

**Special Report on
ACCELERATED LEARNING
RESEARCH PROJECT**

Puerto Rico, 2nd Phase



January, 2001 to December, 2001

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Special Report on Accelerated Learning Research Project Puerto Rico, Year 2

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PURPOSE

The purpose of the Accelerated Learning Research Project (ALRP) is to conduct ongoing studies to:

1. assess the academic quality of accelerated courses;
2. assess the value of accelerated courses to students;
3. investigate the effects of time in class and length of course on student learning and attitudes;
4. link these research findings to recommendations for improving instruction, academic programs, and professional development; and
5. contribute locally and globally to the knowledge base for adult learning in general and to accelerated learning in particular.

ALRP has conducted two research studies in Puerto Rico using Spanish, as the primary language, with the objective of investigating the effectiveness of an accelerated format in higher education in a country other than the United States and in a language other than English. The first of these studies (also known as Phase 4), which was completed last year (2000), compared the effects of time in class and length of course on student perceptions and learning in accelerated courses (5 weeks, 20 contact hours) and traditional courses (16 weeks, 40 contact hours).

This report presents the findings of the second phase of the ALRP in Puerto Rico at Ana G. Méndez University System (AGMUS). Research design is a replication of the studies conducted in Phase 1 (1996-1997), Phase 3 (1998-1999), and Phase 5 (2000-2001) at Regis University and New Ventures' Partner Schools. The present research assesses how current students and alumni perceive and value accelerated courses. In addition, it also assesses the learning of current students.

Information presented here is intended to contribute to academic quality at Regis University, particularly in the School for Professional Studies (SPS) and in New Ventures' Partner Schools in the United States and abroad.

INSTITUTIONS AND ORGANIZATIONS PARTICIPATING IN THE RESEARCH PROJECT

1. Regis University is a Jesuit University located in Denver, Colorado. The SPS primarily serves adult learners and offers classroom-based accelerated courses (5- and 8-week formats) as well as online education courses and guided independent study. The school has a variety of both Bachelor and Master degree programs.
2. New Ventures of Regis University is a program that assists higher education institutions to develop their own accelerated degree-completion programs for working adults.

3. New Ventures' Partner Schools are colleges and universities that have entered a formal relationship with New Ventures of Regis University to establish an accelerated undergraduate degree-completion program. There are 18 partner schools in the United States and five international partner schools.

Three colleges that are part of the AGMUS in Puerto Rico are participating in this research project. These are:

- Universidad del Este (UNE, formerly known as Colegio Universitario del Este),
- Universidad del Turabo (UT), and
- Universidad Metropolitana (UMET).

INTRODUCTION AND BACKGROUND

In recent years, both the SPS and New Ventures have enjoyed remarkable growth. Over 11,000 students are enrolled in the SPS, and 29 colleges and universities have participated in the New Ventures Program. Operating within the central values of the Jesuit tradition, these two university units offer experienced adults a post-secondary education that is responsive to the realities of their communities and professional lives. The essential element of academic structure for both of these systems is the accelerated course. In the fall semester of 2000, the SPS offered more than 800 accelerated courses ranging from philosophy, accounting, and computer science to adult spiritual life and growth.

Although colleges and universities have offered accelerated courses (often referred to as intensive courses) for many years, they remain somewhat controversial. Conventional academic thinking often regards such courses as being too compressed to produce consistent educational value (Scott and Conrad, 1992). Still other higher education pundits critique them as sacrificing breadth and reflection, resulting in learning that is crammed and poorly developed. Empirical research, however, finds substantial support for the accelerated format. In their comprehensive critique of accelerated courses, Scott and Conrad (1992, page 443) conclude, “...*the large number of studies across all fields with no preference between compressed and traditional formats suggest that all courses-- regardless of field --can utilize intensive course designs without diminishing educational outcomes.*”

Most studies find students to be favorably inclined toward accelerated courses (Scott and Conrad, 1992; Shafer, 1995). They appreciate the convenience and effectiveness, the opportunity for concentrated and uninterrupted study, and the strong interest this intensity cultivates. Adult learners, in particular, generally prefer a relevant and efficient format to accomplish pragmatic educational goals (Kirby-Smith, 1987; Grimes and Niss, 1989; Wlodkowski, 1999).

How then might one explain the apparent effectiveness of accelerated courses? What factors, other than time in class, might contribute to knowledge acquisition in a course? Certainly, student motivation would be an influence. Research consistently shows a strong positive relationship between student motivation and learning (Pintrich and Schunk, 1996). A key assumption in adult learning theory is that adults strive to be more self-directed and autonomous (Brockett and Hiemstra, 1991). This personal attribute would be an asset to learning in the intense and relatively short accelerated course. Also, Stratil (1988) finds that adults as a group, when compared to younger college students are more willing to make sacrifices to achieve academically.

Theory and research suggest that adult students are more self-directed and self-motivated than younger traditional college students. These characteristics may enable adults to do the concentrated, independent study required in accelerated courses. In addition, many adult students have the benefit of extended professional work experience where they have honed their writing and critical thinking skills. These attributes would also contribute to their academic success.

In 1996, Bill Husson, (Vice President, SPS) and Tom Kennedy (Vice-President, New Ventures) initiated a research study under the direction of Raymond Wlodkowski to evaluate accelerated courses. This work has become a longitudinal research project focusing on the quality and improvement of learning models in SPS and New Ventures. In August 2000, after four years of continuing research, Regis University established *The Center for the Study of Accelerated Learning*. The mission of this institute is to research adult learning, to evaluate instruction, to document student

outcomes, and to provide ongoing education in order to assure the quality and effectiveness of accelerated programs.

PHASES OF RESEARCH PRIOR TO THIS STUDY

Phase 1

In 1996-1997, a study was conducted to investigate the quality of undergraduate accelerated courses at Regis University and a representative sample of New Ventures' Partner Schools. Researchers surveyed current students and alumni from Davenport College, Emmanuel College, and Regis University to assess their perceptions of and value for accelerated courses. The findings for both groups documented their strong satisfaction with the motivational appeal and instructional effectiveness of accelerated courses. As one example of many, 84 percent of current students and 82 percent of alumni indicated that they would return to their respective colleges if they could start college again.

The researchers also assessed the learning of current students with summative, performance-based problems and case studies. Using criteria-referenced standards, faculty experts found that on the average, for all courses, students demonstrated more than satisfactory learning and very good writing skills.

Phase 2

In 1997-1998, a study was conducted to investigate the effects of time in class and length of course on student perceptions and learning when accelerated courses are compared to traditional courses. Researchers compared the perceptions and learning of students in accelerated courses (5 weeks, 20 contact hours) with the perceptions and learning of students in traditional courses (16 weeks, 40 contact hours) at Regis University. There were no trends or significant differences favoring either format. In accelerated and traditional courses, students have very positive attitudes toward their courses and, according to criteria referenced standards, they are more than satisfactorily learning what is required of them in both formats.

Phase 3

In 1998-1999, researchers replicated the study that was conducted in Phase 1 (1996-1997), but this time with St. Ambrose University, Rosemont College and Regis University. This study allowed researchers to compare the perceptions and learning between students in Phase 1 and Phase 3. The findings from both Phase 1 and Phase 3 indicate that current students and alumni have very positive attitudes toward accelerated courses. Students in both phases on the average demonstrate more than satisfactory learning that meets the challenge of college coursework. However, student learning of research and theory, particular to courses in Management and Management of Human Resources, is less than satisfactory in Phase 3. To improve these matters, researchers recommended that the professional development of instructors in these courses include emphasis on active methods to teach theory and research as well as further revision of the teaching modules for these courses.

Phase 4

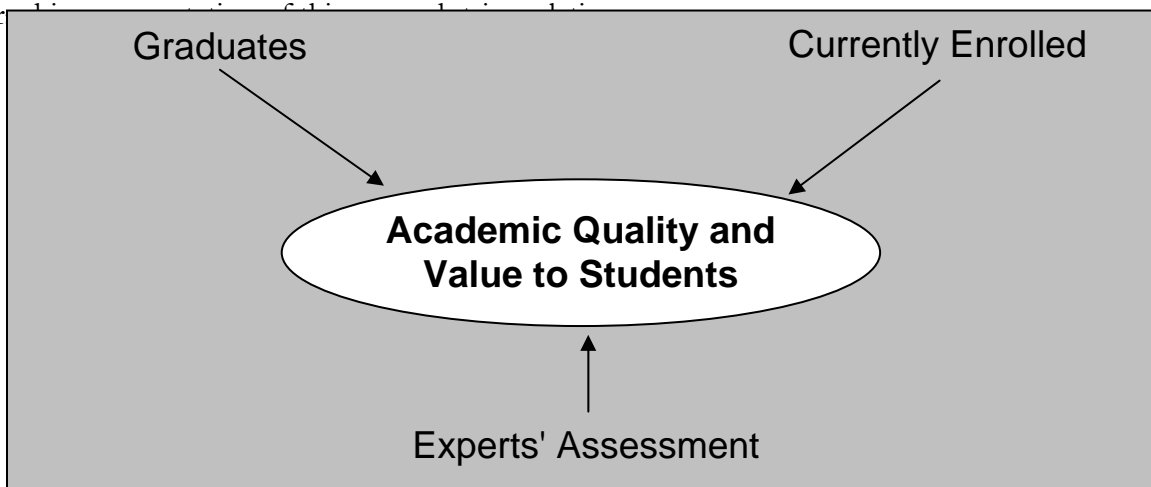
In 1999-2000, researchers replicated the study that was conducted in Phase 2 (1997-1998), but this time in a different cultural context. The study took place in the three institutions that are part of the AGMUS, located in Puerto Rico. For the first time, an ALRP study was conducted in Spanish. It

was found that students in both the accelerated and traditional formats had very positive attitudes and perceptions toward their courses. However, students in the accelerated courses demonstrated higher levels of learning than students in the traditional courses, even though the duration and amount of class time for learning in their courses were significantly less. This result appeared to be related to the fact that the students in the accelerated courses were older, more educated, had more work experience, and came from families with higher incomes than the students in the traditional courses. These characteristics may have provided the older adults in the accelerated courses with opportunities to develop writing skills, work and study habits, and self-regulation skills that combined to improve their capability for learning in college. There is initial evidence that accelerated college courses can be effective learning formats for adults in societies where English or Spanish is the primary language.

METHODOLOGY

RESEARCH DESIGN

The philosophy of SPS and New Ventures is proactive and “*designed to meet the needs of experienced, reflective adults who have not had the opportunity for college degrees*”. In agreement with this philosophy, the research in this second phase in AGMUS institutions is learner-centered, emphasizing the perspective and the academic, personal, and professional growth of the learner. This orientation, which began in Phases 1 and 3, means gathering data about the quality of accelerated courses from at least three different points of view: 1) current student perspectives, 2) alumni perceptions, and 3) current student performance as viewed by subject matter experts. This process, which researchers call triangulation, provides information about current students' perception of accelerated courses; alumni and their experience with these courses after time and work have affected their perspectives; and current students' ability to meet the major learning objectives of accelerated courses. Figure 1 is a graphic illustrating this triangulation process.



SELECTION OF CURRENT STUDENTS

The researchers initiated the investigation by selecting three undergraduate courses to be part of the study: Fundamentals of Marketing (MARK 133), Business Statistics (STAT 201), and Business Law (MANA 204). These courses were chosen for the following reasons:

1. They are part of the core curriculum courses for the bachelor's degree programs in Business Administration, in each of the three institutions.
2. They have large enrollments.
3. Though all courses are from the business academic area, content and orientation are varied: marketing, quantitative methods, and law.

The final number of current students that participated in the study was 169. The distribution of enrollment of students by course for each college was as follows:

College	Marketing	Statistics	Business Law
Univ. del Este	18	19	18
Univ. del Turabo	17	17	23
Univ. Metropolitana	16	21	20
Total AGMUS	51	57	61

SELECTION OF ALUMNI

Alumni included the population of graduates from Management and Accounting majors from each of the three AGMUS institutions:

- 86 graduates from UNE that completed their programs in academic years 1997-98 through 1999-2000,
- 36 graduates from UMET that completed in academic years 1998-99 and 1999-2000, and
- 21 graduates from UT that completed in academic years 1998-99 and 1999-2000.

Surveys were sent to this population of 143 graduates. The response rate was as follows:

College	Alumni	Response	Response rate
Univ. del Este	86	35	40.7%
Univ. Metropolitana	36	20	55.6%
Univ. del Turabo	21	9	42.9%
AGMUS (Total)	143	64	44.8%

Response rate in this study (44.8%) was lower compared to previous research phases (72.0%) in the United States. Return in UNE was particularly low among students from the first graduating class of 1997-98 (four out of 18). Mailing of questionnaires might have been affected by the current alertness to anthrax contamination. The first mailing was completed at the end of September, just days before the outbreak of cases related to this bacterium. A reminder was sent after the first mailing, in addition to follow-up telephone calls. Finally, a second mailing of questionnaires was made.

FINDINGS

CURRENT STUDENT AND ALUMNI PROFILES

A self-report survey was administered to the current students in the last two hours of the final class session and a similar questionnaire was sent to alumni (see Appendix 1 and 2). Both groups are, on the average, adults in their thirties with the majority being female (see Table 1). Alumni participants are seven years older and have six more years of work experience than current students.

Approximately 40.0 percent of students and alumni are the first generation in their families with formal education at the post-secondary level.

On the other hand, alumni have a significantly higher annual family income. This is related to the fact that, among those that are employed, near one fourth hold managerial positions in contrast to only 6.1 percent in the group of current students. These differences could be indicators of a changing student population or the result of better professional opportunities after graduation.

CURRENT STUDENT AND ALUMNI DECISIONS ABOUT COLLEGE AND MAJOR

As Table 2 shows, over 80.0 percent of participants from both groups selected UNE, UT or UMET because of the accelerated courses. Around half of participants identified location as the second reason to select these institutions. In response to the question “If you could start college over, would you choose to attend this college?”, 83.4 and 93.7 percent of current students and alumni, respectively, answered that they definitely or probably would choose the same college.

In relation to choosing the same major, 89.3 percent of current students answered in the affirmative in comparison to 74.6 percent of the alumni. Approximately one-fifth of this group (12 alumni), answered that given the opportunity, they definitely or probably would not choose the same major (*accounting or management*). It might be that professional goals, for these graduates, were not attained as expected.

CURRENT STUDENT PERCEPTIONS AND ATTITUDES

Since 1996, we have used a 22-item scale that combines items from the Motivational Framework for Culturally Responsive Teaching (Wlodkowski and Ginsberg, 1995) with indicators of instructional quality. The framework provides a holistic model directly applicable to learning in college courses. Briefly stated, the theory holds that most people are highly motivated to learn when they feel included (respected within 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 scale give us an understanding of whether students perceive the conditions for learning as intrinsically motivating. Research consistently shows a strong positive relationship between student motivation and student learning (Pintrich and Schunk, 1996).

The 22 items are evaluated using a four-point scale of agreement: *strongly agree*, *agree*, *disagree*, and *strongly disagree*. The *Cronbach's alpha* for the entire scale was .86. Appendix 3 provides the results of current students' perceptions and attitudes for each of the 22 items (statements) in the scale. For all 22 items, including the transposing of response categories for items 4, 7, and 16, the average agreement was 95.6 percent.

Table 3 shows current students' evaluation of items that are of particular importance to motivation. When *strongly agree* and *agree* categories were combined, including the transposing of response

categories for item 7, the average agreement for the above nine items for current students was 95.8 percent.

TABLE 1
GENERAL CHARACTERISTICS OF
CURRENT STUDENTS AND ALUMNI

Variables	Current Students	Alumni
<i>Average Age</i>	32.4	39.6
Base	168	63
<i>Gender</i>		
Female	57.4%	53.1%
Base	168	64
<i>Annual Family Income</i>		
less than \$15,000	17.2%	9.5%
\$15,000 through \$25,999	42.6%	20.6%
\$26,000 through \$40,999	21.9%	28.6%
\$41,000 or higher	18.4%	41.2%
Base	169	63
<i>Parent's Highest Degree</i>		
Not completed High School	20.8%	20.6%
High School	18.5%	20.6%
Technical Degree	10.7%	14.3%
Associate Degree	14.3%	14.3%
Bachelor's Degree	21.4%	23.8%
Master or Doctorate	14.3%	6.4%
Base	168	63
<i>Employment Status</i>		
Full-time job	86.3%	79.4%
Part-time job	3.0%	1.6%
Self-employed	7.1%	7.9%
Not employed-At my choice	1.2%	7.9%
Unemployed-Looking for a job	2.4%	3.2%
Base	168	63
<i>Position (among employed respondents)</i>		
Managerial	6.1%	23.9%
Professional	28.9%	17.4%
Sales	8.8%	2.2%
Clerical	45.6%	52.2%
Service	8.8%	4.3%
Agricultural	1.8%	0.0%
Base	114	46
<i>Average years of experience</i>	11.8	17.9
Base	167	61

TABLE 2
DECISIONS ABOUT COLLEGE AND MAJOR

Questions	Current Students	Alumni
<i>Two reasons to select this college¹</i>		
Accelerated Courses	83.1%	82.5%
Location	47.0%	54.0%
Programs Available	27.1%	20.6%
Admission Standards	4.8%	7.9%
Academic Reputation	5.4%	6.3%
Financial Aid	4.2%	6.3%
Atmosphere	4.2%	4.8%
Other	3.6%	3.2%
Base	166	63
<i>Choose this college again?</i>		
Definitely/Probably Yes	83.4%	93.7%
Uncertain	10.1%	3.2%
Definitely/Probably No	6.5%	3.2%
Base	169	63
<i>Choose same major again?</i>		
Definitely/Probably Yes	89.3%	74.6%
Uncertain	3.6%	6.3%
Definitely/Probably No	7.1%	19.0%
Base	169	63

¹ Multiple responses, percents based on respondents.

TABLE 3
ITEMS RELATED TO MOTIVATION

Item	Strongly Agree	Agree	Total
1. Overall, this course was a valuable learning experience.	72.2%	26.6%	98.8%
7. The teacher respected student opinions and ideas.	86.3%	7.1%	93.4%
8. I have used information or skills that I have learned in this course.	52.7%	42.0%	94.7%
10. This course was relevant to my goals.	56.0%	33.9%	89.9%
11. This course helped me to be effective at what I value.	58.3%	35.7%	94.0%
12. The classroom climate for this course was friendly and respectful.	80.5%	19.5%	100.0%
14. This course challenged me to think.	76.3%	21.9%	98.2%
19. In this course, I felt included.	73.8%	23.8%	97.6%
20. This course was meaningful for me.	63.3%	32.5%	95.9%

A second tier of items deals directly with instruction and materials. Many research studies have found that the interaction between motivational conditions and instruction strongly relates to student achievement (Wlodkowski, 1999). Responses to these items are shown in Table 4. When *strongly agree* and *agree* categories were combined the average percent agreement for these eight items for current students was 93.4 percent.

TABLE 4
ITEMS RELATED TO INSTRUCTION AND MATERIALS

Item	Strongly Agree	Agree	Total
2. Course text was a good resource for achieving the course objectives.	43.2%	47.3%	90.5%
4. The teacher was a skilled instructor.	92.3%	4.2%	96.5%
6. Course module served as an effective learning guide.	28.1%	48.5%	76.6%
16. This course was well taught.	88.0%	6.6%	94.6%
17. The teaching methods in this course helped me to learn.	69.9%	28.9%	98.8%
18. Grading standards for this course required college level performance.	61.9%	36.3%	98.2%
21. The way I have been evaluated in this course, thus far, seems fair.	63.1%	33.3%	96.4%
22. The way I have been evaluated in this course, thus far, seems sensitive to my capabilities.	56.8%	39.1%	95.9%

The table shows that item 6 (course module) was not evaluated as positively as the other scale items. An additional analysis revealed that this evaluation is not significantly different for each of the three courses. Therefore, the student perception of modules is similar and independent of the course.

ALUMNI PERCEPTIONS AND ATTITUDES

With the exception of placing two items in the past tense, the same items in the current student survey were evaluated by the alumni. Because this part of the study is retrospective, a fifth category (“*cannot adequately remember*”) was added to the scale. Alumni were asked to evaluate only the courses they had completed (MARK 133, STAT 201, or MANA 204) in the accelerated format. Between 60.0 and 65.0 percent of the alumni had completed each of the three courses: 39 students completed *Fundamentals of Marketing* (60.9%), 41 students completed *Business Statistics* (64.1%), and 40 students completed *Business Law* (62.5%). Appendix 4 shows results of alumni perceptions and attitudes for each of the 22 items (statements) in the scale.

In general, alumni evaluations of the courses were positive, but MANA 204 had higher evaluations compared to the evaluations of the other two courses. Percentage of agreement was calculated as before: *strongly agree* and *agree* categories were combined and evaluation of negative items transposed. Answers in the category of *cannot adequately remember* were excluded from the base of calculation. The evaluation for each course follows:

Items in the Scale	MARK 133	STAT 201	MANA 204
Complete scale (22 items)	78.1%	81.4%	97.4%
Motivation (9 items)	77.2%	79.1%	97.3%

Instruction and Materials (8 items)	77.9%	81.7%	96.2%
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Differences between MANA 204 and the other two courses were statistically significant ($p < .05$). It should be pointed out that these samples are rather small (around 40 graduates for each course).

The relationship between these subjects and career goals could explain differences in perceptions and attitudes. Table 5 shows answers of current students and alumni to the question about the relevance of each course to their career goals. In this table, evaluations are positive but there is a tendency in both groups to evaluate *Business Law* higher. These could be related to differences in professional background and the pertinence of these subjects to their current or desired professional setting.

ASSESSMENT OF CURRENT STUDENT PERFORMANCE

Method to Assess Students' Performance

For each of the three courses selected for this investigation, a team of three faculty experts created performance tasks based on two or more of the major objectives of these courses (see Appendix 5). These tasks were administered to the students in the last two hours of the final class session.

TABLE 5
RELATION OF COURSES TO CAREER GOALS

Question	Current Students	Alumni
<i>In relation to career goals, this course (MARK 133) was:</i>		
Relevant	66.7%	39.5%
Somewhat relevant	27.5%	50.0%
Irrelevant	5.9%	10.5%
I'm not clear about my career goals	0.0%	0.0%
Base	51	38
<i>In relation to career goals, this course (STAT 201) was:</i>		
Relevant	75.4%	48.6%
Somewhat relevant	21.1%	32.4%
Irrelevant	1.8%	18.9%
I'm not clear about my career goals	1.8%	0.0%
Base	57	37
<i>In relation to career goals, this course (MANA 204) was:</i>		
Relevant	86.7%	65.7%
Somewhat relevant	13.3%	31.4%
Irrelevant	0.0%	2.9%
I'm not clear about my career goals	0.0%	0.0%
Base	60	35

The same team of faculty experts created the performance task (questions, problems, or case studies), dimensions of performance, and the criteria for assessment; they also assessed the students' written responses to the assessment items. The faculty experts worked collaboratively reviewing course modules and objectives to develop their tasks. Researchers facilitated these processes, 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.

Faculty experts had experience teaching in AGMUS institutions, as well as professional practice in the disciplines represented by the courses. The three faculty experts who assessed *Fundamentals of Marketing* were Ivonne Negrón, Gisela Ramírez, and Luis Rodríguez. The three faculty experts who assessed *Business Statistics* were Carmen Peraza, Gladys Figueroa, and Carlos Torrech. Alina Ortega, Rafael Bosque, and Delfin Sosa assessed *Business Law*.

The three teams of faculty experts created dimensions of performance and criteria to assess the quality of student responses (see Appendix 6). The dimensions of performance for each course were the following:

1. Fundamentals of Marketing (MARK 133): Knowledge Base, Critical Thinking, and Writing Skills.
2. Business Statistics (STAT 201): Visual Representation, Statistical Calculation, and Analysis and Interpretation of Results.
3. Business Law (MANA 204): Knowledge about Legal Entities, Knowledge about Contracts and Legal Obligations, and Legal Analysis.

Findings for Current Students' Performance

Faculty experts assessed each student response for each dimension of performance. The scoring system for the criteria was four (4) points for *excellent*, three (3) points for *very good*, two (2) points for *satisfactory*, and one (1) point for *not acceptable*. In order to avoid confusion with the distinctly different meaning of grades or grade point averages, the average rating of the three faculty experts for each dimension of performance was multiplied by a factor of 2. Using a paired comparison method, inter-rater reliability for each course was 90 percent or higher. Numerical range of scores and their corresponding qualitative values were as follows:

Numerical Range	Experts' Ratings
7.00-8.00	Near excellent to excellent
6.00-6.99	Very good to near excellent
5.00-5.99	More than satisfactory to very good
4.00-4.99	Satisfactory to more than satisfactory
3.00-3.99	Less than satisfactory to satisfactory
2.00-2.99	Not acceptable to less than satisfactory

Table 6 shows the students' average scores across all dimensions of performance within each range. The average score for all students was 4.44 (*satisfactory*). It should be kept in mind that instructors, academic performance tasks, faculty experts, and criteria to assess performance are different for the three courses. Approximately two thirds (64.5%) of students averaged 4.00 (*satisfactory*) or better on all dimensions of performance.

TABLE 6
CURRENT STUDENTS' AVERAGES ACROSS ALL DIMENSIONS OF PERFORMANCE

Range of Averages (Experts' Ratings)	Number of Students	% of Total
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7.00 - 8.00 (near excellent to excellent)	4	2.4%
6.00 - 6.99 (very good to near excellent)	26	15.4%
5.00 - 5.99 (more than satisfactory to very good)	29	17.2%
4.00 - 4.99 (satisfactory to more than satisfactory)	50	29.6%
3.00 - 3.99 (less than satisfactory to satisfactory)	29	17.2%
2.00 - 2.99 (not acceptable to less than satisfactory)	31	18.3%
Total	169	100.0%

The average rating by faculty experts for each dimension of performance and course is shown in Table 7. Average scores were *less than satisfactory* for the Analysis and Interpretation of Results (STAT 201). The Writing Skills dimension in MARK 133 had the highest average score with 5.00 (*more than satisfactory*). Average ratings were *satisfactory to more than satisfactory* in all other dimensions of performance.

TABLE 7
AVERAGE SCORE FOR
EACH DIMENSION OF PERFORMANCE BY COURSE

Course and Performance Dimension	Average Score	Qualitative Value
<i>Fundamentals of Marketing (MARK 133)</i>	<i>n=51</i>	
Knowledge Base	4.98	More than satisfactory
Critical Thinking	4.58	More than satisfactory
Writing Skills	5.00	More than satisfactory
<i>Business Statistics (STAT 201)</i>	<i>n=57</i>	
Visual Representation	4.74	More than satisfactory
Statistical Calculation	4.42	Satisfactory
Analysis and Interpretation of Results	3.48	Less than satisfactory
<i>Business Law (MANA 204)</i>	<i>n=61</i>	
Knowledge about Legal Entities	3.52	Satisfactory
Knowledge about Contracts and Obligations	4.98	More than satisfactory
Legal Analysis	4.42	Satisfactory

Note: Inter-rater reliability for each course is 90.0% or better.

DISCUSSION

The self-report survey consistently indicates that current adult students' attitudes toward accelerated courses are positive. When *strongly agree* and *agree* categories are combined, the average agreement for all 22 items of the scale is 95.6 percent. The average for the nine items assessing student perception of motivational conditions is 95.8 percent and the average for the eight items assessing student perception of instruction and materials is 93.4 percent. In addition, 83.1 percent of students indicated accelerated courses as the main reason to select the college where they are currently enrolled.

Viable reasons for such affirmative students' assessments are that the motivational conditions for inclusion, positive attitude, meaning, and competence are being met; and the instruction and materials are effective. On the other hand, college student evaluations of courses generally are positive and indicative of student satisfaction (Astin, 1993) so the results here may not necessarily be due to qualities unique to the course being examined.

The results do suggest, however, that the assessments of these courses compare at least as favorably as those of traditional courses.

The percentage of alumni (82.5%) that indicated accelerated courses as the main reason to select the college where they graduated was almost identical to the proportion of current students. Level of agreement (*strongly agree* and *agree*) was very positive but with differences by course. MANA 204 had significantly higher evaluations compared to the evaluations of the other two courses. As stated before, these differences could be related to alumni's professional background and relevance of these subjects to their career goals.

Because self-report surveys often are criticized for having limited validity, documenting the learning of current students provides more substantial evidence of the effectiveness of accelerated courses. The performance tasks and criteria created by teams of faculty experts are rigorous. Based on the objectives for the three courses in this study, 64.5 percent of the students provide evidence of learning and subject mastery that is rated from *satisfactory to excellent*. The average score across all dimensions of performance and courses is 4.44, a score considered by faculty experts to be indicative of *satisfactory* performance. When the dimensions of performance are considered separately, the only average score that is *less than satisfactory* is for the Analysis and Interpretation of Results (STAT 201). Since there are no nationally standardized tests for the subject areas (Osterlind, 1997) in this study, there is little opportunity to find a wider context for comparing the quality of these achievements.

In general, the findings of this second phase of the ALRP in Puerto Rico are similar to the findings in research (Phases 1, 3, and 5) conducted at Regis University and New Ventures' Partner Schools in the United States. Some of these similarities are the following:

1. Approximately 80 percent of current students and alumni selected the college where they are enrolled or where they completed their bachelor's degree because of the availability of accelerated courses.
2. Proportion of agreement of current students with the 22 items in the self-report course evaluation survey is on the average over 90 percent. This finding also holds for the nine items related to motivation and to the eight items related to instruction and materials.

3. Proportion of agreement of alumni with the 22 items in the self-report course evaluation survey is, on the average, over 80 percent. This finding also holds for the nine items related to motivation and to the eight items related to instruction and materials.
4. Despite variation in language, cultural setting, colleges, instructors, course subjects, and students in each course assessed, there are consistencies among the findings. According to ratings of faculty experts, 64.5 percent of AGMUS affiliated colleges' students performed at a *satisfactory to excellent* level and had an average score across all dimensions of performance of 4.44 (*satisfactory*). These findings compare favorably to the averages of the findings for Phases 1, 3, and 5, where 69.26 percent of all students assessed in these three studies, involving seven colleges regionally dispersed throughout the United States, performed at a satisfactory to excellent level as well. A detailed discussion of these studies is presented in the Phase 5 Report (Wlodkowski, Gonzales, and Mauldin, 2001).

SUMMARY AND CONCLUSIONS

This research, conducted in Spanish in the Ana G. Mendez University System (AGMUS) in Puerto Rico, is the second study to investigate the effectiveness of an accelerated format in higher education outside of the United States and in a language other than English. The research design is a replication of the studies conducted in Phases 1 (1996-1997), 3 (1998-1999), and 5 (2000-2001) at Regis University and New Ventures' Partner Schools in the United States. This research assesses how current students and alumni perceive and value accelerated courses. In addition, it also assesses the learning of current students.

The three AGMUS affiliated colleges that participated in this project are: Universidad del Este (formerly known as Colegio Universitario del Este), Universidad del Turabo, and Universidad Metropolitana. Three popular courses, that are part of the core curriculum of the bachelor degree programs in Business Administration in these institutions, were chosen for the study: *Fundamentals of Marketing* (MARK 133), *Business Statistics* (STAT 201), and *Business Law* (MANA 204). The total number of students enrolled in the three courses was of 169: 51 students in MARK 133, 57 in STAT 201, and 61 in MANA 204. Response rate for the alumni survey was 44.1 percent, 64 graduates from a total number of 143. Both groups are, on the average, adults in their thirties with approximately 55 percent being female. Nearly 40 percent of current students and alumni are the first generation in their families with formal education at the post-secondary level.

The major findings from this investigation are:

1. Accelerated courses were considered as the main reason to select a college by 83.1 percent of current students and by 82.5 percent of alumni.
2. Current students perceived their courses very positively. On the average, 90% or more of the current students *strongly agree* or *agree* with each item of the course evaluation scale. The only exception was the evaluation of the item. *The course module served as an effective learning guide*. The overall agreement with this statement was 76.6 percent: 28.1 percent *strongly agree* and 48.5 percent *agree*.
3. Alumni also perceived their courses positively, although MANA 204 was evaluated more positively than MARK 133 and STAT 201.

4. In the courses investigated, the average performance score for current students across all dimensions of performance is 4.44 (*satisfactory*). Nearly two thirds of these students averaged satisfactory to excellent across all dimensions of performance.

The findings of this study, along with those previously conducted as part of the Accelerated Learning Research Project, including prior study conducted in Puerto Rico (Wlodkowski, Iturralde-Albert, and Mauldin, 2000) reflect the evidence of most research assessing accelerated learning formats: that students, in particular adults, appreciate their effectiveness and the strong interest they cultivate (Scott and Conrad, 1992). In addition, these studies suggest that shorter alternative formats may facilitate learning as effectively as traditional academic schedules and for a larger variety of students.

A comparison of findings from this study with findings from three studies (Wlodkowski, Gonzales, and Mauldin, 2001) having the same research design and conducted at Regis University between 1996 and 2001 indicates similar results. In general, these studies offer consistent evidence that adults in societies where English or Spanish is the primary language can satisfactorily meet the challenge of college course work in a variety of accelerated courses from the field of business administration and management.

ISSUES FOR FURTHER STUDY

The Center for the Study of Accelerated Learning is considering new research directions with the objective of expanding the agenda that was initiated by the ALRP. One example is the research conducted, in collaboration with the University of Missouri in Kansas City (Wlodkowski, Mauldin, & Gahn, 2001), about adult learners' persistence and academic success in accelerated and traditional programs.

All courses, students, and alumni involved in this study were part of the Business Management Program of the colleges investigated. Research that assesses the learning and attitudes of adult students in accelerated courses in other disciplines is paramount to creating a body of studies that can more adequately inform the improvement of accelerated formats for learning throughout higher education.

Extensive studies of accelerated courses and programs in international settings should be conducted to further investigate the potential of this format for learning.

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10. The current job in which you are employed is a: **(Select only one choice)**

- Full Time Position 1
- Part Time Position 2
- Self Employed 3

- Not Employed-At My Choice4
- Not Employed-Looking for Work.....5

If employed, please indicate title of **position**:

Part II. Please circle the number that best describes your opinion for each of the following statements:	Strongly disagree (4)			
	Disagree (3)			
	Agree (2)			
	Strongly agree (1)			
1. Overall, this course was a valuable learning experience.	1	2	3	4
2. The course text was a good resource for achieving the course objectives.	1	2	3	4
3. The teacher was knowledgeable about the course subject area.	1	2	3	4
4. The teacher was not a skilled instructor.	1	2	3	4
5. I would recommend this course to others.	1	2	3	4
6. The course module served as an effective learning guide.	1	2	3	4
7. The teacher did not respect student opinions and ideas.	1	2	3	4
8. I have used information or skills that I have learned in this course.	1	2	3	4
9. Class time was used effectively.	1	2	3	4
10. This course was relevant to my goals.	1	2	3	4
11. This course helped me to be effective at what I value.	1	2	3	4
12. The classroom climate for this course was friendly and respectful.	1	2	3	4
13. Given the way this course was taught, I feel confident about using what I learned.	1	2	3	4
14. This course challenged me to think.	1	2	3	4
15. This course encouraged critical thinking.	1	2	3	4
16. This course was not well taught.	1	2	3	4
17. The teaching methods in this course helped me to learn.	1	2	3	4
18. The grading standards for this course required college level performance.	1	2	3	4
19. In this course I felt included.	1	2	3	4
20. This course was meaningful for me.	1	2	3	4
21. The way I have been evaluated in this course, thus far, seems fair.	1	2	3	4
22. The way I have been evaluated in this course, thus far, seems sensitive to my capabilities.	1	2	3	4

Part III. The following questions have the purpose of providing us a better understanding of the relationship between your experience and the results of this evaluation.

1. Please indicate the number of accelerated courses you have taken: _____ courses
2. In relation to your preference for **accelerated** or **traditional** courses, select **one** of the following choices circling the number corresponding to your answer:

- I prefer **accelerated** courses to **traditional** courses* 1
- I prefer **traditional** courses to **accelerated** courses* 2
- It depends on the situation and the type of course as to whether I will prefer a traditional or accelerated course* 3
- I do not know much about **accelerated** courses*..... 4
- I do not know much about **traditional** courses* 5

3. How many years of **work experience** do you have?: _____ years
4. Most of my work has been in the **area** of : _____

5. In relation to your **career goals**, would you say that this course was: (**select only one choice**)

- Relevant to my career goals* 1
- Somewhat relevant to my career goals* 2
- Irrelevant to my career goals*..... 3
- Difficult to judge because I'm not clear about my career goals* 4

6. The main purpose for taking this course was:

APPENDIX 2: Alumni End of Course Evaluation

PART 1: UNLESS OTHERWISE INDICATED, CIRCLE THE NUMBER THAT BEST DESCRIBES YOUR ANSWER.

1. Please, indicate **month** and **year** you graduated:
Month: _____
Year: _____
2. Please, indicate your current **age**: _____ *years old*
3. Gender:
Male 1
Female 2
4. What is your **annual family income**? (SELECT ONLY ONE CHOICE)
Less than \$15,000..... 1
\$15,000 a \$25,999..... 2
\$26,000 a \$40,999..... 3
\$41,000 a \$60,999..... 4
\$61,000 a \$75,999..... 5
\$76,000 a \$99,999..... 6
\$100,000 or more..... 7
5. What is the highest degree of **one** of your parents? **SELECT THE PARENT WHO HAS THE HIGHEST DEGREE.**
Did not completed high school..... 1
High School diploma 2
Certificate..... 3
Associate degree 4
Bachelor's degree 5
Master's degree 6
Doctoral degree 7
6. What is the highest degree you **currently** hold? (SELECT ONLY ONE CHOICE AND SPECIFY MAJOR OR SPECIALIZATION)
Bachelor's degree 1 → *Major:* _____
Master's degree 2 → *Specialization:* _____
Doctoral degree 3 → *Specialization:* _____
7. What is the degree in which you are **currently enrolled**? (SELECT ONLY ONE CHOICE AND SPECIFY MAJOR OR SPECIALIZATION)
Bachelor's degree 1 → *Major:* _____ *where?* _____
Master's degree 2 → *Specialization:* _____ *where?* _____
Doctoral degree 3 → *Specialization:* _____ *where?* _____
I am not studying..... 4
8. What is the highest degree you plan to seek in the **future**? (SELECT ONLY ONE CHOICE AND SPECIFY MAJOR OR SPECIALIZATION)
Bachelor's degree 1 → *Major:* _____
Master's degree 2 → *Specialization:* _____
Doctoral degree 3 → *Specialization:* _____
9. How long did it **take you to complete** your bachelor's degree in **Programa Ahora**?
Credit hours completed in Programa Ahora: _____ *credit hours*
Time to complete this number of credit hours: _____ year(s) and _____ month(s)

10. What were your top **two primary reasons** for attending this **college**?
- | | | | |
|----------------------------------|---|------------------------------------------------------------|----|
| <i>Cost</i> | 1 | <i>Accelerated courses</i> | 8 |
| <i>Admission standards</i> | 2 | <i>Availability of scholarships or financial aid</i> | 9 |
| <i>Size</i> | 3 | <i>Advice of parents or relatives</i> | 10 |
| <i>Social atmosphere</i> | 4 | <i>To be with friends</i> | 11 |
| <i>Location</i> | 5 | <i>Other:</i> _____ | |
| <i>Type of programs</i> | 6 | _____ | |
| <i>Academic reputation</i> | 7 | _____ | |
11. If you could start college over, would you choose to attend this **college**? (SELECT ONLY ONE CHOICE)
- Definitely yes* 1
Probably yes 2
Uncertain 3
Probably no 4
Definitely no 5
12. If you could start college over, would you choose to graduate with the same **major**? (SELECT ONLY ONE CHOICE)
- Definitely yes* 1
Probably yes 2
Uncertain 3
Probably no 4
Definitely no 5
13. In relation to your preference for **accelerated** or **traditional** courses, select **one** of the following choices circling the number corresponding to your answer:
- I prefer **accelerated** courses to **traditional** courses* 1
*I prefer **traditional** courses to **accelerated** courses* 2
It depends on the situation and the type of course as to whether I will prefer a traditional or accelerated course 3
*I do not know much about **traditional** courses* 4
14. How many years of **work experience** do you have?: _____ years
15. The current job in which you are employed is a: (SELECT ONLY ONE CHOICE)
- Full Time Position* 1
Part Time Position 2
Self Employed 3
Not Employed-At My Choice 4
Not Employed-Looking for Work 5
- If employed, please indicate title of **position**: _____

PART 2: THE FOLLOWING PAGES CONTAIN A GROUP OF STATEMENTS TO BE EVALUATED IN RELATION TO THREE COURSES THAT ARE PART OF THE PROGRAM OF BUSINESS ADMINISTRATION. THESE THREE COURSES ARE:

1. **FUNDAMENTALS OF MARKETING (MARK 133)**
2. **BUSINESS LAW (MANA 204)**
3. **BUSINESS STATISTICS (STAT 201)**

EACH PAGE CONTAINS THE EVALUATION FOR ONE OF THESE THREE COURSES. IT IS POSSIBLE THAT YOU HAVE NOT TAKEN SOME OF THESE COURSES. PLEASE EVALUATE ONLY THOSE COURSES THAT YOU COMPLETED IN PROGRAMA AHORA.

COURSE TO BE EVALUATED: FUNDAMENTALS OF MARKETING (MARK 133). IF YOU DID NOT COMPLETE THIS COURSE IN PROGRAMA AHORA, YOU MAY CONTINUE WITH THE COURSE ON THE NEXT PAGE.

Please circle the number that best describes your opinion for each of the following statements:	Cannot adequately remember (5)				
	Strongly disagree (4)				
	Disagree (3)				
	Agree (2)				
	Strongly agree (1)				
1. Overall, this course was a valuable learning experience.	1	2	3	4	5
2. The course text was a good resource for achieving the course objectives.	1	2	3	4	5
3. The teacher was knowledgeable about the course subject area.	1	2	3	4	5
4. The teacher was not a skilled instructor.	1	2	3	4	5
5. I would recommend this course to others.	1	2	3	4	5
6. The course module served as an effective learning guide.	1	2	3	4	5
7. The teacher did not respect student opinions and ideas.	1	2	3	4	5
8. I have used information or skills that I have learned in this course.	1	2	3	4	5
9. Class time was used effectively.	1	2	3	4	5
10. This course was relevant to my goals.	1	2	3	4	5
11. This course helped me to be effective at what I value.	1	2	3	4	5
12. The classroom climate for this course was friendly and respectful.	1	2	3	4	5
13. Given the way this course was taught, I feel confident about using what I learned.	1	2	3	4	5
14. This course challenged me to think.	1	2	3	4	5
15. This course encouraged critical thinking.	1	2	3	4	5
16. This course was not well taught.	1	2	3	4	5
17. The teaching methods in this course helped me to learn.	1	2	3	4	5
18. The grading standards for this course required college level performance.	1	2	3	4	5
19. In this course I felt included.	1	2	3	4	5
20. This course was meaningful for me.	1	2	3	4	5
21. The way I was evaluated in this course was fair.	1	2	3	4	5
22. The way I was evaluated in this course was sensitive to my capabilities.	1	2	3	4	5

In relation to your **career goals**, would you say that this course was: (SELECT ONLY ONE CHOICE)

- Relevant to my career goals* 1
- Somewhat relevant to my career goals* 2
- Irrelevant to my career goals*..... 3
- Difficult to judge because I'm not clear about my career goals*..... 4

(PLEASE CONTINUE WITH THE EVALUATION OF THE COURSE ON THE NEXT PAGE)

COURSE TO BE EVALUATED: BUSINESS LAW (MANA 204). IF YOU DID NOT COMPLETE THIS COURSE IN PROGRAMA AHORA, YOU MAY CONTINUE WITH THE COURSE ON THE NEXT PAGE.

In relation to your **career goals**, would you say that this course was: (SELECT ONLY ONE CHOICE)

Please circle the number that best describes your opinion for each of the following statements:	Cannot adequately remember (5)				
	Strongly disagree (4)				
	Disagree (3)				
	Agree (2)				
	Strongly agree (1)				
1. Overall, this course was a valuable learning experience.	1	2	3	4	5
2. The course text was a good resource for achieving the course objectives.	1	2	3	4	5
3. The teacher was knowledgeable about the course subject area.	1	2	3	4	5
4. The teacher was not a skilled instructor.	1	2	3	4	5
5. I would recommend this course to others.	1	2	3	4	5
6. The course module served as an effective learning guide.	1	2	3	4	5
7. The teacher did not respect student opinions and ideas.	1	2	3	4	5
8. I have used information or skills that I have learned in this course.	1	2	3	4	5
9. Class time was used effectively.	1	2	3	4	5
10. This course was relevant to my goals.	1	2	3	4	5
11. This course helped me to be effective at what I value.	1	2	3	4	5
12. The classroom climate for this course was friendly and respectful.	1	2	3	4	5
13. Given the way this course was taught, I feel confident about using what I learned.	1	2	3	4	5
14. This course challenged me to think.	1	2	3	4	5
15. This course encouraged critical thinking.	1	2	3	4	5
16. This course was not well taught.	1	2	3	4	5
17. The teaching methods in this course helped me to learn.	1	2	3	4	5
18. The grading standards for this course required college level performance.	1	2	3	4	5
19. In this course I felt included.	1	2	3	4	5
20. This course was meaningful for me.	1	2	3	4	5
21. The way I was evaluated in this course was fair.	1	2	3	4	5
22. The way I was evaluated in this course was sensitive to my capabilities.	1	2	3	4	5

- Relevant to my career goals* 1
- Somewhat relevant to my career goals* 2
- Irrelevant to my career goals*..... 3
- Difficult to judge because I'm not clear about my career goals*..... 4

(PLEASE CONTINUE WITH THE EVALUATION OF THE COURSE ON THE NEXT PAGE)

COURSE TO BE EVALUATED: BUSINESS STATISTICS (STAT 201). IF YOU DID NOT COMPLETE THIS COURSE IN PROGRAMA AHORA, YOU MAY CONTINUE WITH THE COURSE ON THE NEXT PAGE.

Please circle the number that best describes your opinion for each of the following statements:	Cannot adequately remember (5)				
	Strongly disagree (4)				
	Disagree (3)				
	Agree (2)				
	Strongly agree (1)				
1. Overall, this course was a valuable learning experience.	1	2	3	4	5
2. The course text was a good resource for achieving the course objectives.	1	2	3	4	5
3. The teacher was knowledgeable about the course subject area.	1	2	3	4	5
4. The teacher was not a skilled instructor.	1	2	3	4	5
5. I would recommend this course to others.	1	2	3	4	5
6. The course module served as an effective learning guide.	1	2	3	4	5
7. The teacher did not respect student opinions and ideas.	1	2	3	4	5
8. I have used information or skills that I have learned in this course.	1	2	3	4	5
9. Class time was used effectively.	1	2	3	4	5
10. This course was relevant to my goals.	1	2	3	4	5
11. This course helped me to be effective at what I value.	1	2	3	4	5
12. The classroom climate for this course was friendly and respectful.	1	2	3	4	5
13. Given the way this course was taught, I feel confident about using what I learned.	1	2	3	4	5
14. This course challenged me to think.	1	2	3	4	5
15. This course encouraged critical thinking.	1	2	3	4	5
16. This course was not well taught.	1	2	3	4	5
17. The teaching methods in this course helped me to learn.	1	2	3	4	5
18. The grading standards for this course required college level performance.	1	2	3	4	5
19. In this course I felt included.	1	2	3	4	5
20. This course was meaningful for me.	1	2	3	4	5
21. The way I was evaluated in this course was fair.	1	2	3	4	5
22. The way I was evaluated in this course was sensitive to my capabilities.	1	2	3	4	5

In relation to your **career goals**, would you say that this course was: (SELECT ONLY ONE CHOICE)

- Relevant to my career goals* 1
- Somewhat relevant to my career goals* 2
- Irrelevant to my career goals*..... 3
- Difficult to judge because I'm not clear about my career goals*..... 4

WE APPRECIATE YOUR COOPERATION

APPENDIX 3:
Current Student Perceptions and Attitudes

Items	Base	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %
1. Overall, this course was a valuable learning experience.	169	72.2	26.6	.6	.6
2. The course text was a good resource for achieving the course objectives.	169	43.2	47.3	5.9	3.6
3. The teacher was knowledgeable about the course subject area.	169	94.6	5.4	.0	.0
4. The teacher was not a skilled instructor.	168	1.2	2.4	4.2	92.3
5. I would recommend this course to others.	168	73.2	23.8	.6	2.4
6. The course module served as an effective learning guide.	167	28.1	48.5	16.8	6.6
7. The teacher did not respect student opinions and ideas.	168	3.6	3.0	7.1	86.3
8. I have used information or skills that I have learned in this course.	169	52.7	42.0	4.1	1.2
9. Class time was used effectively.	169	81.1	18.3	.6	.0
10. This course was relevant to my goals.	168	56.0	33.9	8.3	1.8
11. This course helped me to be effective at what I value.	168	58.3	35.7	5.4	.6
12. The classroom climate for this course was friendly and respectful.	169	80.5	19.5	.0	.0
13. Given the way this course was taught, I feel confident about using what I learned.	169	77.5	21.9	.6	.0
14. This course challenged me to think.	169	76.3	21.9	1.2	.6
15. This course encouraged critical thinking.	165	70.3	26.1	2.4	1.2
16. This course was not well taught.	167	3.0	2.4	6.6	88.0
17. The teaching methods in this course helped me to learn.	166	69.9	28.9	1.2	.0
18. The grading standards for this course required college level performance.	168	61.9	36.3	1.2	.6
19. In this course I felt included.	168	73.8	23.8	1.8	.6
20. This course was meaningful for me.	169	63.3	32.5	3.0	1.2
21. The way I have been evaluated in this course, thus far, seems fair.	168	63.1	33.3	2.4	1.2
22. The way I have been evaluated in this course, thus far, seems sensitive to my capabilities.	169	56.8	39.1	1.8	2.4

APPENDIX 4:
Alumni Perceptions and Attitudes

Fundamentals of Marketing

Items	Base	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %	Don't Remember %
1. Overall, this course was a valuable learning experience.	39	53.8	17.9	12.8	12.8	2.6
2. The course text was a good resource for achieving the course objectives.	39	35.9	33.3	10.3	12.8	7.7
3. The teacher was knowledgeable about the course subject area.	39	61.5	20.5	2.6	10.3	5.1
4. The teacher was not a skilled instructor.	39	12.8	2.6	35.9	43.6	5.1
5. I would recommend this course to others.	39	51.3	30.8	5.1	10.3	2.6
6. The course module served as an effective learning guide.	38	23.7	39.5	15.8	15.8	5.3
7. The teacher did not respect student opinions and ideas.	38	2.6	5.3	34.2	55.3	2.6
8. I have used information or skills that I have learned in this course.	39	28.2	38.5	12.8	12.8	7.7
9. Class time was used effectively.	39	41.0	33.3	5.1	17.9	2.6
10. This course was relevant to my goals.	38	28.9	39.5	10.5	18.4	2.6
11. This course helped me to be effective at what I value.	38	26.3	42.1	13.2	18.4	.0
12. The classroom climate for this course was friendly and respectful.	39	51.3	41.0	.0	7.7	.0
13. Given the way this course was taught, I feel confident about using what I learned.	39	41.0	30.8	15.4	12.8	.0
14. This course challenged me to think.	39	30.8	51.3	7.7	10.3	.0
15. This course encouraged critical thinking.	38	34.2	47.4	7.9	10.5	.0
16. This course was not well taught.	39	12.8	5.1	43.6	35.9	2.6
17. The teaching methods in this course helped me to learn.	38	34.2	39.5	10.5	15.8	.0
18. The grading standards for this course required college level performance.	39	35.9	43.6	10.3	10.3	.0
19. In this course I felt included.	39	38.5	35.9	12.8	12.8	.0
20. This course was meaningful for me.	39	28.2	41.0	20.5	10.3	.0
21. The way I was evaluated in this course was fair.	38	39.5	42.1	2.6	13.2	2.6
22. The way I was evaluated in this course was sensitive to my capabilities.	39	43.6	33.3	5.1	15.4	2.6

Alumni Perceptions and Attitudes Business Statistics

Items	Base	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %	Don't Remember %
1. Overall, this course was a valuable learning experience.	41	48.8	31.7	9.8	9.8	.0
2. The course text was a good resource for achieving the course objectives.	41	34.1	31.7	19.5	12.2	2.4
3. The teacher was knowledgeable about the course subject area.	41	80.5	14.6	4.9	.0	.0
4. The teacher was not a skilled instructor.	41	4.9	17.1	22.0	56.1	.0
5. I would recommend this course to others.	40	50.0	30.0	7.5	10.0	2.5
6. The course module served as an effective learning guide.	41	26.8	43.9	14.6	12.2	2.4
7. The teacher did not respect student opinions and ideas.	41	7.3	2.4	29.3	58.5	2.4
8. I have used information or skills that I have learned in this course.	41	31.7	36.6	14.6	14.6	2.4
9. Class time was used effectively.	41	48.8	41.5	4.9	4.9	.0
10. This course was relevant to my goals.	41	24.4	41.5	22.0	12.2	.0
11. This course helped me to be effective at what I value.	41	34.1	41.5	12.2	12.2	.0
12. The classroom climate for this course was friendly and respectful.	40	65.0	30.0	2.5	2.5	.0
13. Given the way this course was taught, I feel confident about using what I learned.	41	43.9	36.6	7.3	12.2	.0
14. This course challenged me to think.	41	46.3	36.6	9.8	7.3	.0
15. This course encouraged critical thinking.	39	38.5	38.5	15.4	7.7	.0
16. This course was not well taught.	41	12.2	9.8	19.5	58.5	.0
17. The teaching methods in this course helped me to learn.	41	39.0	43.9	7.3	7.3	2.4
18. The grading standards for this course required college level performance.	41	43.9	41.5	7.3	2.4	4.9
19. In this course I felt included.	41	46.3	36.6	12.2	4.9	.0
20. This course was meaningful for me.	41	31.7	34.1	17.1	12.2	4.9
21. The way I was evaluated in this course was fair.	41	53.7	39.0	.0	4.9	2.4
22. The way I was evaluated in this course was sensitive to my capabilities.	41	41.5	43.9	7.3	4.9	2.4

Alumni Perceptions and Attitudes Business Law

Items	Base	Strongly Agree %	Agree %	Disagree %	Strongly Disagree %	Don't Remember %
1. Overall, this course was a valuable learning experience.	40	77.5	20.0	.0	.0	2.5
2. The course text was a good resource for achieving the course objectives.	40	52.6	25.0	7.5	.0	5.0
3. The teacher was knowledgeable about the course subject area.	40	75.0	20.0	2.5	.0	2.5
4. The teacher was not a skilled instructor.	38	2.6	2.6	26.3	63.2	5.3
5. I would recommend this course to others.	39	69.2	30.8	.0	.0	.0
6. The course module served as an effective learning guide.	40	42.5	45.0	7.5	2.5	2.5
7. The teacher did not respect student opinions and ideas.	40	2.5	7.5	22.5	60.0	7.5
8. I have used information or skills that I have learned in this course.	38	55.3	36.8	.0	2.6	5.3
9. Class time was used effectively.	40	65.0	32.5	.0	.0	2.5
10. This course was relevant to my goals.	39	41.0	51.3	2.6	.0	5.1
11. This course helped me to be effective at what I value.	40	45.0	47.5	2.5	.0	5.0
12. The classroom climate for this course was friendly and respectful.	40	70.0	27.5	2.5	.0	.0
13. Given the way this course was taught, I feel confident about using what I learned.	39	71.8	25.6	.0	.0	2.6
14. This course challenged me to think.	40	62.5	35.0	.0	.0	2.5
15. This course encouraged critical thinking.	40	57.5	37.5	.0	.0	5.0
16. This course was not well taught.	40	.0	5.0	20.0	65.0	10.0
17. The teaching methods in this course helped me to learn.	40	52.5	45.0	.0	.0	2.5
18. The grading standards for this course required college level performance.	40	55.0	42.5	.0	.0	2.5
19. In this course I felt included.	40	67.5	30.0	.0	.0	2.5
20. This course was meaningful for me.	40	55.0	40.0	2.5	.0	2.5
21. The way I was evaluated in this course was fair.	40	60.0	37.5	.0	.0	2.5
22. The way I was evaluated in this course was sensitive to my capabilities.	40	62.5	35.0	.0	.0	2.5

APPENDIX 5: **Performance Tasks**

FUNDAMENTALS OF MARKETING (MARK 133)

READ THE FOLLOWING EXERCISE **CAREFULLY** AND ANSWER IT ON THE PREVIOUSLY PROVIDED **ANSWER SHEETS**. YOU MAY USE YOUR **TEXTBOOKS AND NOTES** AS SUPPORTING RESOURCES. YOU HAVE **90 MINUTES** TO COMPLETE THIS EXERCISE.

CASE INFORMATION:

Magic Kingdom is a family oriented amusement park based on **Walt Disney's** animated cartoon characters. The park provides several entertainment acts for adults and for children, mechanical attractions, shops, eating places, and lodging services. The daily entrance fee per person ranges from \$40.00 to \$50.00, which includes all park attractions.

The park is located in the city of **Orlando, Florida**. The city's weather temperature ranges from an average of 83° F during summer down to an average of 61° F during winter. The city's infrastructure is comprised of hotel and lodging services, road networks, and an international airport. The park (**Magic Kingdom**) is promoted in several communications media, travel agencies, and through personal references (“word of mouth”). The park is prepared to host people from different nations and cultures.

Disney Enterprises Inc. is recognized as an innovator in the application of technology in the entertainment industry. In recent years, there has been a worldwide expansion in the development of amusement parks in the entertainment industry. On the other hand, the enterprise complies with federal and state regulations that are applicable to this type of business.

EXERCISE:

Assume that you are **Vice-President of Marketing** of the international company **Disney Enterprises Inc.**, formerly known as **Walt Disney Company**. Because of recurring news about a possible slowdown of economic growth in **United States** and **Puerto Rico**, you are commissioned to perform a **SWOT** analysis for the strategic business unit known as **Magic Kingdom**.

Focus your analysis on the **Puerto Rican** consumer market. In addition, use this analysis to submit recommendations taking in consideration the elements of the **marketing mix**. In your analysis, use **only** the information presented in this case.

BUSINESS STATISTICS (STAT 201)

READ EACH OF THE FOLLOWING QUESTIONS **CAREFULLY** AND ANSWER THEM ON THE PREVIOUSLY PROVIDED **ANSWER SHEETS**. YOU MAY USE YOUR **TEXTBOOKS AND NOTES** AS SUPPORTING RESOURCES. YOU HAVE **90 MINUTES** TO COMPLETE THIS EXERCISE. YOU NEED A **CALCULATOR** TO SOLVE SOME OF THESE PROBLEMS.

- Below are shown the scores of a **psychological skills test** taken by **30 employees** of a corporate business. This test was administered with the purpose of grouping the employees in **six (6) job positions**, according to the score obtained in the skills test. The **30 scores** were the following:

37	39	43	45	49	51	53	55	58	59
60	60	65	65	65	67	70	70	70	72
73	73	75	75	75	76	82	84	89	96

The findings will be presented as a report to corporate executives. **Specifically, you have been asked to prepare the following:**

- A frequency distribution table.
 - A graphical representation (**choose between a histogram or a frequency polygon**)
- Calculate the **mode**, the **median** and the **mean** for the set of scores obtained in the **psychological skills test** (see previous problem).

What would you say to the management of the corporation about the skills of this group of employees, taking into consideration the results of the calculation of these three measures of central tendency?

- Take into consideration the following sets of data that represent the **daily number of telephone calls, during one week**, of requests for service at two companies dedicated to the sale and distribution of computers. Both sets of data have a **mean equal to 50 phone calls**:

Company A:	46	55	50	47	52
Company B:	30	55	65	47	53

Calculate the following measures and briefly **discuss how the results compare** between both companies:

- Variance
- Standard Deviation
- Coefficient of Variation

4. **Master Card International** prepared a study on the incidence of fraud with credit cards. The findings are shown in the following table:

<i>Method of fraud</i>	<i>Number of frauds</i>
Stolen card	243
Forged card	85
Request by mail/telephone	52
Other	46

If one case of fraud with credit card is selected at random:

- a. What would be the probability that the fraud would have been perpetrated using a forged card?
- b. What would be the probability that the method of fraud would not have been perpetrated using a stolen card?
- c. What would be the probability that the method of fraud would have been perpetrated by means of a stolen card or a forged card?

BUSINESS LAW (MANA/BUSI 204)

READ THE FOLLOWING QUESTIONS **CAREFULLY** AND ANSWER THEM ON THE PREVIOUSLY PROVIDED **ANSWER SHEETS**. YOU MAY USE YOUR **TEXTBOOKS AND NOTES** AS SUPPORTING RESOURCES. YOU HAVE **90 MINUTES** TO COMPLETE THIS EXERCISE.

I. BELOW YOU WILL FIND SEVEN (7) PREMISES. READ THEM AND ACCORDING TO THE INFORMATION IN EACH ONE, ANSWER THE FOLLOWING **IN RELATION TO EACH PREMISE**:

Ⓡ **DETERMINE WHICH OF THE ENTITIES** FOR DOING BUSINESS IN **PUERTO RICO** IS CONVENIENT AND/OR MANDATORY TO USE IN EACH OF THE SEVEN PREMISES, AND

Ⓡ **BRIEFLY JUSTIFY** EACH ONE OF YOUR ANSWERS.

1. Don Pedro has a small grocery store in his house's garage. He does not want to pay separate taxes for business sales, but he wants to do business under a name different from his own.
2. Myrna Jiménez is a speech pathologist and José Zapata is an occupational therapist. Both of them want to develop an entity to do business that will not be required to pay taxes from its operations and whose purpose is to provide evaluative services and therapy to children with learning disorders.
3. José Jiménez, Pedro Pérez, and Miguel Nieves want to create an entity that will limit the number of persons that could be part of it who, at the same time could not sell their shares to external persons.
4. Edna Rodríguez and Ramón Sánchez approved the examination for law certification in **Puerto Rico** and have paid their membership for **Puerto Rico's** Bar Association and obtained all licenses for the practice of the profession as lawyers. They want to be organized under an entity in which they will solely offer professional services as lawyers. At the same time the entity will protect and keep separated the individual properties of each one.
5. Lilliam Rivera, José Rodríguez, and Elsa Maldonado, together with 40 other persons, want to create an entity wherein they can sell stock options in the open market and in return, stock buyers will participate in the entity's profits, if any.
6. Ana Rivera and José Luna, who are professional planners, want to make a contract between them with the purpose of doing business and sharing profits; she will contribute with money and he with real estate. They do not want to be registered in the State Department; they just want to do negotiations in common that could make profits.
7. José Roca and Beatriz Mármol want to create an enterprise for the development of roads. On the other hand, they do not want to be held responsible with their personal properties beyond their contribution. All the business income will proceed from the development of roads and they do not want the business income to be taxable.

(Continues on the next page)

II. FOLLOWING ARE FACTUAL SITUATIONS THAT REFLECT BASIC PRINCIPLES OF **OBLIGATIONS AND CONTRACTS**, AND **SPECIAL TYPE OF CONTRACTS**. READ THEM AND **ANSWER THE QUESTIONS** FOR EACH ONE.

1. You are the head of household and as such, you apply to the Police Department for a license for ownership and possession of a firearm, which is granted. On December 31, Mario Torres, a young man, 17 years old, arrives at your home and makes you an offer to buy the gun for the amount of \$1,000.00, which you accept.

Would this contract be valid? Explain your answer.

2. Pedro and Juan have sustained a love relationship for many years and they attend a church in which Father Antonio officiates mass. They approach him because they want to get married. Father Antonio accepts and fixes the date for the wedding ceremony.

Would this contract be protected by our juridical system? Explain your answer.

3. You decide to hire a person to work as your employee and the only condition is that it should be for the rest of the person's life.

Would this contract be protected by our juridical system? Explain your answer.

4. You decide to travel and leave your car in the charge of a company dedicated to this kind of business. Terms and price are agreed upon. When you return from your travel, you find that your car was used for unauthorized purposes and it suffered serious damages.

What type of contract, if any, exists between you and the company?

What responsibility, if any, does the company have?

5. You need \$500.00 to solve a personal problem and because of your credit history, you are not able to obtain a loan. Then you decide to turn to a pawnbroker. You request the money and in guarantee, you give a "Rolex" watch valued at \$10,000.00 that belongs to your father. It was agreed that the payment had to be made on January 31, 2001. You fail to make the payment on the due date and the creditor sells the watch on February 15.

What type of contract subscribed both parts?

Which are its requisites?

Is the subscribed contract valid?

6. A neighbor of yours inherits a luxurious mansion that he wants to sell. You are interested in this property, decide to buy it, and reach an agreement for the price. Nevertheless, you do not have the necessary economic resources readily available.

How can you acquire this property?

7. You borrow \$3,000.00 from your best friend. He tells several people that he is worried about not being paid back. A mutual friend decides, without your knowledge, to guarantee the payment of the money.

How many types of contracts arise from this situation?

What are the requisites of each one?

APPENDIX 6: **PERFORMANCE DIMENSIONS AND CRITERIA**

FUNDAMENTALS OF MARKETING (MARK 133)

OBJECTIVES

1. Understand the effect of the marketing mix (decisions about: product, price, place, and promotion) on consumer behavioral response.
2. Comprehend how to perform an environmental scanning and its importance in the decision making process.

PERFORMANCE DIMENSIONS

1. KNOWLEDGE BASE

Excellent (4)

- Analysis reveals an ample and specific knowledge base, the application of which demonstrates understanding of marketing theory and principles, particularly of the marketing mix.

Very Good (3)

- Analysis reveals an ample knowledge base, the application of which demonstrates some understanding of marketing theory and principles, particularly of the marketing mix.

Satisfactory (2)

- Analysis reveals a general knowledge base, the application of which demonstrates some understanding of marketing theory and principles, particularly of the marketing mix.

Not Acceptable (1)

- Analysis reveals a poor knowledge base, the application of which demonstrates no understanding of marketing theory and principles, particularly of the marketing mix.

2. CRITICAL THINKING

Excellent (4)

- Logical reasoning is evident throughout the entire analysis.

Very Good (3)

- Logical reasoning is evident in most of the analysis.

Satisfactory (2)

- Logical reasoning is evident in some of the analysis.

Not Acceptable (1)

- Logical reasoning is mostly inconsistent.

WRITING SKILLS

Excellent (4)

- Show substantial depth, fullness, and complexity of thought.
- Demonstrates clear, focused, unified, and coherent organization.
- Is fully developed and detailed.
- Demonstrates superior control of syntactic variety, and transition (may have a few minor flaws).
- The analysis is a cohesive whole.

Very Good (3)

- Show some depth and complexity of thought.
- Is effectively organized.
- Is well developed, with supporting detail.
- Demonstrates control of syntactic variety, and transition (may have a few minor flaws).
- The analysis is somewhat fragmented.

Satisfactory (2)

- Is organized. Follows a comprehensible sequence or pattern.
- Is adequately developed, with some detail.
- Demonstrates competent writing (may have some serious flaws).
- May be simplistic or stereotyped in thought.
- The analysis is fragmented.

Not Acceptable (1)

- May have generalizations without supporting detail or detail with generalizations.
- Demonstrates incompetent writing.
- Is wholly incompetent mechanically.
- The analysis is completely fragmented.

BUSINESS STATISTICS (STAT 201)

OBJECTIVES

1. Construction of statistical tables and graphic representations of frequency distributions.
2. Calculation and interpretation of central tendency and dispersion measures.
3. Definition and business application of probability.

PERFORMANCE DIMENSIONS

1. VISUAL REPRESENTATION

Excellent (4)

- Construction and presentation of tables and graphs is completely appropriate.
- Data is well organized.
- Use of scales and class intervals is correct.

Very Good (3)

- Construction and presentation of tables and graphs is mostly appropriate.
- Data is well organized.
- Use of scales and class intervals has few flaws.

Satisfactory (2)

- Construction and presentation of tables and graphs is only partially appropriate.
- Data is not completely well organized.
- Use of scales and class intervals has several flaws.

Not Acceptable (1)

- Construction and presentation of tables and graphs is not appropriate.
- Data is not well organized.
- Use of scales and class intervals is incorrect.

2. STATISTICAL CALCULATION

Excellent (4)

- Statistical measures, as chosen by the student, are correctly calculated.

Very Good (3)

- Practically all of the statistical measures, as chosen by the student, are correctly calculated.

Satisfactory (2)

- Some of the statistical measures, as chosen by the student, are not correctly calculated.

Not Acceptable (1)

- The majority of the statistical measures, as chosen by the student, are not correctly calculated.

3. ANALYSIS AND INTERPRETATION OF RESULTS

Excellent (4)

- Responses reveal a specific knowledge base, the application of which demonstrates an understanding of principles and basic concepts in statistics and probability.
- Logical reasoning is evident.

Very Good (3)

- Responses reveal a general rather than specific knowledge base, the application of which demonstrates some understanding of principles and basic concepts in statistics and probability.
- Logical reasoning is evident.

Satisfactory (2)

- Responses reveal a general rather than specific knowledge base, the application of which demonstrates some understanding of principles and basic concepts in statistics and probability.
- Logical reasoning is evident but sometimes inconsistent.

Not Acceptable (1)

- Responses reveal a poor knowledge base, the application of which demonstrates little or no understanding of principles and basic concepts in statistics and probability.
- Logical reasoning is mostly inconsistent.

OBJECTIVES

1. Analyze obligations that emerge from contracts and distinguish special types of contracts.
2. Identify the different entities used for doing business in Puerto Rico.

PERFORMANCE DIMENSIONS

1. KNOWLEDGE ABOUT LEGAL ENTITIES

Excellent (4)

The student correctly identified at least six (6) legal entities.

Very Good (3)

The student correctly identified five (5) legal entities.

Satisfactory (2)

The student correctly identified four (4) legal entities.

Not Acceptable (1)

The student correctly identified three (3) or less legal entities.

2. KNOWLEDGE ABOUT CONTRACTS AND LEGAL OBLIGATIONS

Excellent (4)

The student correctly identified at least nine (9) juridical principles related to contracts and obligations.

Very Good (3)

The student correctly identified eight (8) juridical principles related to contracts and obligations.

Satisfactory (2)

The student correctly identified seven (7) juridical principles related to contracts and obligations.

Not Acceptable (1)

The student correctly identified six (6) or less juridical principles related to contracts and obligations.

3. LEGAL ANALYSIS

Excellent (4)

The analysis on which answers are based is precise and correct.

Very Good (3)

The analysis on which answers are based is substantially and generally correct.

Satisfactory (2)

The analysis on which answers are based is superficial.

Not Acceptable (1)

The analysis on which answers are based is poor.