

## ACCELERATED COURSES AS A LEARNING FORMAT FOR ADULTS<sup>1</sup>

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### Abstract

*Many adults are turning to accelerated or intensive course formats to meet their educational needs. Conventional wisdom and scholarly critique suggest that material normally taught in a 16 week course cannot reasonably be presented and learned in a shorter 5 or 8 week term. This study investigates adult students' learning and attitudes in six accelerated courses at three private colleges. Several data sets are examined. First, 188 adult students responded to an end-of-course survey and indicated high levels of satisfaction with both the content and conduct of their accelerated courses. Second, a random sample of alumni from accelerated programs responded to the same survey and reported general satisfaction 1 to 2 years after completing their degrees. Third, current adult students completed content mastery and performance-based assessments. These measures indicate that 80% of these students demonstrated learning rated as satisfactory or above by faculty experts. Finally, researchers compared the learning and attitudes of younger (traditional) students enrolled in 16-week courses with the learning and attitudes of adult students enrolled in 5-week versions of the same courses. These results suggest that accelerated courses satisfy adult students' needs and provide levels of learning indistinguishable from those demonstrated by the younger students in traditional courses. Implications and further research needs are discussed.*

### Résumé

*De nombreux adultes se prévalent de programmes intensifs ou accélérés pour leur besoins éducatifs. Or, le stéréotype et l'orthodoxie académique veulent que les contenus normalement présentés en quelque 16 semaines ne sauraient être adéquatement couverts dans une session*

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*réduite à 5 ou 8 semaines. La présente étude se penche sur les attitudes et les apprentissages d'adultes inscrits à six programmes intensifs dispensés dans trois collèges privés. Plusieurs ensembles de données furent analysés. D'abord, un sondage auprès de 188 finissants montre un taux de satisfaction élevé tant pour le contenu que pour la forme des cours intensifs. De plus, deux ans après la fin de leur programme accéléré, un échantillon aléatoire de diplômés affiche un taux de satisfaction comparable à celle des finissants. Par ailleurs, un groupe de participants s'est prêté à une évaluation de la maîtrise et du rendement, effectuée par un groupe d'enseignants experts de contenu. Ces derniers ont jugé que 80% des étudiants avaient réalisé des apprentissages satisfaisants ou supérieurs à la moyenne. Enfin, nous avons comparé les attitudes et les apprentissages d'étudiants plus jeunes (dits traditionnels) inscrits à une session de 16 semaines, à ceux d'adultes participant à une version accélérée des mêmes cours (5 semaines). Le bilan suggère que les cours accélérés satisfont aux besoins des apprenants adultes et leur permettent des apprentissages dont la qualité ne se distingue pas des résultats obtenus par les jeunes dans les cours traditionnels. L'article s'achève par une réflexion sur la portée de ces résultats pour la recherche future.*

As the number of adult learners approaches the number of 18 to 24 year old students in universities, the nontraditional university is beginning to challenge the dominance of the campus-based university for educating college students. These nontraditional organizations often take the form of private universities (University of Phoenix, 52,000 students), distance education universities (British Open University, 100,000 students), and corporate universities such as those established at Motorola and Disney (Athey, 1998). What sets these nontraditional universities apart from campus-based universities is more than the fact that the latter are residential. The alternative universities are tailored to meet the needs of working adults. They tend to be market driven rather than discipline focused. Increasingly, they are performance based, granting credits and degrees based on competency rather than traditional seat time.

A mainstay in nontraditional post-secondary programs is the accelerated course. Accelerated courses, often known as intensive courses, are presented in less time than the traditional number of contact hours—for example 32 hours of class time versus 40 hours of class time; and for a shorter duration—for example 8 weeks rather than 16 weeks (Scott and Conrad, 1992).

Accelerated courses are often structured in condensed formats including weekend and evening classes, workplace programs, and distance learning. In order to understand how effective accelerated courses are as learning formats for working adults, a 2-year evaluation research study was conducted involving three private, urban colleges and six undergraduate courses. This investigation was undertaken to provide valid information about how well adult students learn in accelerated courses and what their attitudes are toward these courses. This is the first study of adult students in accelerated (5-week, 20 contact hours) courses to document their learning and to compare that learning with the learning of students enrolled in traditional (16-week, 40 contact hours) versions of the same courses.

### **Framework for the Study**

#### ***Critiques of Accelerated Courses***

Traditional scholars have heavily criticized these non-traditional schools for stressing convenience over substance and rigor (Wolfe, 1998). By doing away with such accouterments as tenure, nonprofit status, the semester system, and full-time faculty, and relying on facilitators who have full-time jobs apart from the university, standardized curriculum, and accelerated courses, many critics propose that these institutions offer a diluted or subpar education. Although researchers have studied the relationship between time and learning, the findings are not clear (Karweit, 1984). Walberg's (1988) synthesis of the time and learning research concluded that time is a necessary, but not sufficient condition for learning and that time in and of itself is only a modest predictor of achievement. Academic learning time—time spent actively and successfully involved in learning—is more strongly related to achievement (Fisher and others, 1980). Depending on the task at hand, other factors that influence learning as much or more so than the time spent learning are student capability, quality of instruction, and personal motivation (Wlodkowski, 1999). In general, the findings from these studies suggest not allocating fixed amounts of time to learning without consideration of the previously mentioned factors.

Conventional academic thinking often regards accelerated courses as being too compressed to produce consistent educational value. Critics perceive these courses as sacrificing breadth and reflection, resulting in learning that is crammed and poorly developed (Shafer, 1995). They propose that students in accelerated courses do not have enough time to analyze critically subject material, to think about what they are reading, or to determine the substance of newly presented ideas. Labels such as

"McEducation" and "Drive-in-U" have been applied to universities that use accelerated formats for learning to emphasize, as an analogy, their relationship to fast food restaurants and their inferiority to more traditional schools. Nonetheless, available research indicates that accelerated courses appear to be effective in meeting students' expressed goals and facilitating content mastery (Grimes and Niss; 1989; Scott and Conrad, 1992). However, these studies focus on traditional college age students, are limited in scope and duration, and use grades, final exam scores, and pre- and post-tests as indicators of learning. They present only indirect and modest evidence that adult learners in accelerated courses can achieve equivalent learning outcomes in comparison with students in traditional courses.

### ***Research Problem and Purposes***

All colleges involved in the study espoused a learner-centered approach to their programs. Therefore, we considered current students' learning and attitudes, and also alumni attitudes toward the quality of these courses as relevant to this investigation. Partly from an awareness of the insufficiency of the empirical evidence for learning in previous research on accelerated courses (Scott and Conrad, 1992), and to ensure validity, we used summative, performance-based, measures of learning to assess more clearly the quality of student learning and content mastery. In addition, we agreed with scholars in adult learning who advocate the importance of adults applying new knowledge in real world contexts as a means to assess their learning (Kasworm and Marienau, 1997). To this end student responses to authentic case studies and problems were assessed to measure learning. The required answers for these scenarios reflected the general objectives of each course.

Inextricably, there is also the matter of common sense. All of the accelerated courses in this study occur over a 5 week period of time and involve 20 classroom contact hours. The traditional versions of these same courses at the colleges occur over a 16 week period of time and involve 40 contact hours. Intuitively, one would be likely to question (and faculty regularly do) whether students in the accelerated courses learn as well as students in the traditional versions of the same courses—whether there is a relationship between time in class and length of course on student learning and attitudes. In this regard an important research question for this study was: If the same instructor teaches a traditional version (16 weeks, 40 contact hours) and an accelerated version (5 weeks, 20 contact hours) of the same course using the same texts, the same tests, and covering the same learning objectives with very similar teaching methods, will there be a significant

difference in learning or attitude between students in the traditional class and students in the accelerated class?

### *Theoretical Perspectives*

Theoretically, what might account for adult learning and attitudes in accelerated courses? As research consistently shows a strong positive relationship between student motivation and learning (Pintrich and Schunk, 1996), a number of motivational theories were considered because of their specific relationship to the characteristics of adult learners and accelerated learning formats. The Motivational Framework for Culturally Responsive Teaching (Wlodkowski, 1999) provides a holistic model directly applicable to adult learning. 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).

A consistent motivational assumption underlying much adult learning theory is that adults strive to be more self-directed and autonomous (Brockett & Hiemstra, 1991). This personal attribute would be an asset to learning in the intensive and relatively short duration of an accelerated course. Related to self-direction is Stratil's (1988) finding that adults as a group, when compared to younger college students, are more willing to make sacrifices to achieve academically. Learners in accelerated courses have only to concentrate on one course at a time for 5 weeks at a time, unlike traditional students who face four or five courses and must allocate their time over 16 weeks. In this regard goal-setting research may be informative (Locke and Latham, 1990).

### *Sample Selection*

Three private urban colleges participated in the study. All are general liberal arts colleges. Two of the institutions are located in metropolitan areas exceeding a population of a million people and the third school is in a city of 250,000 people. Each college features a school or program (in excess of a thousand students) that primarily serves working adult learners. With the exception of the younger students in the traditional courses (16-week format) in this study, the adult students were enrolled in courses in these adult oriented programs. For all of these adult programs, the 5-week accelerated course is the main delivery system for learning. The instructors of these courses include faculty from the traditional college and affiliate faculty who

have full-time jobs apart from the college. All instructors receive special training to teach within the 5-week accelerated course format.

For the study the researchers chose six accelerated courses from the undergraduate business management programs of the three colleges: Accounting II, Business Law, Corporate Finance, Introduction to Philosophy, Management, and Management of Human Resources. These courses were chosen because they had experienced instructors, were highly enrolled, existed in the same accelerated format (5-weeks and 20 contact hours), and had very similar curricular and learning objectives across the colleges. They also represented, in content, a variety of disciplines: math, business, law, and philosophy.

To study alumni attitudes, alumni of the three colleges were asked to evaluate only three of the six accelerated courses: Corporate Finance, Management, and Management of Human Resources. These courses were most consistent with their academic major and were likely to ensure the highest response rate.

Among the six accelerated courses selected, only three (Accounting II, Business Law, and Introduction to Philosophy) could be used to study the relationship between time in class and length of course on student learning and attitudes. These were the only three courses that could be arranged to have the same instructor teach a traditional and an accelerated version of the course in the time allotted for the study.

For the undergraduates, the sampling frame was courses. Once the appropriate courses were selected, all students within those courses were included in the study. As normal registration procedures applied, there was no interference with assignment of students to particular course sections. Among the six accelerated courses selected, a total of 188 adult students participated. The average age of the students was 36 with a standard deviation of 8.1. Most of these students were Caucasian (79.2%) and women (72.3%). The largest ethnic minority groups were Hispanic (9.4%) and African American (3.8%).

In the three accelerated courses used to study the relationship between time in class and length of course on student learning and attitudes, 66 adult students were selected. Their average age was 35.9 with a standard deviation of 8.8. They had an average of 19 years work experience. Most of these students were Caucasian (78.8%) and women (71.2 %). The largest ethnic minority groups were Hispanic (10.6%) and African American (3.0%). The average age of the 66 younger students in the three traditional courses was 20.2 with a standard deviation of 3.2. They had an average of 4 years work

experience. Most of these students were Caucasian (63.6%) and women (56.1%). The largest ethnic minority groups were Hispanic (13.6%), Asian/Pacific Islander (9.1%), and African American (4.5%).

Alumni were graduates (1995 and 1996) of the business management programs at the three colleges. As a group, the graduates totaled 800 people and represented a sample that had experienced a much wider range of instructors than the current students. Surveys were sent to 121 randomly selected alumni: 87 were returned, for a return rate of 72%. The average age of the respondents was 38.4 with a standard deviation of 7.3. Most of these students were Caucasian (83.9%) and women (69.0%) with the largest ethnic minority groups being Hispanic (6.9%), Asian/Pacific Islander (5.7%), and African American (2.3%).

## Methodology and Findings

### *Current Students' Perceptions and Attitudes*

We developed a 22 item self-report survey, using Likert type response categories, based on the Motivational Framework for Culturally Responsive Teaching (Wlodkowski, 1999) and indicators of instructional quality. The Cronbach's alpha for the entire scale is .93. Historically, the interaction between student motivation and instruction strongly relates to student achievement (Uguroglu & Walberg, 1979). The self-report survey offered four response choices for each item: strongly agree, agree, disagree, and strongly disagree. It was administered in the last 2 hours of the final class session. A total of 188 students responded. Fifteen students did not complete the survey either because they were absent or did not wish to respond. Student responses to items of particular importance to motivation are:

*Overall, this course was a valuable learning experience.*

Strongly Agree: 58.5% + Agree: 40.0% = 98.5%

*The teacher did not respect student opinions and ideas.*

Strongly Disagree: 89.7% + Disagree: 8.7% = 98.4%

*I have used information or skills that I have learned in this course.*

Strongly Agree: 31.3% + Agree: 55.9% = 87.2%

*This course was relevant to my goals.*

Strongly Agree: 44.6% + Agree: 41.0 = 85.6%

*This course helped me to be effective at what I value.*

Strongly Agree: 28.4% + Agree: 58.2% = 86.6%

*The classroom climate for this course was friendly and respectful.*

Strongly Agree: 66.2% + Agree: 31.3% = 97.5%

*This course challenged me to think.*

Strongly Agree: 67.7% + Agree: 29.2% = 96.9%

*In this course I felt included.*

Strongly Agree: 57.7% + Agree: 39.2% = 96.9%

*This course was meaningful for me.*

Strongly Agree: 43.8% + Agree: 47.4% = 91.2%

When strongly agree and agree categories were combined—including the transposing of the second item's response categories—the average agreement for these nine items was 93.2% while the average for all 22 items in the survey was 94.3%.

A second tier of items in the survey are those that deal directly with instruction and materials. These items and student responses are:

*Course text was a good resource for achieving the course objectives.*

Strongly Agree: 42.6% + Agree: 51.3% = 93.9%

*The teacher was not a skilled instructor.*

Strongly Disagree: 83.6% + Disagree: 12.8% = 96.4%

*Course module and/or syllabus served as an effective learning guide.*

Strongly Agree: 22.8% + Agree: 65.3% = 88.1%

*This course was not well taught.*

Strongly Disagree: 81.3% + Disagree: 13.0% = 94.3%

*The teaching methods in this course helped me to learn.*

Strongly Agree: 44.3% + Agree: 49.5% = 93.8%

*Grading standards for this course required college level performance.*

Strongly Agree: 50.8% + Agree: 46.2% = 97.0%

*The way I have been evaluated in this course, thus far, seems fair.*

Strongly Agree: 52.1% + Agree: 45.9% = 98.0%

*The way I have been evaluated in this course, thus far, seems sensitive to my capabilities.*

Strongly Agree: 38.7% + Agree: 54.1% = 92.8%

After transposing response categories in the second and fourth items, the average agreement for these eight items was 94.3%.

The corresponding average agreement of the 66 adult students in the accelerated courses for all 22 items in the survey was 93.8%, with averages of 92.9% and 93.6% respectively for those categories of items (identified above) of particular importance to motivation and instruction. The corresponding average agreement of the 66 younger students in the traditional courses for all 22 items in the survey was 94.3%, with averages of 92.7% and 94.5% respectively for those categories of items of particular

importance to motivation and instruction. The only statistically significant difference ( $p < .05$ ) found between these two student groups among the 22 survey questions was for the third item of the second tier: "The course module and/or syllabus served as an effective learning guide." Although 90.8% of the students in the traditional courses (they use a syllabus) strongly agreed or agreed with this item, only 78.1% of students in accelerated courses (they use a module) strongly agreed or agreed with the same item.

### *Alumni Perceptions and Attitudes*

With the exception of placing two items in the past tense, the same items in the self-report survey used with the current students were sent to the alumni. Added to the four possible responses from strongly agree to strongly disagree was a fifth: cannot adequately remember. Alumni were asked to evaluate only the courses they had completed from among Corporate Finance, Management, and Management of Human Resources; 84% had completed the Management Course; 76% had completed the Corporate Finance Course; and, 74% had completed the Management of Human Resources Course.

When strongly agree and agree categories were combined (with the transposing of responses in the second item) for the nine items of particular importance to motivation in the survey, their average agreement was 88.1%. The average agreement for the eight items dealing more directly with instruction and materials (transposing the second and fourth items in that tier) was 80.1%. The corresponding average agreement for all 22 items in the survey was 84.4%.

### *Current Student Learning and Content Mastery*

For the six courses selected for this investigation, faculty experts created summative questions and case studies based on two or more of the major objectives of these courses. These questions and case studies also were administered to the students according to a standardized script in the last 2 hours of the final class session. The instructors were not aware of the contents of the questions and case studies until the third week of the 5-week courses and the eighth week of the 16-week courses. The course instructors, independent of the faculty experts' evaluation, could grade these final assessments. However, none of these assessments could be counted for more than 20 percent of a student's final grade. Neither the instructors' assessments nor the students' grades were included in the learning measures used in this study, nor was this information made available to the faculty experts.

For each course, three faculty experts created the dimensions of performance, the related questions and case studies, and the criteria for assessment; they also assessed the students' written question and case study responses. The faculty experts worked collaboratively reviewing course syllabi/modules and objectives to develop their case studies and assessments. One of us facilitated these processes, but was 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.

We selected faculty experts according to the following criteria: Each had to be an experienced teacher of accelerated courses who was well respected as an instructor by faculty and students. Each faculty expert taught in the discipline represented by the course. With the exception of the philosophy course, the faculty experts were professionally employed as well (e.g., accountants and lawyers). The faculty experts were not aware of any of the demographics (age, gender, etc.) of the students nor the course format (traditional or accelerated) from which the student papers were selected. For the portion of the study which included students from traditional courses as well as accelerated courses, each team of three faculty experts had at least one faculty member who currently taught in a traditional program and one who taught in an accelerated program.

All assessments required students' demonstration of critical thinking and application of a learned knowledge base. With the exception of the philosophy course, students had to analyze the cases, find the most pertinent issues and evidence, relate this understanding to theory, and offer recommendations or resolve problems.

To assess the quality of student learning the dimensions of performance were: (a) for Accounting II: calculation for financial accounting, conceptual understanding for financial accounting, calculation for managerial accounting, conceptual understanding for managerial accounting, and writing skills; (b) for Business Law: legal reasoning and writing skills; (c) for Introduction to Philosophy: critical thinking and writing skills; (d) for Corporate Finance: calculation, interpretation, quality of recommendations, and writing skills; (e) for Management: critical thinking, practical application, knowledge base, and writing skills; and (f) for Management of Human Resources: critical thinking, knowledge base, and writing skills.

Three faculty experts assessed each student response for each dimension of performance. Table 1 offers an example of the dimensions of performance and criteria applied by the faculty experts for philosophy. The scoring system

Table 1. *Dimensions of Performance and Criteria Applied to Student Responses for Introduction to Philosophy*

	<b><u>Critical Thinking</u></b>
Excellent	<ul style="list-style-type: none"> <li>• Interprets the argument both broadly and in detail.</li> <li>• Usually offers reason for interpretation and refers to specific words in the passage.</li> <li>• Shows awareness of multiple interpretation possibilities and may even present and explicitly compare alternative position, or applies the question/passage to broader philosophical issues.</li> <li>• Presents the argument accurately.</li> </ul>
Very Good	<ul style="list-style-type: none"> <li>• Interprets the argument both broadly and in detail, but to a lesser degree than an excellent essay (may, for example, only consider one detail of the argument).</li> <li>• Offers some reasons for interpretation (may refer to some specific words in the passage).</li> <li>• Shows some awareness of multiple interpretation possibilities or begins to apply the question to broader philosophical issues (but the awareness or application may be rudimentary).</li> <li>• Presents the argument accurately (with perhaps a few minor details missing).</li> </ul>
Satisfactory	<ul style="list-style-type: none"> <li>• Interprets the basic point of the argument, but pays little attention to the details of the argument.</li> <li>• Few or no reasons given for the interpretation and little or no citing of the text or mention of specific words.</li> <li>• Shows no awareness of multiple interpretation possibilities, or no application of the basic question to broader philosophical issues.</li> <li>• Inaccurate presentation of the argument.</li> </ul>
Not Acceptable	<ul style="list-style-type: none"> <li>• Little or no grasp of the basic point of the argument.</li> <li>• Few or no reasons given for the interpretation; little or no citing of the text or mention of specific words.</li> <li>• No awareness of multiple interpretation possibilities, or no application of the question to broader philosophical issues.</li> <li>• Major inaccuracies in the presentation of the argument.</li> </ul>

	<u>Writing Skills</u>
Excellent	<ul style="list-style-type: none"> <li>• Shows substantial depth, fullness, and complexity of thought.</li> <li>• Demonstrates clear, focused, unified, and coherent organization.</li> <li>• Is fully developed and detailed.</li> <li>• Evidences superior control of diction, syntactic variety, and transition (may have a few minor flaws).</li> <li>• The answer forms a cohesive whole.</li> </ul>
Very Good	<ul style="list-style-type: none"> <li>• Shows some depth and complexity of thought.</li> <li>• Is effectively organized.</li> <li>• Is well developed, with supporting detail.</li> <li>• Demonstrates control of diction, syntactic variety, and transitions (may have a few flaws).</li> <li>• Shows clarity of thought, but may lack complexity.</li> <li>• The answer is somewhat fragmented.</li> </ul>
Satisfactory	<ul style="list-style-type: none"> <li>• Is organized.</li> <li>• Is adequately developed, with some detail.</li> <li>• Demonstrates competent writing (may have some serious flaws).</li> <li>• May distort or neglect parts of the question.</li> <li>• May be simplistic or stereotyped in thought.</li> <li>• Responds to the question point by point.</li> </ul>
Not Acceptable	<ul style="list-style-type: none"> <li>• May have generalizations without supporting detail or detail with generalizations.</li> <li>• May be undeveloped.</li> <li>• May show patterns of flaws in language, syntax, or mechanics.</li> <li>• Is so incompletely developed as to suggest or demonstrate incompetence.</li> <li>• Is wholly incompetent mechanically.</li> <li>• Does not address all aspects of the question and is completely fragmented.</li> </ul>

for the criteria 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 we multiplied the average rating of the three faculty experts for each student's

response for each dimension of performance by a factor of 2. Table 2 indicates this numerical range and its corresponding qualitative values.

Using a paired comparison method, interrater reliability for each course was 90% or higher. Table 3 indicates individual student average scores attained across all applied dimensions of performance in the accelerated courses. Due to the limited amount of time faculty experts could volunteer and the need to have equal numbers of performance assessments to accommodate interrater reliability measures, random selection techniques were used to delete the required number of student responses resulting in the assessment of a total of 117 student responses for the six accelerated courses.

Keeping in mind that the instructors, academic performance tasks, faculty experts, and criteria for performance differ among the six accelerated courses, the average for all students across all applied dimensions of performance was 5.10 (more than satisfactory). The average for all students for writing skills in the six courses was 5.56 (very good). The percentage of all students who averaged 4.00 (satisfactory) or better on all dimensions of performance for the accelerated course they took was 80.3%. Thus, on the

Table 2. *The Numerical Range and Corresponding Qualitative Values for Faculty Experts' Ratings*

Numerical Range	Experts' Rating
7-8	near excellent to excellent
6-6.99	very good to near excellent
5-5.99	more than satisfactory to very good
4-4.99	satisfactory to more than satisfactory
3-3.99	less than satisfactory to satisfactory
2-2.99	not acceptable to less than satisfactory

Table 3. *Individual Student Averages across All Applied Dimensions of Performance for Accelerated Courses (n = 117)*

Range of Averages (Experts' Rating)	Number of Students	Percentage of Total
7-8 (near excellent to excellent)	9	7.7%
6-6.99 (very good to near excellent)	27	23.1%
5-5.99 (more than satisfactory to very good)	29	24.8%
4-4.99 (satisfactory to more than satisfactory)	29	24.8%
3-3.99 (less than satisfactory to satisfactory)	16	13.7%
2-2.99 (not acceptable to less than satisfactory)	7	5.9%

average, students in these accelerated courses are performing more than satisfactorily at college level work. Four out of five of them have met a standard of satisfactory to excellent in the courses that have been studied.

### *Relationship Between Time in Class and Length of Course on Student Learning*

A total of 132 students were in this phase of the study: 66 students in traditionally scheduled courses and 66 students in accelerated courses. Before the courses were taught each instructor participated in a dialogue with us to establish the parameters for the courses and to make the traditional and accelerated versions of each course as similar as possible. All instructors signed a letter of agreement that outlined the expectations for the courses and the essential conditions of the research. These expectations and conditions were identical for all courses. Follow-up interviews with the faculty confirmed that all agreements had been maintained throughout the courses.

The three faculty experts' assessment of each student response for each dimension of performance is summarized in Table 4, where the responses for students in traditional courses and students in accelerated courses can be easily compared. When accelerated courses are compared to traditional courses there are: (a) no trends in student performance scores favoring either format; and (b) no statistically significant differences between the average performance scores for any course for any dimension of performance with the exception of one: financial accounting—favoring the accelerated format. This difference, although significant, was small. Because no trends in student performance favor either format and no other statistically significant differences in performance exist, this single significant difference appears to be due to chance.

To place these findings in a more general context, the average for all students in traditional courses across all applied dimensions of performance is 4.66 (more than satisfactory). Among these students, 77.6 percent average 4.0 (satisfactory) or better across all applied dimensions of performance. The average for all students in accelerated courses across all applied dimensions of performance is 4.95 (more than satisfactory). Among these students, 81.0 percent average 4.0 (satisfactory) or better across all applied dimensions of performance. Therefore, regardless of format, traditional or accelerated, in terms of academic learning, four out of five students 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 4. *Dimensions of Performance Averages for Students According to Course and Format*

Course	Performance Averages	
<u>Introduction to Philosophy</u>	Critical Thinking Traditional = 4.8 (more than satisfactory) $n = 25$ Accelerated = 4.6 (more than satisfactory) $n = 25$	
	Writing Skills Traditional = 5.0 (more than satisfactory) $n = 25$ Accelerated = 5.0 (more than satisfactory) $n = 25$	
	<u>Accounting II</u>	Financial Accounting, Calculation* Traditional = 3.0 (less than satisfactory) $n = 20$ Accelerated = 3.4 (less than satisfactory) $n = 20$
		F. A. Conceptual Understanding Traditional = 3.6 (satisfactory) $n = 20$ Accelerated = 3.6 (satisfactory) $n = 20$
		Managerial Accounting, Calculation Traditional = 6.0 (very good) $n = 20$ Accelerated = 6.8 (near excellent) $n = 20$
		M. A. Conceptual Understanding Traditional = 3.8 (satisfactory) $n = 20$ Accelerated = 5.4 (more than satisfactory) $n = 20$
Writing Skills Traditional = 5.0 (more than satisfactory) $n = 20$ Accelerated = 4.8 (more than satisfactory) $n = 20$		
<u>Business Law</u>		Legal Reasoning Traditional = 4.0 (satisfactory) $n = 13$ Accelerated = 3.8 (satisfactory) $n = 13$
	Writing Skills Traditional = 6.0 (very good) $n = 13$ Accelerated = 6.8 (near excellent) $n = 13$	

\* $p < .05$ 

### Discussion and Conclusion

The self-report survey consistently indicates that current adult students' attitudes toward the accelerated courses are positive. When strongly agree

and agree categories are combined, the average for all 22 items in the survey is 94.3%, with the average for the nine items assessing student perceptions of motivational conditions being 93.2%, and the average for the eight items assessing student perceptions of instruction and materials being 94.3%. In addition, when the attitudes of the adult students in the accelerated courses are compared to the attitudes of the younger adult students in the traditional versions of the same courses, they remain positive and similar, with averages of 93.8% and 94.4% respectively across the 22 items of the survey. The one significant difference ( $p < .05$ ) between the two groups is that the students (90.8%) in the traditional courses favored their course syllabi more than students (78.1%) in the accelerated courses favored their modules; although important to note, this difference is not disruptive of the overall trend. Viable reasons for such affirmative student perceptions are that the motivational conditions for inclusion, positive attitude, meaning, and competence are being met along with effective instruction and materials. However, historically college student evaluations of courses generally are positive and indicative of student satisfaction (Astin, 1993).

When alumni perceptions of the accelerated courses of Management, Human Resource Management, and Corporate Finance are assessed with the same self-report survey, the results are also positive. Their average agreement across the 22 items is 84.4% with the average for the nine items assessing their perceptions of motivational conditions being 88.1%, and the average for the eight items assessing their perceptions of instruction and materials being 80.1%. One must keep in mind that these courses were part of their major and their positive attitudes may be related to this fact (Astin, 1993). Nonetheless, these alumni ( $n = 87$ ) were randomly selected from among 800 graduates from the three colleges and represent a much broader range of course sections and instructors.

Because self-report surveys often are critiqued for having limited validity, the documentation of learning of current adult students provides more substantial evidence of the effectiveness of accelerated courses as learning formats for working adults. The tasks and criteria created by the faculty experts were rigorous. Based on the objectives for the six courses in this study, 80.3% of the students provided evidence of learning and subject mastery that was rated from satisfactory to excellent. Their average across all applied dimensions of performance for each course was 5.1, a score considered by the faculty experts to be indicative of a more than satisfactory performance. As there is no nationally standardized test for these subject

areas (Osterlind, 1997), there is little opportunity to find a wider context for comparing the quality of these achievements.

Therefore, in a relative sense, comparing the learning of adult students in accelerated versions (5-week) with the learning of students in traditional versions (16-week) of the same courses provides one of the few, albeit quite imperfect, ways available to gauge the quality of adult learning in accelerated courses. When student performance averages for the accelerated version of each course are compared with the traditional version of that same course, only one significant difference is found among a total of nine possible dimensions of performance (as shown in Table 4). The average score ( $p < .05$ ) is higher for the students in the accelerated course in the Financial Accounting, Calculation dimension. This difference is likely due to chance. It may also reflect the older students' familiarity with some computational tasks.

This performance evidence suggests that for the three courses investigated in this study, students demonstrate learning that is not significantly distinguishable according to format—traditional or accelerated. Thus, the differences in time between the traditional courses (16 weeks, 40 contact hours) and the accelerated courses (5 weeks, 20 contact hours) do not relate to a discernable difference in learning between two groups of students when each group is taking the same course, with the same instructor, texts, tests, and very similar instructional methods.

However, the students in the accelerated courses are different from the students in the traditional courses. They are, on the average, 15 years older with 15 years more work experience. These differences are part of a constellation of characteristics that may provide an advantage for adult students in accelerated formats. They may be more self-directed than younger adult students (Merriam & Caffarella, 1999). Their ability to focus and self-regulate their learning may allow them to read and study at rates which compensate for the shorter duration of accelerated courses. In addition, proximal goals are far more achievable than distal goals (Locke & Latham, 1990). Learners in accelerated courses have only to concentrate on one course at a time for 5 weeks at a time, unlike traditional students who face four or five courses and must allocate their time over 16 weeks. Finally, the research of Eccles (1998) indicates students to be highly motivated by the identity and attainment value of academic tasks. It is likely that many of the adults in the accelerated courses are in the process of using this learning to acquire better jobs and to advance their careers. It may be that the greater work experience, self-direction, and personal motivation of the adult students

provide for an optimal interaction with the proximal goals of instruction at an accelerated pace, which allows them to be effective learners and to achieve learning indistinguishable from younger adult students in traditional courses, even though the adults' *duration* of time and class contact hours for learning are significantly less.

The relationship of student learning and student time involved in learning is very complex. The findings of this study touch upon the possibility that factors such as motivation, concentration, work experience, self-direction, and (paradoxically) an abbreviated learning experience may catalyze learning. Time itself may not matter for learning accomplishment to the degree conventional wisdom asserts it does.

The findings of this research reflect the evidence of most studies assessing accelerated learning formats: that students, especially adults, appreciate their effectiveness and the strong interest they cultivate (Scott & Conrad, 1992). Both graduates and current students from the Business Management Programs of three private urban colleges indicate that conditions of intrinsic motivation and effective instruction can permeate these courses. There is initial evidence that adults in accelerated courses do learn satisfactorily and in a manner that meets the challenge of traditional college coursework.

### **Issues for Further Research**

A shortcoming of this study was it did not compare the learning or attitudes of younger adult students in accelerated formats with younger adult students in traditional formats of the same courses. Nor did it compare adult students in these same circumstances. No courses at the three colleges offered large enough samples (adults in traditional courses or younger adult students in accelerated courses) to make these comparisons. These studies need to be done.

The personal motivation, self-direction, and goal orientation of the adult students were assumed based on research studies in the literature. Measures and comparisons of the personal motivation and self-direction of adult students in accelerated and traditional courses should be conducted to ascertain if the assumed differences hold true.

The fact that there were 15% more women in the sample of adult students in accelerated courses than in the sample of younger adult students in the traditional courses should be noted. Eccles (1998) found in her studies that, in general, female students tend to be more motivated than are male students by the identity and attainment value of academic tasks. There may

be some effects related to learning because of the preponderance of women in this investigation. The effects of gender need to be further studied.

The colleges in this study are private schools and the adults in these accelerated courses have self-selected to be there; thus, it is quite possible that other adults may not prefer accelerated formats or may have dropped out of these programs due to lack of success. Further research should investigate these possibilities as well as the retention patterns of adult students in accelerated courses to understand the variables that influence how adults respond to this format as well as what might be done to retain more adult students.

All courses, students, and alumni involved in this study were part of the Business Management programs of the three colleges. Researching the learning and attitudes of adult students in accelerated courses in other disciplines and domains of universities is paramount to creating a body of research that can more adequately inform the understanding and improvement of accelerated formats for learning throughout higher education.

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