

2007

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### Recommended Citation

Beaver, William and Paul, Stephen T. (2007) "The CLEP Program: An Evaluation and Assessment at a Small Private University," *Mid-Western Educational Researcher*. Vol. 20: Iss. 4, Article 3.  
Available at: <https://scholarworks.bgsu.edu/mwer/vol20/iss4/3>

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# *The CLEP Program: An Evaluation and Assessment at a Small Private University*

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## **Abstract**

*The Educational Testing Service (ETS) created the College Level Examination Program (CLEP) in 1965 and over the years it has become a staple of American higher education. In order to better understand the ramifications of the CLEP program, this article provides a brief history of CLEP and reexamines some of the findings of earlier research. The present study investigates new areas by addressing several research questions. For instance, what are the impacts of a student's age, academic ability, gender, and previous learning experiences in regard to passing a CLEP exam? How much time do students spend in preparing for CLEP, and how much do they learn compared to regular college course? The major findings of the study are that grade point average (GPA) and time spent in preparation were associated with success on the CLEP, while age and gender were not. In addition, previous learning experiences were also related to a successful CLEP exam. However, the exact nature of the previous learning is unclear, since having a high school course in the specific subject area was not related to CLEP success.*

The College Level Examination Program or CLEP has become a staple of American higher education. Over 2900 colleges and universities participate in the program developed by the Educational Testing Service (ETS). Each year approximately 200,000 CLEP exams are administered at 1,300 testing centers across the nation. Most exams consist of 100 multiple-choice questions that correspond to an introductory-level course in 34 disciplines (The College Board, 2006). If a student gets half or more of the questions correct, they have successfully "CLEPped" a course, which means that they will receive credit for the course that coincides with the appropriate exam (see Table 1 for the most current list of CLEP exams available).

Despite the popularity and widespread use of CLEP in higher education, research examining the CLEP program has been sparse. Most of the studies were conducted in the 1970s when CLEP was gaining in popularity. Many of these early studies (Cashin 1974; Enger & Whitney, 1974; Losak & Lin, 1973; Stetson, 1971; Tittle, Weiner, & Phelps, 1975) focused on two basic questions: First, are CLEP exams valid measures of the courses they are supposed to represent? Second, how had students who received college credit by passing CLEP exams fared academically thereafter?

Although the issues examined by these early studies are obviously important, the continued widespread use of CLEP raises other areas of concern for educators and raises several research questions. For instance, what are the potential impacts of such variables as academic ability, age, gender, and prior learning experiences in regard to passing a CLEP exam? We also wanted to investigate the amount of time students spend studying for CLEP, as well as how much students learn while preparing for a CLEP exam compared with traditional college courses. To answer these questions, we provide a brief history of the CLEP program and review the relevant literature. We then describe the current study and provide a discussion of the results and conclusions.

## *CLEP—A Brief History*

The CLEP program began in 1965. ETS responded to the emerging idea that there should be some alternate mechanism for students to earn college credits apart from attending a class. With this idea in mind, the original CLEP program had three expressed purposes: (1) To allow students to convert life experiences into college credit; (2) To exempt students from basic college course requirements if they could demonstrate certain minimum levels of competence; and (3) To shorten the time period to obtain a degree. To accomplish all of these, the CLEP program utilized two levels of multiple-choice tests: A general examination covering five basic areas, including composition, humanities, math, natural science, and social science/history that represented typical courses taken by college freshman and sophomores; and an additional thirty (30) exams in specific subject areas, including psychology, biology, and other disciplines (Educational Testing Service, 1972).

At first it was believed that CLEP would be used largely by older, non-traditional students to demonstrate knowledge gained from life experiences but this was not the case. By the late 1960s, colleges had begun to use the general examination tests to exempt incoming freshman from general education requirements. For instance, at the University of Iowa 10 percent of the freshman received some CLEP credit (Enger & Whitney, 1974). At Utah State University, 25 percent of the freshman class opted to take the CLEP general exam and 80 percent earned college credit (Levin, 1984). Most interesting, however, was the experience of San Francisco State College. In 1971, the school decided to administer the CLEP general exams to all incoming freshman, and like many schools in those days, San Francisco State paid for and also administered the tests. Somewhat unexpectedly, 38 percent of the freshman class became instant sophomores. That is, they had fulfilled their general education requirements by passing the five CLEP general exams.

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What was to account for this miraculous performance? The answer could be traced to the fact that each school was free to determine what courses they would accept for credit, the number of credits awarded, and most importantly, the scores deemed sufficient to pass each test. San Francisco State had decided that any score at or above the 25<sup>th</sup> percentile was adequate to be granted course-credit. The school estimated that had the 50th percentile been the cut-off, only 7 percent would have been instant sophomores. Research by Archer and Nickens (1977) indicated that the 25<sup>th</sup> percentile was not an appropriate level to award course credit. Perhaps not surprisingly, the following year for both educational and financial reasons, the school adopted the 50th percentile as the cut-off point (Whitaker, 1972).

What occurred at San Francisco State illustrates the major problem with early CLEP exams—without uniform standards, the credits awarded depended on each institution involved. This not only raised the question of fairness but also had the potential for abuse. For instance, schools began to use CLEP as a recruiting tool. In the mid-1970s, representatives of a new college in Texas traveled to local high schools to administer free CLEP exams, and then promptly awarded college credits on-the-spot in order to lure new students (Levin, 1984).

Despite these problems, it is fair to say that CLEP caught on quickly. By the early 1970s more than 1,000 colleges and universities were granting college-credit based on CLEP scores. During the 1975-76 school year alone, 220,000 CLEP general exams were administered (Stecher, 1977). In some ways, the rapid acceptance of CLEP is surprising. Certainly from any traditional point of view, CLEP was a radical change. The notion that a student could receive credit for a semester long course by simply passing a multiple-choice exam undoubtedly raised some eyebrows. Indeed, one early critic of CLEP called it “the great credit giveaway” (Stecher, 1977).

Nonetheless, there were larger social and demographic forces at work that would mitigate these concerns. First, the 1960s were a time of questioning societal traditions, and higher education was not excluded. Long-held beliefs came under scrutiny, including the assumption that attending classes was the only vehicle to obtain a college degree. It was argued that other options should be available to students with the equivalent experience or aptitude. These students should be allowed to advance directly into higher-level courses saving both time and money (Stetson, 1971). Secondly, the popularity of CLEP was tied to the fact that higher education was in the midst of the “baby boom.” Many schools had experienced large enrollment increases and resources were stretched thin. By allowing students to test out of introductory-level courses, classrooms and faculty would be freed-up for advanced curricular offerings (Tittle, et al., 1975).

Not only were colleges using CLEP, but high schools were using it as well. By the late 1970s high school students with good academic records were being encouraged to take CLEP exams and earn college credits. One high school on

Long Island began to use CLEP in a rather innovative way. Seniors with good academic records were encouraged to take a humanities course designed for them. Near the end of the course, the CLEP exam was given to these students in order to earn college-credit (Levin, 1984). Eventually, the Advanced Placement program (AP) would replace this rather unique use of CLEP. The AP program was more academically palatable: High school students would actually take something roughly equivalent to a college-level course and be tested on material actually covered in the course as opposed to simply passing a test.

By the mid-1980s however, the baby boom was over. To survive, many colleges needed all the tuition dollars they could procure. Hence, it made less and less financial sense to allow students to simply test out of freshman-level courses based on CLEP. In more recent years, the CLEP program has focused on exams in specific subjects. These exams cover over 30 different areas at the introductory-level.

Each exam is developed by a faculty committee that formulates a pool of multiple-choice questions. Another committee with faculty that teach the corresponding course at various institutions around the country reviews and selects the specific questions to be used for the exam. The basis for selecting a particular question is whether a typical B or C level student who completed an actual course in that topic would be expected to answer the question correctly. A student must get at least one-half of the one-hundred questions correct to receive credit for a course. According to *The College Board*, the pass rate is 50 percent or less (The College Board, 2003).

Each exam currently costs \$60 (although many colleges charge an additional administration fee) and can take up to 90 minutes to complete. The largest cohort taking CLEP exams are those aged 30 and older (34 percent), while traditional-aged students 19-22 make up the next largest group (24 percent). Individuals who register for a CLEP exam are encouraged to first contact their school to determine the CLEP policy there. Not all schools accept CLEP exam performance for course credit. Among the more than 2,800 colleges and universities that do grant CLEP credit, policies differ in terms of which CLEP exams will replace certain courses as well as what minimum scores on the exams are required (The College Board, 2006). The most recent innovation in the CLEP program is a computer-based format implemented in 2002. Taking an exam via computer allows students to receive immediate results, which ETS hopes will make the tests more popular (The College Board, 2002).

### *Literature Review*

Most of the studies examining CLEP appeared in the 1970s. As the program grew in popularity, researchers were prompted to scrutinize the basic goals of the CLEP program. For instance, how had students who had passed all or part of the CLEP general exams fared academically compared to non-CLEP students? In general, the research indicates that CLEP students did as well or better than those students not

Table 1

*Current listing of CLEP exams available within major areas (College Board, 2006).*

Major Area (and specific examinations within area)	
<b>Composition and Literature</b>	
• American Literature	• English Literature
• Analyzing and Interpreting Literature	• Freshman College Composition
• English Composition	• Humanities
<b>Foreign Languages</b>	
• French Language (Levels 1 & 2)	• Spanish Language (Levels 1 & 2)
• German Language (Levels 1 & 2)	
<b>History and Social Sciences</b>	
• American Government	• Western Civilization I: Ancient Near East to 1648
• Human Growth and Development	• Western Civilization II: 1648 to the Present
• Introduction to Educational Psychology	• Science and Mathematics
• Introductory Psychology	• Biology
• Introductory Sociology	• Calculus
• Principles of Macroeconomics	• Chemistry
• Principles of Microeconomics	• College Algebra
• Social Sciences and History	• College Mathematics
• U.S. History I: Early Colonizations to 1877	• Natural Sciences
• U.S. History II: 1865 to the Present	• Precalculus
<b>Business</b>	
• Financial Accounting	
• Introductory Business Law	
• Information Systems and Computer Applications	
• Principles of Management	
• Principles of Marketing	

taking the exams. For instance, Losak and Lin (1973), after examining the academic records of junior college students, found that those who had received CLEP credit did as well academically as non-CLEP students. Enger and Whitney (1974) reported that students earning CLEP credit had higher graduation rates than non-CLEP students, while Stetson (1971) discovered that CLEP students earned higher GPAs than non-CLEP students. These findings seem to confirm the notion that students who tested out of basic courses were successful in upper-division courses while expediting their progress toward a degree. All of this suggests that two goals of the CLEP program appear to have been achieved: To exempt certain students from basic courses, and in the process, to allow them to graduate sooner.

Perhaps more importantly, these studies indicate that it is the better students who succeed with the CLEP exams in the first place; students who would have performed well in college with or without the CLEP. Indeed, Sharon (1970) found moderate and positive correlations between those students who took and passed the CLEP general exams and their grades in college. Other research also supports this hypothesis. For example, students who scored well on the SAT achievement tests also did well on the corresponding CLEP tests (Cashin, 1974). Similarly, Johnson and Thomas (1973) discovered that students who had high scores on college placement tests were more likely to pass CLEP exams.

Although better students tend to do well on CLEP exams, there is little evidence to suggest that prior learning experience other than the academic variety had much impact. For instance, research indicates that students who had taken coursework in a given area had better results on the cor-

responding CLEP exam (Gussett, 1980). Gussett also found that students planning to major in a subject area had higher scores on the appropriate CLEP test than those not planning to major in the area. Obviously, students planning to major in a discipline are more likely to have taken coursework on the subject and have more interest in it than non-majors or students in outside majors.

Finally, if so-called life experiences were related to CLEP, it is logical to assume that older students would tend to have an advantage. Fagin (1971), however, was unable to find an association between performance on CLEP tests and age of the test taker. Despite a lack of supporting evidence, ETS maintains that prior learning is important with regard to CLEP success, particularly for non-traditional students (Educational Testing Service, 2002).

The other question most often investigated in these early studies was: Is CLEP a valid measure of college-level courses? In other words, if a student passes a CLEP exam, does that student have roughly the equivalent knowledge of students who would have taken the actual course? Tittle, et al. (1975) examined data from 246 students and discovered that CLEP scores were positively correlated ( $r = .62$ ) with scores on a final math exam. Conversely, weak correlations ( $r = .26$ ) were obtained between the CLEP English composition exam and a final essay in freshman composition, which the authors attributed to more subjective grading of essays. Cashin (1974) concluded that the CLEP general exams were reasonably valid measures of college achievement. He compared CLEP General Exam scores of 216 sophomores to their GPA in the corresponding subject matter area. In general, modest positive correlations were discovered between subject GPA and CLEP

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scores ( $r = .51$ ). In short, the research suggests that CLEP exams, other than those involving writing, are somewhat valid measures of college-level courses.

### *Present Study*

In order to increase our understanding of CLEP, the present study was designed to survey students who had just taken a CLEP exam. Our goals were to replicate some earlier research findings and also to investigate new areas. For example, previous research indicated that it is the better students (students with higher GPAs) who benefit most from CLEP. In fact, ETS advises colleges to treat CLEP as a type of scholarship for their better students (The College Board, 2002). To examine this issue, we planned to ask students their current grade point average (GPA) and how many courses they had successfully CLEPed, along with how many they planned to CLEP. We also believed that gender is a variable that needs to be examined. Studies indicate that females earn higher grades in college and work harder in their careers than males (Luzzo, 1994; Neville & Super, 1988; Wei & Lynn, 2001). Such commitment suggests that more females might take CLEP exams and also experience more success than males; a prediction that we examined in this study. In addition, research suggests that adult learners may be more self-directed, motivated, and have benefited from previous learning experiences (Draper, 1998; Tice, 1997; Titmus, 1999). Therefore, a goal of this research is to examine the possible differences between traditional students (18-22 years old) and non-traditional students (23 and older).

We were also curious about some pedagogical issues that CLEP raises. Therefore, this study includes questions regarding the amount of time students spent studying for a CLEP exam as well as the amount of time spent studying for a regular college course. Additionally, questions were asked concerning the students' perceptions of how much they learned studying for the CLEP exam compared with how much they learned in a traditional college course. We felt that these issues were very important when one considers that students are receiving credit for a college course without being in a classroom, the very foundation of the academic experience. Finally, because previous research (Gussett, 1980) indicated that prior learning experiences help with CLEP performance, a reasonable hypothesis is that students who had taken a high school course in the content of the CLEP exam may have some advantage on the CLEP compared with those who did not have that previous learning experience.

## Methods

### *Participants*

The participants were 227 students who enrolled in CLEP exams administered at the Robert Morris University (RMU) campus test center over approximately 14 months, mainly during the 2003-2004 academic year. Due to incomplete surveys, an actual count of non-RMU students cannot

be determined. However, 3 of the 227 respondents specifically indicated that they were not RMU students. Because 26 surveys were incomplete (e.g., only side one was completed), data from these surveys were not included in our analyses. Our final sample consisted of 201 participants (81 males and 120 females) of which approximately 99% were RMU students. No incentives were provided to the test takers for completing the survey.

### *Materials*

The present survey consisted of thirteen questions (see Table 2). Most questions were written as forced choice alternatives with the exception of self reported GPA, number of CLEP exams taken, number of CLEP exams expected to be taken, and a question asking participants about their primary motivations for taking the CLEP exam.

### *Procedure*

In order to protect the privacy of the participants, surveys were given to representatives at the campus test center to distribute to potential participants subsequent to the completion of each CLEP exam. This was somewhat of an imposition for the test center staff due to staffing difficulties. In fact, due to staffing changes, our survey was not distributed to CLEP takers for about two months during the academic year. Therefore, we did not additionally request the staff to track data concerning the number of missed opportunities to distribute the present survey, nor the number of participants who refused to complete the survey. It is known, however, that historically the RMU test center administers approximately 500 CLEP exams a year with an approximate pass rate of 60 percent. As the anonymous surveys were completed, the test center staff mailed them in batches to our address about once a week.

## Results and Discussion

The results are shown in Tables 3 through 6. These results confirm the findings of earlier studies that above average students are more likely to attempt to CLEP a course. In our sample ( $n = 201$ ), the average GPA was 3.37 on a 4-point scale. Moreover, a statistically significant correlation,  $r(199) = .23, p < .05$ , was found between GPA and the number of courses a student planned to CLEP, indicating that GPA appears to be related to one's confidence in academic abilities.

We speculate that instructors and academic advisors are more likely to suggest a CLEP exam to above average students if the need arises. Also, informal communications among students in regard to course selections and instructors is quite common. Therefore, it seems reasonable to assume that information concerning the difficulty of CLEP might also be passed-on informally. This would have the effect of discouraging some students from considering CLEP, particularly if they are average or below average students. As it turns out, our sample clearly indicated that CLEP was

Table 2  
Survey used in this study.

CLEP SURVEY				
Please circle or write-in your response to each question.				
1	Your gender is:	Female	Male	
2	Your age is:	A) under 19	B) 19-22	C) 23-29 D) 30 or older
3	What is your current grade point average?	_____		
4	Approximately how much time did you spend studying for the CLEP test?			
		A) 1-5 hours	B) 6-10 hours	C) 11-15 hours D) 16-20 E) 20+ hours
5	Compared to a regular college course, did you spend _____ time studying for the CLEP?			
		A) more	B) about the same	C) less
6	Compared to a regular college course, have you learned _____?			
		A) more	B) about the same	C) less
7	How difficult did you consider this CLEP test?			
		A) very difficult	B) average difficulty	C) not very difficult
8	To what extent did your previous learning experiences help you with this CLEP test?			
		A) a great deal	B) somewhat	C) a little D) not at all
9	Have you had a similar course in high school to this CLEP test?	Yes	No	
10	What was your primary motivation for taking this CLEP test?			
11	How many courses have you successfully CLEP'ed?	_____		
12	How many courses do you plan to CLEP?	_____		
13	Are you currently a student at Robert Morris:	Yes	No	

challenging. Indeed, 48.3 percent indicated that the CLEP exam was very difficult while only 2.5 percent thought the exam was not very difficult (49.2 percent indicated that the exam was of average difficulty).

The study also revealed a small but statistically significant correlation between time spent studying for the CLEP exam and GPA,  $r(199) = .14, p < .05$  (see Table 3). It should not be surprising that students with higher grades study more, since time and effort are related to success in college. Indeed, an increasing number of studies (Jansen & Bruinsma, 2005; Rau & Durand 2000; Ridgell & Lounsbury, 2004) point to the fact that students who study in a regular, intense, and disciplined fashion achieve higher GPAs. The researchers hypothesize that such behaviors are even more important for CLEP exams, since students generally receive very little outside help in terms of preparation and must be motivated to learn the material on their own. This usually means obtaining a textbook and then attempting to learn the material. Along these lines, there was also a significant correlation,  $r(199) = .41, p < .05$ , between GPA and passing CLEP exams. Not surprisingly, students with higher GPAs study longer and are more likely to achieve passing scores.

How much time do students spend studying for CLEP? The results make generalizations somewhat difficult. For instance, the most common amount of time spent studying was between 1 and 5 hours, which represented 30.3 percent of the sample. At the other range 20.4 percent studied 20 hours or more. Overall, 51.3 percent of the sample studied 10 hours or less, while 48.7 percent studied 11 hours or more. Taking into account the ETS data, which indicate that the pass rate is 50 percent or less for any given exam, and also taking into account that GPA, study time, and success on CLEP are related, time spent in preparation is crucial.

In terms of credit hours earned, CLEP is equivalent to a regular college course. Therefore, the present researchers

Table 3  
GPA as a function of time spent preparing for the CLEP exam;  $r(199) = .14, p < .05$ .

	Time Spent Preparing for the CLEP Exam				
	1-5 Hrs	6-10 Hrs	11-15 Hrs	16-20 Hrs	20+ Hrs
GPA	3.34	3.34	3.30	3.35	3.54
n	61	42	35	22	41
Percentage	30.3%	20.9%	17.4%	11.0%	20.4%

Table 4  
Average number of CLEP exams successfully completed as a function of age group;  $F(3, 197) = 8.0, p < .01$  ( $\eta^2 = 0.11$ ).

	Age Groups			
	Under 19	19-22	23-29	30 and Older
CLEP'ed	0.50	1.98	1.73	2.93
n	1	86	61	53

Table 5  
Average number of CLEPs passed as a function of whether previous learning helped;  $F(3, 197) = 6.09, p < .01$  ( $\eta^2 = 0.09$ ).

	How much did previous learning help?			
	A great deal	Somewhat	A little	Not at all
CLEP'ed	2.69	2.34	1.77	1.36
n	41	81	55	24

were also interested in knowing how much time students spent studying for CLEP exams compared with traditional college courses. The results indicate that 54.7 percent of our sample studied less time for the CLEP exam. This finding is understandable since a traditional college course lasts about 15 weeks (one semester). In our experiences as college

Table 6

Percentage of students who did and who did not have a similar course in high school as a function of the amount of study time invested in the CLEP exam;  $\chi^2(1, n = 201) = 6.18, p < .05 (\Phi = 0.18)$ .

High School Course?	How much time did it take you to prepare for the CLEP?	
	15 Hours or Less	16 Hours or More
YES	77.4% (n = 72)	22.6% (n = 21)
NO	61.1% (n = 66)	38.9% (n = 42)

instructors and academic advisors, students do not typically spend an entire semester preparing for a CLEP exam—just part of one.

On the other hand, it is interesting to note that 45.3 percent of the sample reported studying more (18.9%) or about the same (26.4%) amount of time for the CLEP exam as they do for a traditional college course. These results are somewhat perplexing considering that 51.3 percent of the sample reported studying a total of ten hours or less. Nonetheless, these findings are consistent with the *National Survey of Student Engagement* (2006), which reports that on average, undergraduates study about 13.5 hours per week for all their courses. Moreover, it should be noted that other studies indicate that study time is highly skewed, depending on the type of school involved. For instance, at highly selective schools like the University of Michigan, students report studying an average of 25 hours a week, while at less selective schools, students typically study less than one-half this amount (Rau & Durand, 2000). Students from the present study attended Robert Morris University, which is a less selective institution, where one would expect fewer hours of study.

In terms of learning, when comparing CLEP to a regular college course, the majority of the sample (54.2%) reported learning about the same amount, while 15.4 percent reported learning more and 30.3 percent reported learning less. Considering the paucity of time many students reported studying for CLEP, these results are problematic and would suggest that students do not learn a great deal in introductory-level courses. Again, this assumption is supported by other research. For example, the *National Survey of Student Engagement* (2005) found that 30 percent of first year students (those most likely to take introductory-level course) report studying just enough to pass. More telling is the research conducted by Osterlind et al. (1997), which summarized data from 70,000 achievement test scores and concluded that college students' knowledge in subjects such as geography, economics, and social science was minimal. Clearly, then, students as a group appear to be more likely to under-prepare (under-achieve) than to over-prepare (over-achieve) whether they are taking a course, or, studying for the CLEP exam.

The findings concerning gender reveal few variations. The only significant difference found was that females ( $m = 2.71$ ) planned to CLEP more courses than males ( $m = 2.11$ ),  $t(199) = 3.08, p < .05$ . It should also be pointed out that 59.7

percent of the sample was female, which might indicate that women have more confidence in their academic abilities. However, on all other comparisons (GPA, study time, learning reported) there were no statistically significant differences. These results are somewhat surprising, given the fact that women earn higher grades than men (Luzzo, 1994; Wei & Lynn, 2001). In part, these findings could be explained by research that indicates that males score higher on multiple-choice exams like CLEP. For instance, Bridgeman and Lewis (1994) discovered that on the AP multiple-choice exams, males scored one-half standard deviation higher on multiple-choice items than females. Similar findings have been reported in other studies (Bolger & Kellaghan, 1990; Murphy, 1982). Of course, in college courses, grades are often determined by using a variety of assessment techniques beyond objective tests, including various writing assignments where women may have some advantage (Hyde & Linn, 1988). It has also been suggested that women may tend to comply more with other course requirements such as submitting assignments and attending on a more regular basis (Kleinfeld, 1999).

The results concerning age also provided few statistically significant relationships. Only the fact that students over 30 CLEP'd more subjects was significant,  $F(3, 197) = 8.00, p < .01$  (see Table 4). This finding is not unexpected. Older students often attempt to juggle family, school, and work commitments. Consequently, it is reasonable to expect that they would seek the most expeditious path to a degree. Time-saving was one of the original goals of the CLEP program. Beyond this finding, however, the study negates the notion that older students would tend to have some advantage on CLEP and is consistent with earlier research that also found few, if any, variations based on age (Fagin, 1971).

Although age was not related to success on CLEP ( $p > .10$ ), there was a significant relationship between extent of previous learning and CLEP success,  $F(3, 197) = 6.09, p < .01$  (see Table 5). This is not surprising, as students would be more likely to pass a CLEP exam if they had taken a course on that topic. Interestingly, though, students who had taken a high school course tended to study fewer hours for CLEP,  $\chi^2(1, N = 201) = 6.18, p < .05$  (see Table 6), assuming perhaps that less study time was needed. However, having taken a similar high school course was not significantly related to passing a CLEP exam ( $p > .05$ ). This finding contradicts an earlier study that found that those students who had similar coursework did have more success on CLEP (Gussett, 1980). The results of the present study raise the question; if having high school coursework in a specific subject area is not related to success on CLEP, what type of previous learning is? This begs some discussion of what "previous learning" meant to students taking the present survey. There are two broad possibilities. On one hand, previous learning may reflect required exposure to the material (e.g., either as high school or college level courses or even preparation for the CLEP exam). On the other hand, previous learning may reflect an intrinsic interest in the topic which resulted

in voluntary (non-academic) exposure to the material such as through leisure reading. Therefore, a possible explanation of the findings is that the previous learning that helped students was in addition to having had a relevant course. This repetition of ideas is what benefited students taking the CLEP relative to those who did not receive such additional previous learning. Students whose previous learning was intrinsically motivated or the result of more recent college level exposure would be expected to outperform those not so exposed. At any rate, the types of previous learning experiences and exactly how they might benefit students is clearly an area worthy of further study.

Finally, Table 7 contains a summary of the responses to our open-ended question (*What was your primary motivation for taking this CLEP test?*).

Table 7  
Summary of responses to the open-ended question: What was your primary motivation for taking this CLEP test?

Motivation	Overall (n = 201)	Males (n = 81)	Females (n = 120)
Save time	40.3%	42.0%	39.2%
Save money	36.8%	35.8%	37.5%
Graduate (on time)	23.9%	22.2%	25.0%
Graduate early	8.5%	11.1%	6.7%
Skip a course	7.0%	6.2%	7.5%
Skip a required course	6.0%	1.2%	9.2%
For the credits	4.5%	4.9%	4.2%
Eliminate an open elective	4.0%	3.7%	4.2%
Why not?	0.5%	1.2%	0.0%
Needed for graduate school	0.5%	1.2%	0.0%
Get credit for previous learning	0.5%	0.0%	0.8%
Schedule	0.5%	0.0%	0.8%

Note: Some participants listed multiple motivations.

Two findings stand out from these responses. First, responses were remarkably similar between males and females (all  $p > .05$ ). Second, although ETS advises colleges to treat CLEP as a scholarship (The College Board, 2002), the idea of saving money (which we equate to the scholarship aspect of CLEP) comes second to students' desire to save time. Of the twelve categories of responses we obtained, nearly half dealt with time saving of one sort or another: save time (40.3%); graduate on time (23.9%); skip a (required or elective) course (13.0%); and graduate early (8.5%). The remaining motivations to take the CLEP were relatively negligible representing responses from fewer than 10 or so participants each.

## Conclusions

The major focus of this study has been to reexamine some earlier findings concerning CLEP and also to investigate some new areas that merit examination. In this regard, our study reinforces earlier research that indicates that it is the above average performing students who benefit most from CLEP. Along these lines, success on the CLEP exam is significantly related to GPA and the amount of time spent in preparation. The study also found that a majority of the

sample devoted 10 hours or less preparing for CLEP, which perhaps explains why nearly one-half of the sample thought that CLEP was very difficult. In addition, slightly more than one-half the sample reported that their learning from CLEP was about the same as in a traditional college course. At least with regard to those students who take the CLEP exams, when one takes into account preparation time, the present research suggests that many introductory-level students do not learn a great deal either from CLEP or from a regular college course.

Somewhat surprisingly, gender and age were not found to be significant variables, beyond finding that females and those over 30 planned to CLEP more courses. Based on these outcomes, the present researchers conclude that GPA and time spent studying are more important variables than either gender or age in predicting CLEP success. Finally, the most curious result of this study was that previous learning experience was related to success on CLEP, but that having a high school course in the same subject area was not significant, contradicting earlier research. Perhaps students have forgotten much of what they have learned, or having taken a high school course gives students a sense of false security, and as the results indicate they study less for the exam. On the other hand, it is possible that previous learning experiences provide some pedagogical benefits (e.g., repetition of material or intrinsic motivation) that serve students well on CLEP. At the very least, this finding warrants closer examination and is an area that future studies could investigate.

## Limitations

There are some aspects of the present research that serve to limit the generalizability of our findings. First, because the methodology used relied on self-reports, there is some likelihood that participants' recollections of certain facts (e.g., GPA, number of courses successfully CLEPed) may be biased. Also, because the majority of participants were RMU students, these results may not accurately reflect the performance and reports of students from other institutions. Finally, this study was designed to explore possible relationships among variables that seem relevant to CLEP exams using a survey instrument. Because the researchers had no opportunity to interact directly with participants in order to assess comprehension of or to clarify survey questions, it is possible that terms and phrases used in the questionnaire were interpreted differently among participants. Therefore, although significant relationships were identified, it may be that significant relationships were missed due to the potential for increased variability in responding. Future research is needed to more fully examine these concerns.

## References

- Archer, J. A., & Nickens, H. C. (1977). Credit by CLEP: A disconcerting look at a good idea. *Community/Junior College Research Quarterly*, 1, 179-190.



- Bolger, N., & Kellaghan, T. (1990). Method and measurement and gender differences in scholastic achievement. *Journal of Educational Measurement, 27*, 165-174.
- Bridgeman, B., & Lewis, C. (1994). The relationship of essay and multiple-choice scores with grades in college courses. *Journal of Educational Measurement, 31*(1), 37-50
- Cashin, W. E. (1974). The relationship on the CLEP general examinations to grades. *Educational and Psychological Measurement, 34*, 907-913.
- The College Board. (2002). *CLEP test development: Standard setting panels*. Retrieved August 2005, from <http://www.collegeboard.com/clep/clepctr/html/tcoo3b.html>
- The College Board. (2003). *Welcome to CLEP for colleges*. Retrieved February 23, 2006, from <http://www.collegeboard.com/clep/clepcoll/html/coll1001b.html>
- The College Board. (2006). *Exam descriptions*. Retrieved December 1, 2006, from <http://www.collegeboard.com/student/testing/clep/exams.html>
- Draper, J. A. (1998). The metamorphoses of andragogy. *Canadian Journal for the Study of Adult Education, 12*(1), 3-26.
- Educational Testing Service. (1972). *CLEP may be for you*. New York: College Entrance Examination Board.
- Enger, J. M., & Whitney, D. R. (1974, Spring). CLEP credit and graduation: A four-year study of the University of Iowa. *College and University, 236*-241.
- Fagin, M. C. (1971). Analysis of adult women in Missouri on three general examinations of the College Level Examination Program. *Adult Education Journal, 21*, 148-165.
- Gussett, J. C. (1980). Achievement test scores and scholastic aptitude test scores as predictors of college level examination program scores. *Educational and Psychological Measurement, 40*, 213-218.
- Hyde, J. S., & Linn, M. C. (1988). Gender differences in verbal ability: A meta-analysis. *Psychological Bulletin, 104*, 53-69.
- Jansen, E. D., & Brunisma, W. A. (2005). Explaining achievement in higher education. *Educational Research and Evaluation, 11*, 235-253.
- Johnson, R. W., & Thomas, W. F. (1973). College entrance examinations, educational testing, equivalency tests and multiple regression analysis. *Measurement and Evaluation in Guidance, 6*, 168-170.
- Kleinfeld, J. (1999). Student performance: Males versus females. *Public Interest, 134*, 25-36.
- Levin, F. M. (1984). Old roots, new branches. *The College Board Review, 131*, 28-32.
- Losak, J. S., & Lin, T. T. (1973). A comparison of academic success: College credits via general examination or course enrollment. *Journal of Educational Research, 67*, 127-130.
- Luzzo, D. A. (1994). An analysis of gender and ethnic differences in college students' commitment to work. *Journal of Employment Counseling, 31*, 38-45.
- Murphy, R. J. (1982). Sex differences in objective test performance. *British Journal of Educational Psychology, 52*, 213-219.
- National Survey of Student Engagement (2005). *Annual report*. Retrieved February 22, 2006, from <http://nsse.iub.edu/index.cfm>
- National Survey of Student Engagement (2006). *Annual report*. Retrieved June 10, 2007, from [http://nsse\\_2006\\_Annualreport/docs\\_2006.pdf](http://nsse_2006_Annualreport/docs_2006.pdf)
- Neville, D. S., & Super, D. E. (1988). Career maturity and commitment to work in university students. *Journal of Vocational Behavior, 32*, 139-151.
- Osterlind, S. J., Robinson, R. D., & Nickens, M. N. (1997). Relationship between collegians' perceived knowledge and congeneric tested achievement in general education. *Journal of College Student Development, 38*(3), 255-265.
- Rau, W., & Durand, A. (2000). The academic ethic and college grades: Does hard work help students to "make the grade"? *Sociology of Education, 73*(1), 19-39.
- Ridgell, S. D., & Lounsberry, J. W. (2004). Predicting academic success: General intelligence, "big five" personality traits, and work drive. *College Student Journal, 38*, 607-619.
- Sharon, A. T. (1970). Measurement of college achievement by the College-Level Examination Program. *Research Bulletin, 70*-38, Princeton, NJ: Educational Testing Service.
- Stecher, C. A. (1977). CLEP and the great credit giveaway. *Change, 9*, 36-41.
- Stetson, R. F. (1971). Getting a head start on college. *College Board Review, 81*, 16-19.
- Tice, E. T. (1997). Educating adults: A matter of balance. *Adult Learning, 9*, 18-21.
- Titmus, C. (1999). Concepts and practices of education and adult education. *Journal of Lifelong Learning Education, 18*, 343-354.
- Tittle, C. K., Weiner, M., & Phelps, F. D. (1975). Validity of awarding college credit by examination in mathematics and English. *Educational and Psychological Measurement, 35*, 455-459.
- Wei, C. M., & Lynn, R. (2001). Gender differences on the Scholastic Aptitude Test, the American College Test and college grades. *Educational Psychology, 21*, 133-136.
- Whitaker, U. (1972). A case study of CLEP: Credit by examination at San Francisco State College. *College Board Review, 83*, 12-16.