

## ABSTRACT

College (MDCC) to determine the relationship between students' level
of basic skills at entry and their pass/fail performance on the College-Level Academic Skills Test (CLAST). Specifically, the study focused on students' Comparative Guidance and Placement Test (CGP) scores in reading, writing, and basic mathematics; the proportion of students entering MDCC in fall 1981 whe had taken the CLAST by March 1984; the passing rates of those who took the CLAST; the current activities of those who had not taken the CLAST; and the CLAST performance of students with low level basic skills. Study findings included the following: (1) about two-thirds of the fall 1981 freshmen scored below the 50 th percentile nationally on basic reading skills as measured by the CGP, and were less likely to have taken the CLAST by March 1984; (2) those students who scored in the bottom quartile in the CGP reading test were much less likely to pass the CLAST than those whe scored in the second, third, or forth quartiles; (3) a disproportionate number of Blacks (70\%) fell in the first quartile in reading basic skills upon MDCC entry; (4) Hispanics who scored in the upper quartiles on the reading test were more likely than either of the other two ethnic groups to have taken the CLAST or to have remained in school; (5) in general, about the same proportion of fall 1981 freshmen were as low on entering writing basic skills as on reading basic skills; (6) students entered MDCC with better computation basic skills than either reading or writing skills; (7) of the 1,114 students who took the CLAST by March 1984, 64\% obtained scores above the cuts in all four test areas; and (8) almost 25: of those who passed ali sections of the CLAST entered MDCC with placement scores below the 25 th percentile in at least one area. (EJV)


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A COHORT ANALYSIS OF THE RELATIONSHIP BETWEEN ENTERING BASIC SKILLS AND CLAST PERFORMANCE FOR FALL 1981 FIRST-TIME-IN-COLLEGE STUDENTS

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Marcia Belcher<br>Research Associate, Sr.

OFFICE OF INSTITUTIONAL RESEARCH

John Losak, Dean

A Cohort Analysis Of The Relationship Between Entering Basic Skills And CLAST Peformance For Fall 1981 First-Time-in-College Students

It is a documented fact that the level of basic skills a student brings to the college environment probably will have a strong impart on the success that student experiences in college. For example, Divis (Research Report 84-10) found that students who scored above the cut on measure of reading basic skills were more likely to obtain a "C" or becter in core courses. Losak and Morris (Research Report $82-36$ ) found that students above the cut scores on all three basic skills areas (reading, writing, mathematics) were more likely to re-enroll in school and to graduate than students who scored below all three criteria. Losak (Research Report 84-04) indicated that students who required remediation in reading, writing, or basic mathematics were still less likely, even after taking a developmental course in the topic, to pass the portion of the CLAST, a sophomore level exit exam, which dealt with that topic.

The 84-04 Research Report by Losak was particularly relevant to the present study since results indicated tha the role of remediation in breaking the link between entry level performance and exit level performance had been only partially effective. A similar point was made by Belcher in a study designed to assess the mean score differences among the four M-DCC campuses on the CLAST after the effects of basic skills had been considered (Research Report 84-14). The results of this study again indicated that the relationship between basic skills (as measured by the CGP) and CLAST performance was strong. Though inclusion of entering basic skills performance decreased the mean differences among the campuses, some difference in performance still remained.

Findings for the 84-14 study wi e based on data from students who had written the CLAST and graduated. Basic skills scores for these students were then retrieved and included in an analysis of covariance
procedure which adjusted the campus means according to the basic skills scores of their students. While this is a perfectly acceptable research design, this approach ignores any student who did not reach the point of writing the CLAST. In addition, comparing campuses by their mean scores may produce differences which disappear when the proportion passing is considered instead. It can be argued that the proportion passing (or failing) is a more relevant criterion since in terms of receiving a degree and/or continuing in the state university system, the student needs only to pass; whether the "pass" is by one point or twenty is irrelevant.

## Purpose of the Study

The purpose of this study was to select an entering group of students and follow them to the point where they might have written the CLAST, then assess their pass/fail performance on CLAST when their entering level of basic skills was considered. Specifically, the study was directed toward these questions:

1. What proportion of entering freshmen fell in each quartile on basic skills in reading, writing, and basic mathematics? Did this proportion vary by campus, ethnic membership, or gender?
2. For each quartile, what proporion had written the CLAST by March 1984? Did this proportion differ by campus, ethnic membership, or gender? Were those in the upper quartiles more likely to have written the CLAST?
3. Of those taking the CLAST, what proportion at each quartile passed the reading, writing, and computation subtest? Are there differences by campus, by ethnic membership, or by gender?
4. Are the students who have not written the CLAS' still in school or have they left Miami Dade? Are there differences by quartile, campus, ethnic membership, or gender?
5. Did any student with a low level of basic skills
still manage to successfully pass all four sections of the CLAST, i.e., were any students successfully remediated?

The process of selecting a group upon entry and following them forward in time is cohort analysis. Dy studying the results at each quartile on basic skills control is provided for the affect: of entering basic skills.

## METHODOLOGY

## Selection of Subjects

Only students who entered college for the first time during the Fall of 1981 and enrolled as full time freshmen were included in this analysis. In addition, any student who was not assessed on basic skills prior to or during his/her first term at M-DCC was excluded from the analysis. Therefore, any student who had English as a second language and required scme ESL courcework first was excluded from this study. Fall 1981 freshmen were chosen for the analysis since 1981 was the first year in which taking the CGP was mandatory for all students enrolling full-time at Miami-Dade. Only full-time students were included since it was this group who should have had the greatest opportunity to reach the point of writing CLAST.

## Test Considerations

Basic skills are measured at Miami-Dade using a test known as the Comparative Guidance and Placement Test or CGP. Three sections of the test are used in placing students. In Reading, a student with a raw score of less than 11 must receive remediation beforc entering regular college work; with a raw score of less than 19 , the student is
encouraged to enroll in a reading course. In Writing, to enroll in a regular English course, a raw score of 22 or greater is required. In Computation, a raw score of 21 or above is required. For this study, students were acsigned to CGP quartiles based on the following guidelines:

|  | CGP Raw Scores |  |  |
| :--- | :--- | :---: | :---: |
|  | Reading | Writing | Computation |
| Quartile 1 | $0-17$ | $0-21$ | $0-16$ |
| Quartile 2 | $18-24$ | $22-26$ | $17-28$ |
| Quartile 3 | $25-29$ | $27-31$ | $21-25$ |
| Quartile 4 | 30 or more | 32 or more | 26 or more |

The College Level Academic Skills Test (CLAST) is a sophomore level exit examination mandated by the state of Florida for all students wishing to receive an A.A. Degree and/or continue their education in upper division. Cutscores currently are 260 for Reading, 265 for Writing, and 260 for Computation. These three subtests are multiple choice tests; the fourth Essay portion of the CLAST requires students to produce a writing sample of three to four paragraphs. A combined rating score of 4 is required for passing the Essay.

RESULTS

## Reading Basic Skills and CLAST Performance

As shown by Table 1, about two-thirds of the Fall 1981 freshmen scored below the 50 th percentile nationally on reading basic skills as measured by che CGP. This group, as opposed to the top two quartiles, was less likely to have reached the point where they wrote the CLAST by March, 1984. Especially for students in the bottom quartile, the smaller proportions writing the CLAST were due more to having left school than to a slower pace because of spending time in remediation. For students who did take the CLAST Reading test, those
in the bottom quartile were much less likely to pass chan those who scored in the second, third, or fourth quartiles.

When these freshmen were divided among the four campuses, it became obvious that fewer of the low scoring students resided on the South Campus compared to the other three campuses. Yet, despite their few numbers; South Compus students were nore successful than the other campuses in reachiat the point whare ther wsote the chast, Voreh Campus, along with South, was more successful with those students in the top two quartiles. On Wolfson Campus, the smaller proportion writing the CLAST could be explained by the higher proportions remaining in school, yet not having advanced far enough to write CLAST. While the overall passing rates were fairly similar, it appears that South Campus students in the bottom quartiles were best prepared while Wolfson did best with students in the upper quartiles.

At least some of the campus differences could have hem due to the ethnic makeup of the campuses. When the three major athanc groups were studied, it was found that a dispropoftionate umber of Blacks (70\%) fell in the first quartile in reading basic skills uppn entry to Miawi-Dade. Not surprisingly, white non-isisppnic studenes scored highest in reading basic skills. Black non-Hisponic studemes, besides their low levels of entering basic skill! were also less likely to reach the point where they wrote the clasy my March, iget. Below the 50th percentile, black Non-Hispanics left school at higher rate than the other two othnic groups. Hispanics who scored in the upper quartiles were more rikely than either of the other two chnie groups to have written the CLAST or to have remained in school. In, terms of passing the reading portion of the CLAST, blacks in che second, third, and fourth quartiles were as likely or more likely than the other two ethric groups to pass. White non-Hispanics had the highest overall passing rate, probably because of their higher entering basic skills scores. Data for white Hispanics closely paralleled that of white 1 on-Hispanic students. i breakdown of results by ethnic membership can be found in Table 3.

Table 4 shows the ferformance of males and females on reading basic skills scores and the CLAST. In general, gender played little part in entering levels of reading basic skills. In terms of reaching the point where they wrote the CLAST, however, more females than males remained in school and persevered to the point of writing CLAST. Females also were slightly more likely to pass than males, especially in the bottom quartile.

## Results for Writing Basic Skills and CLAST Performance

In general, about the same proportion of Fall 1981 freshmen were low on entering writing basic skills of on reaaing basic skills. Similar numbers in each quartile also wrote the CLAST. More student.s in the bottom quartile passed the multiple-choice Writing portion of the CLAST than they did in Reading. On the Essay, however, less than $50 \%$ of those entering Miami-Dade Community College in the bottom quartile on writing basic skills passed. Only above the 75th percentile was the passing rate on the Essay equal to that for the Reading and Writing tests. See Table l for full results.

Table 5 shows the results for the writing portion by campus. Once again, South Campus had fewer students falling in the bottom quartile and more falling in the top than the other campuses. Of the major campuses, the greatest proportion of South students and the smallest oroportion of Wolfson students in the first quartile wrote the CLAST by March, 1984. South had the biggest overall percentage writing the CLAST, while Wolfson had the most remaining in school, again due to retention in the upper quartiles. In terms of passing, the overall passing rate was about equal among the three campuses on the multiple-choice writing portion of CLAST. On the Essay portion, Wol fson students performed best in the bottom and top nuartiles, though the small numbers prevented any strong conclusions from being drawn.

Ethnicity once again appeared as a factor (see Table 6). As shown for reading, more black non-Hispanic students scored in the
bottom quartile than either of the other two major ethnic groups. Again, white non-Hispanics had the highest scores in writing basic skills. The smallest proportion of Blacks in the first quartile had also reached the point where they had written the CLAST by March due to their dropout rates. Except above the 75 th percertile, Hispanics had the lowest dropout rate. Fewest Hispanic students in the bottom quartile passed the writing portion of CLAST, though passing rates were similar for the other quartiles. Except at the top quartile, Black non-Hispseic atudeats had the hardent time passina the Escny.

Table 7 show the results for writias perfomency by gander, In general, males and females entered miami-bade with abourt thio seme level of writing skill, though more feanles cached the paint of takiat the CLAST. In terms of passing, in the bottom quartile miemales fhen fenales passed the multiplechoice Uritias swetion, while more fanden than males passed the Essay. This wes also true in the top quartile. Overall, the proportions passing the writing section of the CMST varied very little for the two genders. Females performed betier than males on the Essay.

## Results For Computation Basic Skills and CLAST Performance

Students entered M-DCC with better computation basic skills than either writing or reading skills. For those who wrote the CLABT, students who had scored above the 50th percentile on computation basic skills were more likely to pass the CLAST Computation subtant than were those who entered Miami-Dade with scores in the bottom two quartiles Overall, the passing rate was a little higher than it was for Hesding or Writing. Students who entered M-DCC in bottom quartite on basic skills were more likely to pass Computation than any other subtest.

For the Campuses, South had the smallest proportion of students in the bottom two quartiles on computation basic skills. Wolfson had the lowest proportion of students in the bottom quartile who had written the CLAST by March or remained in school. In the top
quartile, North had the highest dropout rate. South and Wolfson had the highest proportion who passed the computation subtest.

When considered by ethnic membership, black non-Hispanics again had the lowest entering levels of basic skills. Fewer black students reached a point where they wrote the CLAST than either Hispanirs or white non-Hispanics, though an unusual number of black non-Hispanic students in the bottom quartile on computation still managed to pass the Computation subtest. Except at the bottom quartile, the performance of Hispanics and white non-Hispanics was very similar.

Gender was not a significant factor effecting entering levels of basic skills in computation (see Table 10). However, in the top two quartiles more females had written the CLAST or remained in school. In terms of passing, in the bottom quartile more females than males passed. This trend reversed in the remaining quartiles so that overall the proportion passing the computation section of the CLAST was about equal for males and females.

Results for Students Passing All Sections of CLAST

Of the 1,114 students who wrote the CLAST, 709 or $64 \%$ obtained scores above the cuts in all four areas. Table 11 shows the number of these students who entered M-DCC with basic skills deficiencies when "deficiency" is alternatively defined as being below the 25 th percentile, the 50 th percentile, or the college 1982-83 CGP Placement cutscores.

Results clearly iadicate that despite the increased likelihood of not passing CLAST, a significant number succeed in doing so anyway. Whether these students were remediated in their regular classes or througn developmental courses cannot be answered with these data. It is certain, however, that students requiring remediation in any area, and especially those requiring remediation in more than one area, are currently facing an uphill battle.

This study confirms that $a$ relationship exists between entering level of basic skills and performance on CLAST. Students in the bottom quartile form a particularly vulnerable group, both in terms of leaving school prior to writing the CLAST and in terms of being stopped from continuing their education because of CLAST scores below acceptable levels, particnlarly on the Essay.

It is not true, however, that it is always too late by the time a student enters college to make up basic skills deficiencies to the point of passing all four sections of CLAST. For the group of Fall 1981 full-time, first-time-in-college students, almost a fourth of those who passed all sections of CLAST entered M-DCC below the 25th percentile in at least one area. Almost one-third fell below the 1982-83 Placement criteria and were pagged as needing developmental work. It is unclear from this study what set this group of students apart from those with similar CGP scores who were less successful on CLAST. Future research efforts will explore this question in some depth.

From a campus perspective, the greatest proportion of South Campus freshmen remained in school or wrote the CLAST. Wolfson students in the bottom quartile on Computation left school much more readiiy than the other campuses. Of the three main campuses, however, North Campus students were least likely to remain in school or take CLAST. When students did write the CLAST, South Campus students in the bottom quartile on Reading were more likely to pass than those in the bottom quartile on North or Wolfson Campuses. On the Computation and Essay sections, however, Wolfson bottom quartile students had higher passing rates.

Black non-Hispanics comprised the most vulnerable ethnic group; $70 \%$, for example, scored below the 25 th percentile in reading upon entry to $M-D C C$. These low scoring students were also less jikely to remain at Miami-Dade. Hispanic students, on the other hand, had
relatively high retention rates. In terms of passing rates on CLAST, no dramatic differences were found among the groups for Reading. On the multiple-choice Writing test, Hisparics in the bottom quartile on writing basic skills were less likely to pass than their Black or white non-Hispanic counterparts. Black non-Hispanics, however, had the most trouble with the Essay, where, except above the 75 th percentile, they scored lower than white non-Hispanics or Hispanics. On Computation, blacks had as bigh a passing rate in the bottom quartile as they did in any of the upper quartiles, an indication of either successful remediation or ineffectiveness cF the CGP as a predictor for this group.

Gender differences were not as pronounced as they were for the ethnic groups. Though few differences where found on entering levels of basic skills; females were more likely to remain in school o.: to write the CLAST. Females in the bottom quartile also consistently outperformed the males in passing all aress of CLAST except the multiple-choice Writing section. These differences generally disappeared with nigher entering levels of basic skills.

The retention and remediation of students with deficiencies in entering levels of basic skills is a difficult task. This report has shown thac for more cases than not, students who enter M-DCC mith deficiencies will be more likely to exit with deficiencies, either because of withdrawal prior to the CLAST or failure at the time of the test. Results indicate that this pattern is partially dependent upon ethnic membership, gender, and the campus where the student is enrolled. Follow-up over the next year or two will show whether this pattern holds for the remaining students and if those identified as requiring further remediation by their failure on CLAST are successfully remediated.

## References

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Losak, J. (1984). Success on the CLAST for those students who enter the college academically underprepared (Research Report 84-04). Miami, FL: Miami-Dade Commuriv College, Cffice of Institutional Research.

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Table 1
Basic Skills and CLAST Performance for Full-Time Fall 1981 Full-Time First-time-in-College Siudents

|  | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each Quartile for Three Basic Skills Tests |  |  |  |  |  |  |  |  |  |  |
| Reading | 1,465 | 38 | 1,118 | 29 | 735 | 19 | 527 | 14 | 3,845 | 100 |
| Writing | 1,445 | 38 | 1,081 | 28 | 896 | 23 | 423 | 11 | 3,845 | 100 |
| Computation | 735 | 19 | 734 | 19 | 1,056 | 28 | 1,320 | 34 | 3,845 | 100 |

Proportion of Each Quartile Who Wrote CLAST by March 1984

| Reading | 289 | 20 | 349 | 31 | 278 | 38 | 198 | 38 | 1,114 | 29 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Writing | 262 | 18 | 338 | 31 | 344 | 38 | 170 | 40 | 1,114 | 29 |
| Computation | 108 | 15 | 159 | 22 | 307 | 29 | 540 | 41 | 1,114 | 29 |

Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST

| Reading | 404 | 28 | 286 | 26 | 157 | 21 | 96 | 18 | 943 | 25 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Writing | 403 | 28 | 277 | 26 | 186 | 21 | 77 | 18 | 943 | 25 |
| Computation | 194 | 26 | 194 | 26 | 262 | 25 | 293 | 22 | 943 | 25 |

Proportion of Those Writing CLAST Who Passed the Equivalent CLAST Subtest

| Reading | 195 | 67 | 315 | 90 | 261 | 94 | 188 | 95 | 959 | 86 |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Writing | 201 | 77 | 292 | 86 | 323 | 94 | 160 | 94 | 976 | 88 |
| Computation | 87 | 81 | 134 | 84 | 275 | 90 | 512 | 95 | 1,008 | 90 |
| Essay | 121 | 46 | 246 | 73 | 302 | 88 | 163 | 96 | 832 | 75 |

Data Source: MJBLE811 J594

Table 2
Keading Basic Skills and CLAST Performance by Canpus Fall 1981 Full-Time First-time-in-College Students

| Campus | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number |  |

Proportion Who Fell at Each CGP Reading Quartile

| North | 625 | 47 | 367 | 28 | 205 | 15 | 127 | 10 | 1,324 | 100 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| South | 597 | 29 | 623 | 30 | 460 | 23 | 360 | 18 | 2,040 | 100 |
| Wolfson | 157 | 48 | 97 | 30 | 49 | 15 | 23 | 7 | 326 | 100 |
| Medical | 86 | 55 | 31 | 20 | 21 | 14 | 17 | 11 | 155 | 100 |

Proportion of Each Reading Quartile Who Wrote CLAST by March 1984

| North | ${ }^{1} 11$ | 18 | 95 | 26 | 78 | 38 | 51 | 40 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South | 143 | 24 | 224 | 36 |  |  | 51 | 40 | 335 | 25 |
| Wolfson | 29 | 18 | 22i | 36 | 182 | 40 | 139 | 39 | 688 | 34 |
|  |  | 18 | 24 | 25 | 12 | 24 | 6 | 26 | 71 | 22 |
| Medical | 6 | 7 | 6 | 19 | 6 | 29 | 2 | 12 | 20 | 13 |


| North | 172 | 28 | 96 | 26 | 36 | 18 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South | 158 | 26 | 146 | 26 | 36 | 18 | 22 | 17 | 326 | 25 |
| Wolf son |  |  | 146 | 23 | 96 | 21 | 63 | 18 | 463 | 23 |
| Wolfson | 42 | 27 | 32 | 33 | 19 | 39 | 8 | 35 | 101 | 31 |
| Medical | 32 | 37 | 12 | 39 | 6 | 29 | 3 | 18 | 101 | 31 |

Proportion of Those Writing CLAST Who Passed the Reading Subtest

| North | 71 | 64 | 83 | 87 | 73 | 94 | 48 | 94 | 275 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| South | 101 | 71 | 205 | 92 | 170 | 93 | 132 | 95 | 608 |
| Wolfson | 18 | 62 | 23 | 96 | 12 | 100 | 88 |  |  |
| Medical | 5 | 83 | 4 | 67 | 6 | 100 | 6 | 100 | 59 |
| Data Source: | MJBLE811 J594 |  |  |  | 2 | $1 C 0$ | 17 | 83 |  |

Table 3

Reading Basic Skills and CLAST Performance by Ethnic Category
Fall 1981 Full-Time First-time-in-College Students

| Ethnic Categories |  | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Prçortion Who Fell at Each CGP Reading Quartile |  |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic |  | 221 | 19 | 399 | 33 | 305 | 25 | 280 | 23 | 1,205 | 100 |
| Black NonHispanic | 1 | 392 | 70 | 100 | 18 | 40 | 7 | 25 | 5 | 557 | 100 |
| Hispanic |  | 812 | 40 | 607 | 30 | 381 | 19 | 217 | 11 | 2,017 | 100 |

Proportion of Each Reading Quartile Who Wrote CLAST by March 1984

| White NonHispanic | 49 | 22 | 106 | 27 | 109 | 36 | 92 | 33 | 356 | 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Black Nonhispanic | 55 | 14 | 27 | 27 | 11 | 28 | 8 | 32 | 101 | 18 |
| Hispanic | 171 | 21 | 211 | 35 | 155 | 41 | 96 | 44 | 633 | 31 |



Table 4
Reading Basic Skills and CLAST Performance by Gender Fall 1981 Full-Time First-time-in-College Students

| Gender | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each CGP Reading quartile |  |  |  |  |  |  |  |  |  |  |
| Male | 640 | 37 | 514 | 29 | 339 | 19 | 265 | 15 | 1,758 | 100 |
| Female | 825 | 40 | 604 | 29 | 396 | 19 | 262 | 12 | 2,087 | 100 |
| Proportion of Each Reading Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| Male | 124 | 19 | 140 | 27 | 116 | 34 | 85 | 32 | 465 | 26 |
| Female | 165 | 20 | 209 | 35 | 162 | 41 | 113 | 43 | 645 | 33 |
| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLA: - |  |  |  |  |  |  |  |  |  |  |
| Male | 160 | 25 | 123 | 24 | 76 | 22 | 44 | 17 | 403 | 23 |
| Female | 244 | 30 | 163 | 27 | 81 | 20 | 52 | 20 | 540 | 26 |
| Proportion of Those Writing CLAST Who Passed the Reading Subtest |  |  |  |  |  |  |  |  |  |  |
| Male | 76 | 61 | 127 | 91 | 108 | 93 | 81 | 95 | 392 | 84 |
| Female | 119 | 72 | 188 | 90 | 153 | 94 | 107 | 95 | 567 | 87 |

Table 5
Writing Basic Skills and CLAST Performance by Campus Fall 1981 Full-Time First-time-in-College Studen:s

| Campus | Q:artile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Nuaber | Percent | Number | Percent |
| Proportion tho Fell at Each CGP Writing Quartile |  |  |  |  |  |  |  |  |  |  |
| North | 595 | 45 | 368 | 28 | 264 | 20 | 93 | 7 | 1,324 | 100 |
| South | 609 | 30 | 578 | 28 | 556 | 27 | 297 | 15 | 2,040 | 100 |
| Wolfson | 148 | 45 | 101 | 31 | 59 | 18 | 18 | 6 | 326 | 100 |
| Medical | 89 | 57 | 34 | 22 | 17 | 11 | 15 | 10 | 155 | 100 |
| Proportion of Each Writing Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| North | 98 | 16 | 96 | 26 | 102 | 39 | 39 | 42 | 335 | 25 |
| South | 134 | 22 | 210 | 36 | 220 | 40 | 124 | 42 | 688 | 34 |
| Holfson | 18 | 12 | 30 | 30 | 17 | 29 | 6 | 33 | 71 | 22 |
| Medical | 12 | 13 | 2 | 6 | 5 | 29 | 1 | 7 | 20 | 13 |


|  | Proportion of Each. quartile Who Remained at |  | M-DCC | Without Writing CLAST |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 157 | 26 | 103 | 28 | 51 | 19 | 15 | 16 | 326 | 25 |
| South | 173 | 28 | 131 | 23 | 108 | 19 | 51 | 17 | 463 | 23 |
| Wolfson | 45 | 30 | 29 | 29 | 22 | 37 | 5 | 28 | 101 | 31 |
| Medical | 28 | 31 | 14 | 41 | 5 | 29 | 6 | 40 | 53 | 34 |


| Proportion of Those Writing CLAST Who Passed the Writing Subtest |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| North | 73 | 74 | 84 | 88 | 94 | 92 | 38 | 97 | 289 | 86 |
| South | 106 | 79 | 179 | 85 | 207 | 94 | 115 | 93 | 607 | 88 |
| Wolfson | 14 | 78 | 27 | 90 | 17 | 100 | 6 | 100 | 64 | 90 |
| Medical | 8 | 67 | 2 | 100 | 5 | 100 | 1 | 100 | 16 | 80 |
| Proportion of Those Writing CLAST Who Passed the Essay Subtest |  |  |  |  |  |  |  |  |  |  |
| North | 44 | 45 | 71 | 74 | 86 | 84 | 36 | 92 | 237 | 71 |
| South | 50 | 45 | 154 | 73 | 197 | 90 | 120 | 97 | 531 | 77 |
| Wolfson | 9 | 50 | 20 | 67 | 15 | 88 | 6 | 100 | 50 | 70 |
| Medical | 8 | 67 | 1 | 50 | 4 | 80 | 1 | 100 | 14 | 70 |

Data Source: MJBLE811 J594

Table 6
Writing Basic Skills and CLAST Performance by Ethnic Categories Fall 1981 Full-Time First-time-in-College Students

| Ethnic Categories | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mamber | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion the Fell at Each CGP Writing Quartile |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 261 | 22 | 331 | 27 | 387 | 32 | 226 | 19 | 1,205 | 100 |
| Black MonHispanic | 378 | 68 | 118 | 21 | 50 | 9 | 11 | 2 | 557 | 100 |
| Hispanic | 766 | 38 | 620 | 31 | 450 | 22 | 181 | 9 | 2,017 | 100 |

Proportion of Each Writing Quartile Who Wrote CLAST by March 1984

| White Non- <br> Hispanic | 57 | 22 | 80 | 24 | 133 | 34 | 86 | 38 | 356 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Black Mon- | 43 | 11 | 33 | 28 | 20 | 40 | 5 | 45 | 101 |
| Hispanic | 150 | 20 | 220 | 35 | 187 | 42 | 76 | 42 | 633 |
| Hispanic |  |  |  |  |  |  |  |  |  |


| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| White NonHispanic | 51 | 20 | 77 | 23 | 64 | 17 | 33 | 15 | 225 | 19 |
| Black MonHispanic | 99 | 26 | 21 | 18 | 5 | 10 | 3 | 27 | 128 | 23 |
| Hispanic | 244 | 32 | 177 | 29 | 116 | 26 | 40 | 22 | 577 | 29 |
| Proportion of Those Hriting Clast who Passed the Writing Subtest |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 47 | 82 | 69 | 86 | 124 | 93 | 82 | 95 | 322 | 90 |
| Black NonHispanic | 34 | 79 | 27 | 82 | 19 | 95 | 5 | 100 | 85 | 84 |
| Hispanic | 109 | 73 | 192 | 87 | 176 | 94 | 72 | 95 | 549 | 87 |
| Proportion of Those Writing CLAST Wno Passed the Essay Subtest |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 31 | 54 | 63 | 79 | 119 | 89 | 82 | 95 | 295 | 83 |
| Black NonHispanic | 16 | 37 | 20 | 61 | 15 | 75 | 5 | 100 | 56 | 55 |
| Hispanic | 71 | 47 | 158 | 72 | 165 | 88 | 73 | 96 | 467 | 74 |

Data Source: MJBLE811 J594

Table 7
Writing Basic Skills and CLAST Performince by Gender Fall 1981 Full-Time First-time-in-College Students

| Gender | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each CGP Writing Quartile |  |  |  |  |  |  |  |  |  |  |
| Male | 698 | 40 | 470 | 27 | 413 | 23 | 177 | 10 | 1,758 | 100 |
| Female | 747 | 36 | 611 | 29 | 483 | 23 | 246 | 12 | 2,087 | 100 |
| Proportion of Each Writing Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| Male | 124 | 18 | 137 | 29 | 145 | 35 | 59 | 33 | 465 | 26 |
| Female | 138 | 18 | 201 | 33 | 199 | 41 | 111 | 45 | 649 | 31 |
| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST |  |  |  |  |  |  |  |  |  |  |
| Male | 171 | 24 | 111 | 24 | 89 | 22 | 32 | 18 | 403 | 23 |
| Female | 232 | 31 | 166 | 27 | 97 | 20 | 45 | 18 | 540 | 26 |
| Proportion of Those Writing CLAST Who Passed the Writing Subtesc |  |  |  |  |  |  |  |  |  |  |
| Male | 100 | 81 | 111 | 81 | 135 | 93 | 57 | 97 | 403 | 87 |
| Female | 101 | 73 | 181 | 90 | 189 | 94 | 103 | 93 | 573 | 88 |
| Proportion of Those Writing CLAST Who Passed the Essay Subtest |  |  |  |  |  |  |  |  |  |  |
| Male | 47 | 38 | 94 | 69 | 130 | 90 | 54 | 92 | 325 | 70 |
| Female | 74 | 54 | 152 | 76 | 172 | 86 | 109 | 98 | 507 | 78 |
| Data So | BLE811 | J594 |  |  |  |  |  |  |  |  |

Table 8
Computation Basic Skills and CLAST Performance by Campus Fall 1981 Full-Time First-time-in-College Students

| Campus | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each CGP Computation Quartile |  |  |  |  |  |  |  |  |  |  |
| North | 297 | 23 | 279 | 21 | 400 | 30 | 348 | 26 | 1,324 | 100 |
| South | 313 | 15 | 358 | 18 | 524 | 26 | 845 | 41 | 2,040 | 100 |
| Wolfson | 89 | 27 | 63 | 20 | 85 | 26 | 89 | 27 | 326 | 100 |
| Medical | 36 | 23 | 34 | 22 | 47 | 30 | 38 | 25 | 155 | 100 |
| Proportion of Each Computation Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| North | 45 | 15 | 56 | 20 | 101 | 25 | 133 | 38 | 335 | 25 |
| South | 55 | 18 | 87 | 24 | 180 | 34 | 366 | 43 | 688 | 34 |
| Wolfson | 6 | 7 | 13 | 21 | 15 | 18 | 37 | 42 | 71 | 22 |
| Medical | 2 | 6 | 3 | 9 | 11 | 23 | 4 | 11 | 20 | 13 |
| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST |  |  |  |  |  |  |  |  |  |  |
| North | 74 | 25 | 74 | 27 | 103 | 26 | 75 | 22 | 326 | 25 |
| South | 88 | 28 | 91 | 25 | 106 | 20 | 178 | 21 | 463 | 23 |
| Wolfson | 20 | 22 | 20 | 32 | 39 | 46 | 22 | 25 | 101 | 31 |
| Medical | 12 | 33 | 9 | 26 | 14 | 30 | 18 | 47 | 53 | 34 |
| Proportion of Those Writing CLAST Who Passed the Computation Subtest |  |  |  |  |  |  |  |  |  |  |
| North | 36 | 80 | 43 | 77 | 88 | 87 | 123 | 92 | 290 | 87 |
| South | 46 | 84 | 76 | 87 | 163 | 91 | 351 | 96 | 636 | 92 |
| Wolfson | 4 | 67 | 13 | 100 | 15 | 100 | 35 | 95 | 67 | 94 |
| Medical | 1 | 50 | 2 | 67 | 9 | 82 | 3 | 75 | 15 | 75 |

Data Source: MJBLE811 J594

Table 9
Computation Basic Skills and CLAST Performance by Ethnic Categories Fall 1981 Full-Time First-time-in-College Students

| Ethnic Categories | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each CGP Computation Quartile |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 138 | 11 | 211 | 18 | 342 | 28 | 514 | 43 | 1,205 | 100 |
| Black NonHispanic | 211 | 38 | 131 | 23 | 145 | 26 | 70 | 13 | 557 | 100 |
| Hispanic | 375 | 19 | 386 | 19 | 553 | 27 | 703 | 35 | 2,017 | 100 |
| Proportion of Each Computation Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 28 | 20 | 46 | 22 | 95 | 28 | 187 | 36 | 356 | 30 |
| Black NonHispanic | 19 | 9 | 25 | 19 | 34 | 23 | 23 | 33 | 101 | 18 |
| Hispanic | 59 | 16 | 88 | 23 | 174 | 31 | 312 | 44 | 633 | 31 |
| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST |  |  |  |  |  |  |  |  |  |  |
| White NonHispanic | 28 | 20 | 39 | 18 | 76 | 22 | 82 | 16 | 225 | 19 |
| Black NonHispanic | 49 | 23 | 27 | 21 | 34 | 23 | 18 | 26 | 128 | 23 |
| Hispanic | 115 | 31 | 126 | 33 | 151 | 27 | 185 | 26 | 577 | 28 |

Proportion of Those Writing CLAST Who Passed the Computation Subtest

| White NonHispanic | 23 | 82 | 40 | 87 | 86 | 91 | 179 | 96 | 328 | 92 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Blark NonHispanic | 18 | 95 | 20 | 80 | 29 | 85 | 21 | 91 | 88 | 87 |
| Hispanic | 44 | 75 | 74 | 84 | 156 | 90 | 297 | 95 | 571 | 90 |

Table 10
Computation Basic Skills and CLAST Performance by Gender Fall 1981 Full-Time First-time-in-College Students

| Gender | Quartile 1 |  | Quartile 2 |  | Quartile 3 |  | Quartile 4 |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Proportion Who Fell at Each CGP Computation Quartile |  |  |  |  |  |  |  |  |  |  |
| Male | 331 | 19 | 333 | 19 | 482 | 27 | 612 | 35 | 1,758 | 100 |
| Female | 404 | 19 | 401 | 19 | 574 | 28 | 708 | 34 | 2,087 | 100 |
| Proportion of Each Computation Quartile Who Wrote CLAST by March 1984 |  |  |  |  |  |  |  |  |  |  |
| Male | 52 | 16 | 65 | 20 | 122 | 25 | 226 | 37 | 465 | 26 |
| Female | 56 | 14 | 94 | 23 | 185 | 32 | 314 | 44 | 649 | 31 |
| Proportion of Each Quartile Who Remained at M-DCC Without Writing CLAST |  |  |  |  |  |  |  |  |  |  |
| Male | 78 | 24 | 89 | 27 | 103 | 21 | 133 | 22 | 403 | 23 |
| Female | 116 | 29 | 105 | 26 | 159 | 28 | 160 | 23 | 540 | 26 |
| Proportion of Those Writing CLAST Who Passed the Computation Subtest |  |  |  |  |  |  |  |  |  |  |
| Maie | 40 | 77 | 57 | 88 | 112 | 92 | 216 | 96 | 425 | 91 |
| Female | 47 | 84 | 77 | 82 | 163 | 88 | 296 | 94 | 583 | 90 |

Table 11
Proportions Passing All Four Sections of CLAST Who Entered With Low Levels of Basic Skills

| Scored Low In: | Fell Below the 25th Percentile |  | Fell Below the 50th Percentile |  | Fell Below the 1982-83 M-DCC Cutscore |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent: | Number | Percent | Number | Percent |
| One Area | 115 | 16 | 205 | 29 | 156 | 22 |
| Two Areas | 39 | 6 | 170 | 24 | 53 | 8 |
| Three Areas | 6 | 1 | 54 | 8 | 17 | 2 |
| Subtotal | 160 | 23 | 429 | 61 | 226 | 32 |
| No Areas | 549 | 77 | 280 | 39 | 483 | 68 |
| Total | 709 | 100 | 709 | 100 | 709 | 100 |

