning. While 44% have about the same amount of time for an online course as they do for a classroom-based course. Since online courses often require more reading and preparation due to their instructional format, this lack of time for over forty percent of the students may contribute to their eventual exit from these courses. It is also interesting to note that 90% of these students reported that they were either somewhat or very confident with the subject matter in the course they were taking. This finding offers further evidence, as found in the *ALS*, that the students who participated in this study were confident learners.

# Current Student Learning and Content Mastery

Faculty experts were selected according to the following criteria: an experienced, well-respected teacher of accelerated courses, who has had experience and professional practice in the discipline represented by the course (e. g., business managers, consultants, statisticians, mathematicians, etc.). The three faculty experts who assessed Management and Management of Human Resources were Don Bush, Jr., Rick Rokosz, and June Twinam. The three faculty experts who assessed College Algebra were Rita Davidshofer, Frank Walsh, and Eleanor Storey. All faculty experts are affiliated with Regis University.

For two of the courses selected for this investigation – Management and Management of Human Resources – faculty experts created summative questions and case studies (Appendix C) based on two or more of the major objectives of these courses. To evaluate performance in each of these courses, the faculty experts worked collaboratively to determine the dimensions of performance and the criteria for assessment; then used these rubrics to assess the students' written answers to the case study questions (Appendix D). For these two courses as well as College Algebra, researchers facilitated the work of the faculty experts, but were careful to make certain all assessment items and the criteria and their application were strictly governed by the mutual dialogue and eventual agreement of the faculty experts themselves.

Each assessment for the business courses required students to demonstrate critical thinking and apply a learned knowledge base. Students had to analyze the case, find the most pertinent issues and evidence, relate this understanding to theory, and offer recommendations or resolve problems. The specific dimensions of performance were: Critical Thinking, Practical Application, Knowledge Base, and Writing Skills.

The questions and case studies were administered to the students according to a standardized script in the last week of classes. In all three courses the instructors, independent of the faculty experts' evaluations, graded the performance assessments as well. Neither the instructors' assessments nor the students' grades were included in the outcome measures used in this study. Students' grades, identities, and demographic characteristics were not available to the faculty experts.

The faculty experts assessed each student response for each dimension of performance. The scoring system was 4 points for excellent, 3 points for very good, 2 points for satisfactory, and 1 point for not acceptable. In order to avoid confusion with the distinctly different meaning of grades or grade point averages, the average rating by the three faculty experts for each dimension of performance was multiplied by a factor of 2. Since the same dimensions of performance and rubrics were used for both

Management and Management of Human Resources, the average scores of the students from both of these courses could be combined and categorized in a range from Excellent to Not Acceptable. Table 4 indicates the average rating by faculty experts of student responses for each dimension of performance. This table also includes the corresponding qualitative value for each average rating. The table combines averages from both courses. The mean inter-rater reliability for both courses was .88.

There were no significant differences in average scores for any dimension of performance between the two courses. For all dimensions of performance for both courses, the average ratings of the faculty experts range from more than satisfactory to near excellent. The average for all students across all applied dimensions of performance was 5.2 (more than satisfactory).

| Table 4 Business student performance for BA 461 and BA 452 (n=97) | | |
|---|---|---|
| Dimension | Average | Description |
| Critical Thinking | 4.8 | More than satisfactory |
| Practical Application | 4.7 | More than satisfactory |
| Knowledge Base | 4.7 | More than satisfactory |
| Writing Skills | 6.5 | Near excellent |
| | | |
| Combined | 5.2 | More than satisfactory |
| Combined without Writing Skills | 4.7 | More than satisfactory |

Writing skills had an average rating of 6.5 (near excellent). The rubrics for Writing Skills contain error counts. (Appendix D). Because writing was done online with the benefit of Spell Check and automatic grammatical error indication, the Writing Skills ratings are likely to be higher for an online course than in a classroom-based course where more students perform required assessments with a pen and paper. If the averages for all students across the applied dimensions of performance are calculated with the averages for Writing Skills withheld, the revised average for all students in both courses is 4.7. The qualitative value of this average remains more than satisfactory but closer to the lower end of the scale for this category.

Table 5 indicates the numerical range of scores, the corresponding qualitative values, and the number and percentage of students whose average scores across all dimensions fell within each range. According to this table, four out of five students (81%) in this study met a standard of satisfactory to excellent for course work at the college level as judged by faculty experts in their field of study.

| Table 5 Business student performance averaged across dimensions of performance (n=97) | | |
|---|---|---|
| | **n** | |
| 7-8 near excellent to excellent | 13 | 14% |
| 6-6.99 very good to near excellent | 27 | 28% |
| 5-5.99 more than satisfactory to very good | 12 | 13% |
| 4-4.99 satisfactory to more than satisfactory | 27 | 28% |
| 3-3.99 less than satisfactory to satisfactory | 11 | 11% |
| 2-2.99 not acceptable to less than satisfactory | 7 | 8% |

For College Algebra, the faculty experts selected quantitative and verbal problems from the end-of-chapter, mandatory exercises required for completion by all students. In these exercises, each student had to demonstrate mathematical reasoning, analysis of a problem from either a verbal and/or quantitative perspective, and carry out a set of calculations. The problems selected for the performance assessment were based on their representation of quantitative skills, complexity of cognitive integration, level of challenge, and hierarchical sequencing of requisite mathematical understanding and skill.

Because the student response options were embedded in a multiple-choice framework in the online format, student performance was indicated by right or wrong answers. The students could not receive partial credit for answers that indicated some degree of mathematical understanding but did not arrive at a correct solution. The summative score of the students' correct answers indicated a level of overall proficiency rather than any discreet dimensions of performance.

The faculty experts chose 23 problems for assessment from the total end-of-chapter exercises. The researchers collected this set from each student's online work. The range of correct answers and their corresponding qualitative value were:

Excellent: 21-23 correct answers
Very good: 18-20 correct answers
Satisfactory: 15-17 correct answers
Not acceptable: 14 or fewer correct answers

Table 6 indicates the number and percentage of students whose total of correct answers corresponded to each qualitative rating. Twenty-three (82%) students scored in a range from satisfactory to excellent. However, only 28 out of the 63 students who started the course completed it. That is a 56% exit rate. Conversations with faculty indicated that many students drop and retake this course until they are able to pass it. With such consistent online required assignments, students probably realize early on that they cannot keep up with the pace and drop until they are more prepared to

complete the course. Nonetheless, those who finish the course demonstrate mathematical reasoning and skill at a relatively high level of performance.

| Table 6 College Algebra Performance (n=28) | |
|---|---|
| Excellent | 29% |
| Very Good | 39% |
| Satisfactory | 14% |
| Not Acceptable | 18% |

## Discussion

Both the *End of Course Evaluation* and the *ALS* indicate that students' attitudes toward online courses are positive. Nearly nine out of ten students agree that the courses are effective, well taught, and enhance their motivation to learn. In addition, at least four out of five students would recommend these courses to others and attend Regis University again if they had another chance to go to college.

Responses to the *Online Readiness Survey* indicated that 80% of the students in these courses were experienced online learners who were confident about learning the subject at hand. However, a large proportion of them (44%) did not have any more time for an online course than they had for a classroom-based course. Since online courses often require more time, this characteristic may eventually contribute to students exiting from their online program.

The documentation of student learning provides more substantial evidence of the effectiveness of online accelerated courses. The tasks and criteria created by the faculty experts were rigorous. For BA 452: Management and BA 461: Management of Human Resources, 81% of the students provided evidence of learning and subject mastery that was rated from satisfactory to excellent. Their average for all applied dimensions of performance for both courses was 5.2, a rating by faculty experts that indicated more-than-satisfactory performance.

For the third course investigated, MT 201: College Algebra, students had to complete verbal and quantitative exercises at the end of each chapter of their textbook. Students were assessed based on a selection of representative problems that measured their overall proficiency for correctly responding to the variety of problems represented in their text. Although 56% of the students exited this course early, among those who completed it, 82% correctly answered problems at levels that ranged from satisfactory to excellent. Since students often repeat the Algebra course until they are more confident of passing, a proactive form of tutorial assistance seems needed for them.

Because no national norms exist for the subject areas in this study, there is little opportunity to find a wider context for comparing the quality of the students' achievement. Based on the rubrics of the faculty experts, most students in the online courses in this study appear to learn satisfactorily and meet the challenge of college coursework.

# Relationship of Student Online Readiness and Motivation to Performance and Retention

Is there a relationship between student online readiness and course retention? In order to answer this question, a chi square test of student mean scores for all items on the Online Readiness Scale and their relationship to student course completion was conducted. All chi squares were nonsignificant indicating that for these three courses student online readiness does not relate to course completion.

Is there a relationship between student online readiness and subsequent course performance? To answer this question, another chi square test of student mean scores for all items on the Online Readiness Scale and their relationship to student averages for performance in the three courses was conducted. All chi squares were nonsignificant indicating that for these courses student online readiness does not related to course performance.

Is there a difference in motivation for those students who complete these courses when compared with those students who did not complete the courses? To answer this question, a t-test to measure the equality of student mean scores for the four conditions of the motivational framework (Inclusion, Attitude, Meaning, and Competence) for those who completed the course and those who did not was conducted. All t-test scores were nonsignificant indicating that for these three courses student motivation does not relate to course completion. The finding of no difference was likely because the level of motivation was high for both groups (completed mean = 5.8, not completed mean = 5.7).

Is there a relationship between student motivation and subsequent course performance? To answer this question, correlations were calculated between student mean scores for each condition of the motivational framework and their mean scores for each dimension of performance assessed in the business courses. The significant correlations are presented in Table 7.

Although the correlations are modest, they are significant for Attitude, Meaning, and Competence. The correlations for competence have probably the most potential to inform educational practice because they are significant for every dimension of performance. Students perform better in courses where they learn something well and can use it in their lives or jobs. The more a course offers these characteristics, the better students may learn.

| Table 7 |
|---|
| **Correlations between Motivational Framework Conditions and Business Performance Dimensions (n=97)** |

| | |
|---|---|
| Meaning /Critical Thinking | r=.26 |
| Meaning /Practical Application | r=.28 |
| Attitude/Practical Application | r=.27 |
| Attitude/Writing Skills | r=.25 |
| Competence/Critical Thinking | r=.32 |
| Competence/Practical Application | r=.31 |
| Competence/Knowledge Base | r=.27 |
| Competence/Writing Skills | r=.32 |

## Algebra

MT201 performance and persistence were not related to any of the variables measured, possibly due to small sample size (n=28).

# A Comparison of Findings
# for Online Courses
# with Past Research on Classroom-based Courses

Phase I of the Online Research Project was conducted as an extension of a previous line of research. Over a five-year period, 1996 to 2001, three academic quality studies of classroom-based accelerated courses were conducted at Regis University in collaboration with six other private colleges. Each study involved a set of three schools: a) 1996-1997 – Regis University, Davenport College, and Emmanuel College; b) 1998-1999 - Regis University, St. Ambrose University, and Rosemont College; c) 2000 – 2001 Regis University, Walsh University, and Waynesburg College.

The courses included in the three studies were Corporate Finance, Management, and Management of Human Resources. The majority of respondents in the 1996-2001 classroom studies were women (66%) with an average age of 37, a demographic profile closely matched in this online study (67% women, average age = 36) All students in the classroom-based studies completed the same *End of Course Evaluation* that the online students completed.

Differences in regional populations, instructors, and performance assessments preclude making direct and conclusive comparisons between the 1996-2001 classroom-based studies and the current online study. However, since the student performance criteria and *End of Course Evaluation* items were the same in each study and the samples were demographically similar, we can discuss findings from both studies to draw some suggestive insights.

## Perceptions and Attitudes

In classroom-based courses, student attitudes have been very positive. For the three studies conducted between 1996 and 2001, 98% of the students agreed that their course was a valuable learning experience. The combined average across all 22 items for the *End of Course Evaluation* was 93%. See Table 8.

In the online courses, student attitudes are also positive. Ninety-one percent of the students agreed that their course was a valuable learning experience. In general, the percentage of students in online courses who have positive attitudes toward their courses is slightly less than those in classroom courses. The combined average across all 22 items for their *End of Course Evaluation* is 90%. See Table 8. With an overall sampling error of + or - 7%, the differences between the individual item averages of classroom-based students and online students is not large enough to be

| END OF COURSE EVALUATION | Phase 1 | Phase 3 | Phase 5 | Avg 1,3,5 | Online 03-04 |
|---|---|---|---|---|---|
| **Table 8** — Online End of Course Evaluation Comparisons | | | | | |
| 1. Overall, this course was a valuable learning experience. | 98 | 98 | 96 | 98 | 91 |
| 2. The course text was a good resource for achieving the course objectives. | 93 | 91 | 82 | 90 | 89 |
| 3. The teacher was knowledgeable about the course subject area. | 100 | 99 | 99 | 99 | 96 |
| 4. The teacher was not a skilled instructor. | 95 | 90 | 94 | 93 | 89 |
| 5. I would recommend this course to others. | 93 | 92 | 93 | 93 | 89 |
| 6. The course module and/or syllabus served as an effective learning guide. | 93 | 89 | 81 | 87 | 87 |
| 7. The teacher did not respect student opinions and ideas. | 100 | 97 | 96 | 98 | 94 |
| 8. I have used information or skills that I have learned in this course. | 89 | 91 | 78 | 87 | 83 |
| 9. Class time was used effectively. | 95 | 88 | 81 | 89 | 91 |
| 10. This course was relevant to my goals. | 93 | 92 | 95 | 93 | 88 |
| 11. This course helped me to be effective at what I value. | 89 | 89 | 93 | 90 | 81 |
| 12. The classroom climate for this course was friendly and respectful. | 98 | 97 | 98 | 98 | 93 |
| 13. Given the way this course was taught, I feel confident about using what I learned. | 93 | 90 | 94 | 92 | 89 |
| 14. This course challenged me to think. | 97 | 96 | 95 | 96 | 94 |
| 15. This course encouraged critical thinking. | 93 | 91 | 91 | 92 | 91 |
| 16. This course was not well taught. | 94 | 85 | 94 | 91 | 89 |
| 17. The teaching methods in this course helped me to learn. | 96 | 85 | 96 | 92 | 84 |
| 18. The grading standards for this course required college level performance. | 98 | 95 | 95 | 96 | 96 |
| 19. I felt included in this course. | 98 | 98 | 98 | 98 | 91 |
| 20. This course was meaningful for me. | 93 | 96 | 95 | 95 | 89 |
| 21. The way I have been evaluated in this course, thus far, seems fair. | 98 | 93 | 98 | 96 | 91 |
| 22. The way I have been evaluated in this course, thus far, seems sensitive to my capabilities. | 92 | 88 | 97 | 92 | 86 |
| **Average** | | | | **93** | **90** |
| NOTE: All numbers are percentages of students who agreed or strongly agreed. | | | | | |

meaningful. For example, in Item No. 11: *This course helped me to be effective at what I value*, the percent of all classroom-based students agreeing or strongly agreeing with this item is 90%, while the percent of online students is 81%, yielding a difference of 9%; however, this difference is within the range of the sampling error (plus or minus 7%, a total range of 14%) and so the difference may or may not be due to sampling error alone.

## Student Learning and Content Mastery

When student learning is considered, probably the most informative aspect of examining student performance is to examine the qualitative distribution of student averages in classroom-based courses and in online courses across all the dimensions of performance. If we take the mean of the student averages for Critical Thinking, Practical Application, Knowledge Base, and Writing Skills for all business courses studied from 1996 to 2001, how do they compare with the mean of the student averages for the same dimensions of performance in the online courses BA 452 and BA 461? See Table 9.

| Table 9 Online Student Performance BA452 & BA461 Comparisons | | | | | |
|---|---|---|---|---|---|
| | Phase 1 | Phase 3 | Phase 5 | Avg. | Online |
| Near excellent to excellent | 12% | 14% | 3% | 10% | 14% |
| Very good to near excellent | 25% | 12% | 14% | 16% | 28% |
| More than satisfactory to very good | 20% | 17% | 16% | 17% | 13% |
| Satisfactory to more than satisfactory | 22% | 24% | 31% | 26% | 28% |
| Less than satisfactory to satisfactory | 12% | 25% | 34% | 25% | 11% |
| Not acceptable to less than satisfactory | 9% | 8% | 1% | 5% | 8% |

Proportionately, 26% of the students in the classroom-based courses compared to 42% of online students have averages that range from Very Good to Excellent. For the range from Satisfactory to Excellent, there are 69% of the students in the classroom-based courses compared to 83% of the online students. Thus, we might say that preliminary indicators suggest that more students in the online business courses learn effectively than students in the classroom-based business courses. Future research that actually compares these courses in a rigorous design will provide significant evidence about this possibility.

# Discussion and Recommendations

The findings of Phase 1 of the Online Research Project (2003-2004) provide evidence that adult students in online accelerated courses view their courses as effective, well taught, and motivating. These students achieve course learning outcomes in a manner that satisfactorily meets the challenge of substantive college coursework. These findings are consistent with previous research of the academic quality of classroom-based accelerated courses over the past 13 years (Scott & Conrad, 1992; Aslanian, 2001; Wlodkowski and Kasworm, 2003).

## Perceptions and Attitudes

In general, students have very positive attitudes toward their online accelerated courses. Ninety-one percent of all students agreed or strongly agreed that these courses were a valuable learning experience. At least four out of five students would recommend these courses to others and attend Regis University again if they had another chance to go to college. When compared to the attitudes of students in classroom-based courses, as measured in previous studies conducted by CSAL, online student attitudes appear to be about as positive about their courses as their classroom-based counterparts.

Nearly nine out of ten online students perceive their courses as well taught and fostering the motivational conditions of inclusion, positive attitude, meaning, and competence to encourage learning. These findings indicate that curricular and instructional quality is keenly appreciated by online students. Another aspect of their positive perceptions may be that the students who completed these courses were highly motivated, confident, and experienced online learners. Findings from the *Adult Learning Survey* underscore this conclusion. For example, on the item: "I am confident I can understand the basic concepts taught in my courses," students averaged a score of 6.2 on a 7 point Likert scale that extended to Very True of Me.

Since most of the students in this study were confident and experienced online learners, with 73% of them having had more than one online course, it was difficult to identify at-risk students. In fact, the average motivation score for students who exited the courses (5.7) was nearly as high as for those who completed the courses (5.8). Not a single item on the *Online Readiness Survey* indicated a significant difference between those students who finished the courses and those who did not. For adult online students, it may be that factors such as family and work responsibilities are stronger determinants of their course completion than their personal motivation and readiness.

## Learning and Performance

Documentation of student learning in this study provides substantial evidence of content mastery in online accelerated courses. For BA 452: Management and BA 461: Management of Human Resources, 81% of the students demonstrated learning and subject mastery that was rated from satisfactory to excellent. Forty-two percent exhibited learning that was rated from very good to excellent. Their average for all applied dimensions of performance (Critical Thinking, Practical Application, Knowledge Base, and Writing Skills) was 5.2, a rating by faculty experts that indicated more than satisfactory performance.

For the third course investigated, MT 201: College Algebra, 82% of the students correctly answered problems at levels that ranged from satisfactory to excellent as rated by the faculty experts. Sixty-eight percent solved problems at levels that were rated from very good to excellent. However, over a year's time only 28 students (44%) of the original sample completed the course. Since students often repeat the Algebra course until they are more confident of passing, a proactive form of tutorial assistance is needed for them.

The performance criteria, case studies, and problems constructed by the faculty experts are rigorous. See Appendices D and E. Most students in the online courses in this study appear to learn satisfactorily and meet the challenge of college coursework. When compared to the learning of students in classroom-based courses, as measured in previous studies conducted by CSAL, online student performance in BA 452 and BA 461 appears to be superior. Although the scores cannot be statistically compared, they suggest that higher percentages of students learn effectively in online courses.

For student learning, there are relationships between motivation, self efficacy, and performance. Modest but statistically significant, positive correlations exist for competence and the four dimensions of performance. In other words, the more a student sees his or her course having practical value, the more that student will learn to think critically, apply the knowledge base of the course, and write effectively. Students perform better in online courses where they learn something well and can use it in their lives or jobs.

There was also a correlation between self-efficacy and performance, but the relationships were too small to suggest any programmatic change or intervention. However, this is a relationship to continue to study in future investigations.

In general, the findings in this study indicate that online accelerated courses are an effective format for learning in the School for Professional Studies at Regis University. Students perceive them as well taught and motivating. They learn well and more than satisfactorily perform on rigorous summative assessments that comprehensively measure college level outcomes.

The following recommendations are based on this research:

- Continue to reconstruct classroom-based accelerated courses into online courses. In 8 weeks duration, they appear to be an effective format for college courses.
- Review the curriculum of existing online courses for their practical value to adult students. Where appropriate, deepen the instruction and extend the knowledge base to increase the course's relevance and utility in students' lives and jobs.
- Conduct institutional research that determines those online courses where early lack of student success, such as in College Algebra, leads to prompt student exit from the course. Revise those courses to measure the necessary prerequisite skills and/or to provide more immediate effective tutorial assistance.
- Continue this line of research – i.e. the Online Research Project – to further investigate online students' experience and performance and to further establish and refine the psychometric properties of the instruments used in the study.
- For the next study, examine the relationship of self-efficacy to learning. If the relationship is significant and stronger, consider self-efficacy training as part of early student orientation.
- Develop mechanisms to disseminate the study's findings to relevant administration and faculty for their feedback and consideration.

## Issues for Further Study

One of the shortcomings of this study is that it did not compare the performance or attitudes of adult online students *in current sections* of the same accelerated classroom-based courses. A rigorously designed study for comparing the effectiveness of the two formats needs to be done. Accordingly, Phase 2 of the Online Research Project will compare the online and classroom-based formats of the same three courses researched in Phase 1 as well as BA 495: Business Ethics and MT 270: Introduction to Statistics.

The Online Research Project would prove more informative and useful if it were extended to courses in Teacher Education and the Graduate Programs in SPS. Studies of more diverse courses in the Undergraduate Program should also be conducted. A wider variety of courses included in the research would allow for increased generalizeability to other courses in SPS. Phase 3 of the Online Research Project will address this need.

Since this study was conducted only within SPS, its generalizeability is limited. As SPS develops its Online Consortium, this research needs to be extended to schools outside of SPS. Broader comparative studies would provide findings that support valid and reliable generalizations for the larger community of institutions with accelerated online programs.

# Acknowledgments

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# Appendix A

| Adult Learning Survey Results (n=150) | |
|---|:---:|
| 1. When I study, I go through the readings and my class notes and try to find the most important ideas | 5.63 |
| 2. Considering the difficulty of the courses, the teachers, and my skills, I think I do well in my classes | 5.91 |
| 3. I do class assignments because I want to learn new things | 5.71 |
| 4. When I make mistakes in my course work, I try to figure out why | 6.12 |
| 5. During class time, I often miss important points because I am thinking of other things | 2.89 |
| 6. At this university, I enjoy my contact with faculty | 5.01 |
| 7. My experience here makes me feel like a valued member of the university | 4.89 |
| 8. When I become confused about something I am reading for class, I go back and try to figure it out | 6.15 |
| 9. Even when the work is hard, I can learn it | 6.05 |
| 10. I ask the instructor to clarify concepts I do not understand well | 5.65 |
| 11. I work hard to do well in class even if I do not like what we are doing | 6.10 |
| 12. It is fascinating to me to learn new information | 6.15 |
| 13. I talk with my instructors about information related to courses I am taking (grades makeup work, assignments, etc.) | 5.35 |
| 14. I often find that I have been reading for class but do not know what it was all about | 3.10 |
| 15. I enjoy increasing my understanding of the subject matter | 6.05 |
| 16. I am very interested in the content area of my courses | 5.87 |
| 17. I feel that this university makes efforts to accommodate adult students | 6.19 |
| 18. I have acquired knowledge and skills applicable to a specific job or type of work I regard as important | 5.86 |
| 19. I try to figure out how academic work fits with what I have learned from my work experience | 5.87 |
| 20. I am certain I can understand the most difficult material presented in the readings for my courses | 5.53 |
| 21. I prefer course material that arouses my curiosity, even if it is difficult to learn | 6.08 |
| 22. Understanding the subject matter of my courses is very important to me | 6.32 |
| 23. I go back over assignments I do not understand | 6.07 |
| 24. When course work is difficult, I give up or only study the easy parts | 2.23 |
| 25. I am confident I can understand the basic concepts taught in my courses | 6.23 |
| 26. My experience-based comments are accepted by my professors. | 6.01 |
| 27. At this university, I am likely to engage other students in conversations and discussions | 5.42 |
| 28. I work with other students to learn in the course/s I take | 4.96 |
| 29. The classroom atmosphere encourages me to participate in class discussions and activities | 5.11 |
| 30. I am confident I can understand the most complex material presented by the instructors in my courses | 5.80 |
| 31. I prefer course material that really challenges me so I can learn new things | 5.75 |
| 32. I know I am becoming more effective at things I regard as important as a result of the course/s I am taking | 5.76 |
| 33. This semester I have become acquainted with students whose interests were different than mine | 4.73 |
| 34. I feel that the faculty at this university are sensitive to my other responsibilities | 5.29 |
| 35. I find the material in the course/s I am taking to be relevant | 5.94 |
| 36. At this university, I enjoy my contact with other students. | 5.32 |
| 37. In the course/s I take, the atmosphere is friendly and respectful. | 6.19 |
| 38. I do class assignments because I want to improve my skills. | 6.09 |
| 39. At this university, I am likely to engage faculty in conversation. | 5.31 |
| 40. Emphasis on the personal relevance (applying what you are learning to your interests, concerns, and perspectives) in your courses. | 5.68 |
| 41. Emphasis on the practical value (applying what you are learning to the real world) of your courses. | 5.83 |
| 42. Relationships with other students. | 5.56 |
| 43. Relationships with faculty members | 5.67 |

# Appendix B

| Online Readiness Survey Results (n=172) | |
|---|---|
| **1: My need to take this course now is:** | |
| low - it's a personal interest that could be postponed | 5% |
| moderate - I could take it on campus later or substitute another course. | 32% |
| high - I need it immediately for degree, job, or other important reason. | 63% |
| **2: Socializing with my classmates is:** | |
| not particularly important to me. | 48% |
| somewhat important to me. | 43% |
| very important to me. | 9% |
| **3: I would classify myself as someone who:** | |
| needs reminding to get things done on time. | 12% |
| often gets things done ahead of time. | 69% |
| puts things off until the last minute | 20% |
| **4: Classroom discussion is:** | |
| almost always helpful to me. | 28% |
| rarely helpful to me. | 8% |
| sometimes helpful to me. | 64% |
| **5: When an instructor hands out directions for an assignment, I prefer:** | |
| figuring out the instructions myself. | 8% |
| having the instructions explained to me. | 19% |
| trying to follow the directions on my own, then asking for help as needed. | 73% |
| **6: If my computer broke down:** | |
| I would have to drop the course. | 2% |
| I would have to get a professional to fix it. | 13% |
| I would use the one at work or a friend's. | 85% |
| **7: Considering my professional and personal schedule, the amount of time I have to work on an online course is:** | |
| less than for a class on campus. | 35% |
| more than enough for a campus class. | 21% |
| the same as for a class on campus. | 44% |
| **8: When I am asked to use software, computers, voice mail, or other technologies new to me:** | |
| I feel apprehensive, but try anyway. | 13% |
| I look forward to learning new skills. | 87% |
| **9: As a reader, I would classify myself as:** | |
| average - I sometimes need help to understand the text. | 22% |
| good - I usually understand the text without help. | 74% |
| slower than average | 4% |
| **10: How confident are you with the subject material in this class?** | |
| not confident. | 8% |
| somewhat confident. | 52% |
| very confident. | 40% |
| **11: Not including this class, have you completed any online classes before?** | |
| I have begun an online class but dropped it. | 1% |
| I have registered for an online course but did not begin it. | 1% |
| no | 18% |
| yes, just one | 7% |
| yes, more than one | 73% |

## Appendix C

## Management Case Study

### The Distribution Center

Dave Griffin is a supervisor in the receiving and marking department of Singer-Marls' distribution center, a large Midwest retail department store. Dave's particular unit of twenty-five people is responsible for unpacking and inspecting goods (women's fashions) from manufacturers, placing price tags on each product, and separating the goods for shipment to the four branch stores.

At almost 6:50 p.m. on a Friday night, over an hour past his usual time to leave for home, Dave was in his office, looking out the window with a very concerned expression on his face, trying to remember and understand what happened over the last two months. His first thoughts recall the three-day supervisory training program he attended some eight weeks ago at a nearby university management development center. The program covered many topics, from communications to understanding motivation.

The most vivid experience was a session on leadership, at which he completed a questionnaire that was supposed to measure his style of leadership on two dimensions: task orientation and employee orientation. The results, which showed him to be very high on task orientation but very low on employee orientation, were a surprise to him because he always thought of himself as being pretty much people centered on the job. He also recalled the seminar leader suggesting that the most effective leadership style was one that was high on both task orientation and employee orientation.

This leadership session was of particular importance to Dave because of the problems he was having in his department. The busy spring season was just around the comer, which meant a big productivity push by management to get the increased flow of goods to the stores. His subordinates could be divided almost equally into two groups: those that performed at the 100 percent performance standard (regarding the number of units unloaded, inspected, and priced per day) and those that rarely exceeded 85 percent of the standard.

Two subordinates were key examples of these two groups. First, there was Glenn Fields, who worked as a Quality Control inspector for the last three years. Glenn was dependable, quality conscious, and always performed between 100 percent and 105 percent of standard. On the other hand, there was Roger Gardner, a Quality Control inspector on a production line next to Glenn's, who had been employed at the distribution center for almost two years. In Dave's opinion, Roger spent too much time "goofing" around, socializing with other workers, and being the first one out the door at 5:00 p.m. each day. His performance rarely exceeded 80 percent of

standard. Several times, Dave had strongly warned Roger about his lack of attention to his work and his performance. These warnings usually had an effect for a few days, but then his old ways returned. Roger was not the only one who received these warnings from Dave.

The supervisory training program convinced Dave that what he needed to do to improve the performance of his subordinates was to increase his employee-oriented behavior and attempt to be high on each style dimension. He made a special point to be more open and friendly to Roger and other low performers, to take more interest in Roger's personal life, and to try to be more sympathetic about the increased emphasis on performances.

As Dave sat looking out the window, he was both dismayed and puzzled. His attempt at being more employee oriented was a flop. Not only had Roger's performance not changed, but many subordinates, including Glenn Fields, were performing under 90 percent of standard. With the spring season just beginning, his supervisor, the department manager, and even the center's superintendent were on his back to improve his unit's performance. He sat there wondering what to do next.

## Questions

1. What should Dave do now and why? In your discussion of this case, please discuss possible alternative solutions, and propose a recommendation with a rationale for the recommendation.
2. From a management perspective, critically evaluate Dave's past attempts to address performance issues.

(Please integrate ample research and theoretical support as well as experience throughout your discussion and rationale. Also, please be attentive to correct spelling, punctuation, and grammar as you write your answers.)

# Appendix C (Continued)

## Management of Human Resources Case Study

Every Friday, Max Steadman, Jim Cobun, Lynne Sims, and Tom Hamilton meet at Charley's Food Place after work for refreshments. The four friends work as managers at Eckel Industries, a manufacturer of arc welding equipment in Minneapolis. The one-plant company employs about 2,000 people. The four managers work in the manufacturing division. Max, 35, manages the company's 25 quality control inspectors. Lynne, 33, works as a supervisor in inventory management. Jim, 34, is a first-line supervisor in the metal coating department. Tom, 28, supervises a team of assemblers. The four managers' tenure at Eckel Industries range from one year (Tom) to 12 years (Max).

The group is close-knit: Lynne, Jim, and Max's friendship stems from their years as undergraduate business students at the University of Minnesota. Tom, the newcomer, joined the group after meeting the three at an Eckel management seminar last year. Weekly get-togethers at Charley's have become a comfortable habit for the group and provide an opportunity to relax, exchange the latest gossip heard around the plant, and give and receive advice about problems encountered on the job.

This week's topic of discussion: performance appraisal, specifically the company's annual review process, which the plant's management conducted last week. Each of the four managers completed evaluation forms (graphic rating scale format) on each of his or her subordinates and met with each subordinate to discuss the appraisal.

**Tom:** This was the first time I've appraised my people, and I dreaded it. For me, it's been the worst week of the year. Evaluating is difficult; it's highly subjective and inexact. Your emotions creep into the process. I got angry at one of my assembly workers last week, and I still felt the anger when I was filling out the evaluation forms. Don't tell me that my frustration with the guy didn't bias my appraisal. I think it did. And I think the technique is flawed. Tell me – what's the difference between a five and a six on "cooperation"?

**Jim:** The scales are a problem. So is memory. Remember our course in human resource management in college? Philips said that, according to research, when we sit down to evaluate someone's performance in the past year, we will only be able to actively recall and use 15 percent of the performance we observed.

**Lynne:** I think political considerations are always a part of the process. I know I consider many other factors besides a person's actual performance when I appraise him.

**Tom:** Like what?

**Lynne:** Like the appraisal will become part of the permanent record that affects his career. Like the person I evaluate today, I have to work with tomorrow. Given that, the difference between a five and a six on cooperation isn't that relevant, because frankly, if a five makes him mad, and he's happy with a six . . .

**Max:** Then you give him the six. Accuracy is important, but I'll admit it – accuracy isn't my primary objective when I evaluate my workers. My objective is to motivate and reward them so they'll perform better. I use the review process to do what's best for my people and my department. If that means fine-tuning the evaluations to do that, I will.

**Tom:** What's an example of fine-tuning?

**Max:** Jim, do you remember three years ago when the company lowered the ceiling on merit raises? The top merit increase that any employee could get was 4 percent. I boosted the ratings of my folks to get the best merit increases for them. The year before that, the ceiling was 8 percent. The best they could get was less than what most of them received the year before. I felt they deserved the 4 percent, so I gave the marks that got them what I felt they deserved.

**Lynne:** I've inflated ratings to encourage someone who is having personal problems but is normally a good employee. A couple of years ago, one of my better people was going through a painful divorce, and it was showing in her work. I don't think it's fair to kick someone when they're down. I felt she realized her work was suffering. I wanted to give her encouragement; it was my way of telling her she had some support and that she wasn't in danger of losing her job.

**Jim:** There's another situation where I think fine-tuning is merited – when someone's work has been mediocre or even poor for most of the year, but it improves substantially in the last two, three months or so. If I think the guy is really trying and is doing much better, I'd give him a rating that's higher than his work over the whole year deserves. It encourages him to keep improving. If I give him a mediocre rating, what does that tell him?

**Tom:** What if he's really working heard, but not doing so great?

**Jim:** If I think he has what it takes, I'd boost the rating to motivate him to keep trying until he gets there.

**Max:** I know of one or two managers who've inflated ratings to get rid of a pain-in-the-neck, some young guy who's transferred in and thinks he'll be there a short time. He's not good, but thinks he is, and creates all sorts of problems. Or his performance is okay, but he just doesn't fit in with the rest of the department. A year or two of good ratings is a sure trick for getting rid of him.

**Tom:** Yes, but you're passing the problem on to someone else.

**Max:** True, but it's no longer my problem.

**Tom:** All the examples you've talked about involve inflating evaluations. What about deflating them, giving someone less than you really think he deserves? Is that justified?

**Lynne:** I'd hesitate to do that because it can create problems. It can backfire.

**Max:** But it does happen. You can lower a guy's rating to shock him, to jolt him into performing better. Sometimes, you can work with someone, coach them, try to help them improve, and it just doesn't work. A basement-level rating can tell him you mean business. You can say that isn't fair, and for the time being, it isn't. But what if you feel that if the guy doesn't shape up, he faces being fired in a year or two, and putting him in the cellar, ratings-wise, will solve his problem? It's fair in the long run if the effect is that he improves his work and keeps his job.

**Jim:** Sometimes, you get someone who's a real rebel, who always questions you, sometimes even oversteps his bounds. I think deflating his evaluation is merited just to remind him who's the boss.

**Lynne:** I'd consider lowering someone's true rating if they've had a long record of rather questionable performance, and I think the best alternative for the person is to consider another job with another company. A low appraisal sends him a message to consider quitting and start looking for another job.

**Max:** What if you believe the situation is hopeless, and you've made up your mind that you're going to fire the guy as soon as you've found a suitable replacement? The courts have chipped away at management's right to fire. Today, when you fire someone, you must have a strong case. I think once a manager decides to fire, appraisals become very negative. Anything good that you say about the subordinate can be used later against you. Deflating the ratings protects you from being sued and sometimes speeds up the termination process.

**Tom:** I understand your point, but I still believe that accuracy is the top priority in performance appraisal. Let me play devil's advocate for a minute. First, Jim, you complained about our memory limitations introducing bias into appraisal. Doesn't introducing politics into the process further distort the truth by introducing yet another bias? Even more important, most would agree that one key to motivating people is providing true feedback – the facts about how they're doing so they know where they stand. Then you talk with them about how to improve their performance. When you distort an evaluation – however slightly – are you providing this kind of feedback?

**Max:** I think you're overstating the degree of fine-tuning.

**Tom:** Distortion, you mean.

**Max:** No, fine-tuning. I'm not talking about giving a guy a seven when he deserves a two or vice versa. It's not that extreme. I'm talking about making slight changes in the ratings when you think the change can make a big difference in terms of achieving what you think is best for the person and for your department.

**Tom:** But when you fine-tune, you're manipulating your people. Why not give them the most accurate evaluation, and let the chips fall where they may? Give them the facts, and let them decide.

**Max:** Because most of good managing is psychology, understanding people, their strengths and shortcomings, knowing how to motivate, reward, and act to do what's in their and your department's best interest. Sometimes total accuracy is not the best path.

**Jim:** All this discussion raises a question. What's the difference between fine-tuning and significant distortion? Where do you draw the line?

**Lynne:** That's about as easy a question as what's the difference between a five and six. On the form, I mean.

## Questions:

1. Choose any 2 of the 4 managers cited in the case. State what you believe their approaches to performance evaluation are. What is your reaction to these approaches? Why?

2. What is your personal reaction to "fine-tuning" evaluations? Would your reaction change if you were the V-P of the managers in the case? How? Why?

3. Describe the elements of an effective evaluation system/process including the underlying rationale.

(Please integrate ample research and theoretical support as well as experience throughout your discussion and rationale. Also, please be attentive to correct spelling, punctuation, and grammar as you write your answers.)

# Appendix D

## Dimensions of Performance and Criteria Applied
## to Student Final Case Analysis
Responses for
BA 461: Management and BA 452: Management of Human Resources

### Critical Thinking
**Excellent:**
   Student discourse renders an understanding of a significant problem rather than just the "symptoms" of the given case or situation; student discourse integrates the rational and scientific perspective with the intuitive and experiential perspective as a means to further insight, understanding, or solution.
**Very Good:**
   Student discourse renders an understanding of a significant problem but does not fully integrate the rational and scientific perspective with the intuitive and experiential perspective as a means to further insight, understanding, or solution.
**Satisfactory:**
   Student discourse renders an understanding of a significant problem but there is no integration of the rational and scientific perspective with the intuitive and experiential perspective as a means to further insight, understanding, or solution.
**Not Acceptable:**
   Student discourse renders an understanding of only symptoms based on personal experience or intuition.

### Practical Application
**Excellent:**
   Student offers three or more recommendations/alternative solutions with a substantive rationale for each.
**Very Good:**
   Student offers at least two recommendations/alternative solutions with a substantive rationale for each.
**Satisfactory:**
   Student offers recommendation(s)/alternative solutions(s) with limited rationale.
**Not Acceptable:**
   Student offers recommendation/alternative solution without a rationale.

### Knowledge Base
**Excellent:**
   In the discourse, student refers to three or more correct sources, at least two of the sources are research and/or theory.
**Very Good:**
   The student refers to two correct sources that are research and/or theory.
**Satisfactory:**
   The student refers to one correct source that is research or theory.
**Not Acceptable:**
   The student does not refer to a correct source that is research or theory.

**Writing Skills**

**Excellent:**

With a total of two or less errors in punctuation, spelling, and grammar, the student effectively communicates his or her analysis.

**Very Good:**

Within a range of 5 to 3 errors in punctuation, spelling, and grammar, the student adequately communicates his or her analysis.

**Satisfactory:**

Despite 6 or more errors in punctuation, spelling, and grammar, the student communicates his or her analysis.

**Not Acceptable:**

Due to errors in punctuation, spelling, and grammar, the student fails to communicate his or her analysis.