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#### **ABSTRACT**

This report provides information about the performance of 1999 graduating seniors nationwide in the United States who took the ACT Assessment as sophomores, juniors, or seniors. Caution is advised in applying these results because these students may not be representative of the total population of graduating seniors. Information is provided according to the level of high school coursework completed. In general, students who completed a core program tended to earn higher average scores (average composite score of 22.0) than students who did not complete core courses (average composite score of 19.5). This association holds true across racial and ethnic groups. Tables present trends in ACT composite scores for all students and across ethnic groups. (SLD)



# ACT Assessment® 2000 Results

Summary Report National

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An ACT Program for Educational Planning



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#### **ACT ASSESSMENT RESULTS**

#### National 2000

This report provides information about the performance of 2000 graduating seniors nationwide who took the ACT Assessment as sophomores, juniors or seniors. As you review and interpret the information please keep the following in mind:

- ACT-tested seniors may not be representative of the total population of graduating seniors.
- This report provides selected information about the nation's ACT-tested graduating seniors. For more details, please refer to the 2000 ACT National High School Profile Report.



#### **Average ACT Scores**

#### National 2000

To help policy-makers gain a better perspective on the association between coursework taken in high school and performance on the ACT Assessment, this report provides information about the graduating class according to level of high school coursework completed. Average scores are reported for 2000 graduating seniors who reported completing a core high school program (a **core or more** program is defined as a typical college preparatory program) and for those who reported not completing a high school core program. (Refer to following page).

The academic preparation a student receives in high school correlates with success in college. ACT research indicates that students who prepare academically by taking a core high school program consistently score higher on the ACT Assessment than those who do not. These same students also earn better grades in college. These facts underscore the value of a strong basic program of study in high school.



#### Levels of High School Coursework

#### Core or More

Core or more is defined as a typical college preparatory program including:

#### • English (four years or more)

One year credit each for English 9, English 10, English 11, English 12

#### Mathematics (three years or more)

One year credit each for Algebra 1, Algebra II, Geometry
One-half year credit each for Trigonometry, Calculus (not Pre-Calculus), other Math
courses beyond Algebra II, Computer Math/Computer Science

#### Social Studies (three years or more)

One year credit each for American History, World History, American Government One-half year credit each for Economics, Geography, Psychology, other History (European, State, etc.)

#### Natural Sciences (three years or more)

One year credit each for General/Physical/Earth Science, Biology, Chemistry, Physics

#### **Less Than Core**

**Less than core** refers to a program of studies consisting of fewer courses than those included in core or more.



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Average ACT test scores in English, Mathematics, Reading, Science Reasoning, and Composite for 2000 seniors who completed a core curriculum and those who did not are shown in Tables 1 and 2. In general, students who complete core coursework tend to earn higher average scores than students who do not complete core coursework. As Table 2 indicates, this association holds true across racial-ethnic groups. Table 3 shows that regardless of racial-ethnic background, the average Composite score for students who completed core coursework has been consistently higher over the past five years than the average Composite scores of those who did not.

Table 1
Average ACT Scores
By Level of High School Coursework

|                 | Core or More |      |      | Less Than Core |      |      |      |      |      |      |
|-----------------|--------------|------|------|----------------|------|------|------|------|------|------|
| Reference Group | E            | M    | R    | SR             | С    | E    | М    | R    | SR   | С    |
| National        | 21.5         | 21.8 | 22.4 | 21.8           | 22.0 | 18.8 | 19.0 | 19.8 | 19.7 | 19.5 |

Table 2
Average ACT Scores
By Level of High School Coursework and Racial-Ethnic Group

|                               | Core or More |      |      |      | Less Than Core |      |      |      |      |      |
|-------------------------------|--------------|------|------|------|----------------|------|------|------|------|------|
| National                      |              |      |      |      |                |      |      |      |      |      |
| Reference Group               | E            | M    | R    | SR   | С              | E    | М    | R    | SR   | С    |
| African-Amer./Black           | 17.4         | 17.6 | 17.8 | 17.9 | 17.8           | 15.0 | 15.8 | 16.0 | 16.5 | 16.0 |
| Amer. Indian, Alaskan Native  | 19.7         | 20.0 | 20.9 | 20.6 | 20.4           | 16.6 | 17.1 | 18.2 | 18.4 | 17.7 |
| Caucasian-Amer./White         | 22.3         | 22.4 | 23.1 | 22.5 | 22.7           | 19.6 | 19.5 | 20.6 | 20.4 | 20.2 |
| Mexican-Amer./Chicano         | 18.6         | 19.6 | 19.7 | 19.6 | 19.5           | 16.3 | 17.4 | 17.6 | 18.0 | 17.5 |
| Asian-Amer., Pacific Islander | 21.3         | 23.9 | 22.0 | 22.0 | 22.4           | 18.6 | 21.3 | 19.6 | 20.1 | 20.0 |
| P.R., Cuban, Other Hispanic   | 19.8         | 20.6 | 20.9 | 20.4 | 20.5           | 17.1 | 17.9 | 18.4 | 18.4 | 18.0 |



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Table 3.

Trends in Average ACT Composite Scores Across Five Years

By Level of High School Coursework and Racial-Ethnic Group

| National                                 | Core   | or More      | Less Than Core |              |  |
|--|--------|--------------|----------------|--------------|--|
| Reference Group                          | N      | Composite    | N              | Composite    |  |
| All Graduates                            |        |              |                |              |  |
| 1996                                     | 542136 | 22.0         | 354733         | 19.2         |  |
| 1997                                     | 566141 | 22.1         | 361947         | 19.3         |  |
| 1998                                     | 606406 | 22.1         | 354306         | 19.3         |  |
| 1999                                     | 615545 | 22.0         | 367537         | 19.4         |  |
| 2000                                     | 645513 | 22.0         | 376645         | 19.5         |  |
| African-American/Black                   | 0,00.0 | 22.0         | 0700-10        | 17.0         |  |
| 1996                                     | 48321  | 17.9         | 38546          | 15.9         |  |
| 1997                                     | 50100  | 17.9         | 39696          | 16.0         |  |
| 1998                                     | 56544  | 17.9         | 41019          | 16.0         |  |
| 1999                                     | 58410  | 17.9         | 42061          | 16.0         |  |
| 2000                                     | 63837  | 17.8         | 42874          | 16.0         |  |
| American Indian, Alaskan Native          | 00007  | 17.0         | 42074          | 10.0         |  |
| 1996                                     | 5655   | 20.2         | 5419           | 17.7         |  |
| 1997                                     | 5685   | 20.4         | 5414           | 17.7         |  |
| 1998                                     | 5587   | 20.4         | 4903           | 17.0         |  |
| 1999                                     | 5332   | 20.4         | 4703<br>4782   |              |  |
| 2000                                     | 5382   | 20.4         | 4762<br>4821   | 17.6<br>17.7 |  |
| Caucasian-American/White                 | 3302   | 20.4         | 4021           | 17.7         |  |
| 1996                                     | 398962 | 22.7         | 051075         | 10.0         |  |
| 1997                                     | 408851 | 22.7<br>22.8 | 251375         | 19.9         |  |
| 1998                                     | 444461 | 22.0<br>22.7 | 250763         | 20.0         |  |
| 1999                                     | 452100 | 22.7<br>22.7 | 249092         | 20.0         |  |
| 2000                                     |        |              | 260036         | 20.1         |  |
| Mexican-American/Chicano/Latino          | 470451 | 22.7         | 266811         | 20.2         |  |
| 1996                                     | 11752  | 10.0         | 0.400          | 17.4         |  |
| 1997                                     | 11753  | 19.8         | 9438           | 17.4         |  |
| 1998                                     | 11875  | 19.9         | 9475           | 17.4         |  |
| 1999                                     | 19028  | 19.6         | 14541          | 17.2         |  |
| 2000                                     | 21260  | 19.6         | 15753          | 17.4         |  |
|  | 23831  | 19.5         | 16018          | 17.5         |  |
| Asian-American, Pacific Islander<br>1996 | 10/05  | 00.4         |                |              |  |
|  | 19685  | 22.4         | 7676           | 19.7         |  |
| 1997                                     | 20201  | 22.5         | 7834           | 19.8         |  |
| 1998                                     | 22074  | 22.6         | 7886           | 20.0         |  |
| 1999                                     | 23017  | 22.3         | 8856           | 19.9         |  |
| 2000                                     | 24458  | 22.4         | 9314           | 20.0         |  |
| Puerto Rican, Cuban, Other Hispanic      |        |              |                |              |  |
| 1996                                     | 14838  | 20.0         | 10462          | 17.4         |  |
| 1997                                     | 15693  | 20.1         | 10615          | 17.4         |  |
| 1998                                     | 10732  | 20.7         | 5893           | 17.9         |  |
| 1999                                     | 8911   | 20.7         | 5002           | 17.9         |  |
| 2000                                     | 9350   | 20.5         | 5561           | 18.0         |  |



Table 4 presents the relationship between average ACT Composite scores and patterns of high school coursework across racial-ethnic groups **and** annual family income levels within each group.

Table 4
Average ACT Composite Scores
By Level of High School Coursework, Racial-Ethnic Group
And Annual Family Income

| 2000                        |              | Annuc                   | al Family Incom                  | е    |                                 |      |
|-----------------------------|--------------|-------------------------|----------------------------------|------|---------------------------------|------|
| National<br>Reference Group |              | n \$18,000<br>Composite | \$18,000-\$50,000<br>N Composite |      | \$50,000 or more<br>N Composite |      |
|                             |              |                         |                                  |      |                                 |      |
| All Graduates               |              |                         |                                  |      |                                 |      |
| Total Group*                | 85096        | 18.3                    | 388496                           | 20.3 | 421428                          | 22.3 |
| Core                        | 45786        | 19.2                    | 231756                           | 21.2 | 285342                          | 23.1 |
| Less than Core              | 38089        | 17.2                    | 152616                           | 18.9 | 131785                          | 20.7 |
| African-American/Black      |              |                         |                                  |      |                                 |      |
| Total Group                 | 24643        | 16.1                    | 50021                            | 17.0 | 17939                           | 18.7 |
| Core                        | 13545        | 16.7                    | 30071                            | 17.7 | 11919                           | 19.4 |
| Less than Core              | 10863        | 15.3                    | 19448                            | 16.0 | 5817                            | 17.5 |
| American Indian, Alasko     | an Native    |                         |                                  |      |                                 |      |
| Total Group                 | 1726         | 17.3                    | 4934                             | 18.8 | 2569                            | 20.7 |
| Core                        | 708          | 18.8                    | 2472                             | 20.1 | 1554                            | 21.7 |
| Less than Core              | 933          | 16.4                    | 2293                             | 17.6 | 957                             | 19.2 |
| Caucasian-American/W        | /hite        |                         |                                  |      |                                 |      |
| Total Group                 | 36089        | 20.1                    | 263626                           | 21.1 | 347741                          | 22.5 |
| Core                        | 18818        | 21.3                    | 156934                           | 22.1 | 235933                          | 23.2 |
| Less than Core              | 16922        | 18.7                    | 104469                           | 19.6 | 108719                          | 20.9 |
| Mexican-American/Chic       | cano/Latino  |                         |                                  |      |                                 |      |
| Total Group                 | 7657         | 17.2                    | 19361                            | 18.5 | 8743                            | 20.6 |
| Core                        | 4314         | 17.9                    | 11416                            | 19.3 | 5737                            | 21.3 |
| Less than Core              | 3295         | 16.2                    | 7806                             | 17.3 | 2932                            | 19.3 |
| Asian-American, Pacific     | Islander     |                         |                                  |      |                                 |      |
| Total Group                 | 4612         | 18.8                    | 13431                            | 20.8 | 11889                           | 23.9 |
| Core                        | 3046         | 19.5                    | 9342                             | 21.5 | 9046                            | 24.3 |
| Less than Core              | 1473         | 17.3                    | 3855                             | 19.3 | 2654                            | 22.4 |
| Puerto Rican, Cuban, Ot     | her Hispanic |                         |                                  |      |                                 |      |
| Total Group                 | 2247         | 17.7                    | 6684                             | 19.1 | 4313                            | 21.5 |
| Core                        | 1197         | 18.7                    | 3986                             | 19.9 | 2950                            | 22.2 |
| Less than Core              | 950          | 16.4                    | 2491                             | 17.8 | 1240                            | 19.9 |
|                             | 700          | 10.4                    | 2471                             | 17.0 | 1240                            | 17.7 |

<sup>\*</sup> All "Total Group" counts and averages include students with unknown "Core" status.



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Each year ACT collects freshman course grades from hundreds of colleges and universities. Research has shown ACT-tested graduates typically have at least a 50 percent chance of receiving at least a "B" in the courses listed in Table 5 if they obtain the identified ACT score value or higher. The columns in the right side of the table present the percentages of ACT-tested graduates that earned a score at or above the typical cutoff score. For example, of those students who had core or more coursework, 82% had an ACT English score at or above 17.

Table 5
Summary of Course Placement
Cutoff Scores

|                      |   |    | Percent At or Above The Typical<br>Cutoff Score |  |  |
|----------------------|---|----|---|--|--|
| Course Type          | ACT Assessment Typical Cutoff Test Variable Score |    | Those with<br>Core<br>Coursework                | Those With<br>Less than Core<br>Coursework |  |
| English              |   |    |   |  |  |
| Standard Composition | English   | 17 | 82  | 64   |  |
| Advanced Composition | English   | 22 | 49  | 29   |  |
| Literature           | English   | 21 | 56  | 35   |  |
| Mathematics          |   |    |   |  |  |
| Elementary Algebra   | Mathematics                                       | 20 | 61  | 35   |  |
| Intermediate Algebra | Mathematics                                       | 22 | 48  | 25   |  |
| College Algebra      | <b>Mathematics</b>                                | 23 | 42  | 21   |  |
| Calculus             | <b>Mathematics</b>                                | 27 | 20  | 8  |  |
| Science              |   |    |   |  |  |
| Biology              | Science Reasoning                                 | 24 | 34  | 18   |  |
| Chemistry            | Science Reasoning                                 | 25 | 25  | 13   |  |

Academic success at specific colleges/universities depends on many factors, including the selectivity of the institution and the institution's grading practices. Based on the information presented above, the percentage of ACT-tested students who would likely receive at least a "B" in the identified courses is higher for those who completed the recommended core coursework. Students who earn ACT scores below those listed may need additional academic preparation to be successful in these typical college entry level courses.



Table 6 compares percentages of students choosing selected academic majors in 1996, 1998, and 2000. Overall the interest in most majors has been consistent during this period.

Table 6
Percentages Choosing Selected Majors
By Graduation Year and Gender

| National                      |      |       |       |
|-------------------------------|------|-------|-------|
| Reference Group               | Men  | Women | Total |
| Business                      |      |       |       |
| 1996                          | 14   | 12    | 13    |
| 1998                          | 14   | 11    | 12    |
| 2000                          | 13   | 11    | 12    |
| Computer/Information Sciences |      |       |       |
| 1996                          | 4    | 1     | 3     |
| 1998                          | 6    | 2     | 3     |
| 2000                          | 8    | 2     | 4     |
| Education                     |      |       |       |
| 1996                          | 5    | 12    | 9     |
| 1998                          | 5    | 13    | 10    |
| 2000                          | 5    | 13    | 9     |
| Engineering                   |      |       |       |
| 1996                          | 17   | 3     | 9     |
| 1998                          | 17   | 3     | 9     |
| 2000                          | 16   | 3     | 8     |
| Health Professions            |      |       |       |
| 1996                          | 13   | 27    | 21    |
| 1998                          | 11   | 26    | 20    |
| 2000                          | · 10 | 25    | 18    |



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Table 7 presents the average ACT Composite scores for various racial-ethnic groups from 1996 to 2000. Over this five-year period, the national average ACT Composite score for most racial-ethnic groups has remained relatively stable. The change in averages that occured between 1997 and 1998 for the Mexican-American/Chicano/Latino and the Puerto Rican/Cuban/Other Hispanic groups was due primarily to a change in racial-ethnic coding in 1998.

Table 7 **Trends in Average ACT Composite Scores** 

| National                        |         |           |
|---------------------------------|---------|-----------|
| Reference Group                 | N       | Composite |
| All Graduates                   |         |           |
| 1996                            | 924663  | 20.9      |
| 1997                            | 959301  | 21.0      |
| 1998                            | 995039  | 21.0      |
| 1999                            | 1019053 | 21.0      |
| 2000                            | 1065138 | 21.0      |
| African-American/Black          |         |           |
| 1996                            | 87630   | 17.0      |
| 1997                            | 90617   | 17.1      |
| 1998                            | 100537  | 17.1      |
| 1999                            | 103932  | 17.1      |
| 2000                            | 110617  | 17.0      |
| American Indian, Alaskan Native |         |           |
| 1996                            | 11580   | 18.8      |
| 1997                            | 11509   | 19.0      |
| 1998                            | 11132   | 19.0      |
| 1999                            | 10830   | 18.9      |
| 2000                            | 10976   | 19.0      |
| Caucasian-American/White        |         |           |
| 1996                            | 654377  | 21.6      |
| 1997                            | 663878  | 21.7      |
| 1998                            | 707496  | 21.7      |
| 1999                            | 732025  | 21.7      |
| 2000                            | 762017  | 21.8      |

...Continued



Continued...

Table 7
Trends in Average ACT Composite Scores

| National                            |       |           |
|-------------------------------------|-------|-----------|
| Reference Group                     | N     | Composite |
| Mexican-American/Chicano/Latino     |       |           |
| 1996                                | 21345 | 18.7      |
| 1997                                | 21511 | 18.8      |
| 1998                                | 34617 | 18.5      |
| 1999                                | 38257 | 18.6      |
| 2000                                | 41414 | 18.6      |
| Asian-American, Pacific Islander    |       |           |
| 1996                                | 27847 | 21.6      |
| 1997                                | 28542 | 21.7      |
| 1998                                | 30988 | 21.8      |
| 1999                                | 33251 | 21.7      |
| 2000                                | 35479 | 21.7      |
| Puerto Rican, Cuban, Other Hispanic |       |           |
| 1996                                | 25857 | 18.9      |
| 1997                                | 26841 | 19.0      |
| 1998                                | 17500 | 19.6      |
| 1999                                | 15073 | 19.6      |
| 2000                                | 16401 | 19.5      |

Annual national trends in ACT scores beginning with 1969-70 are available on request.





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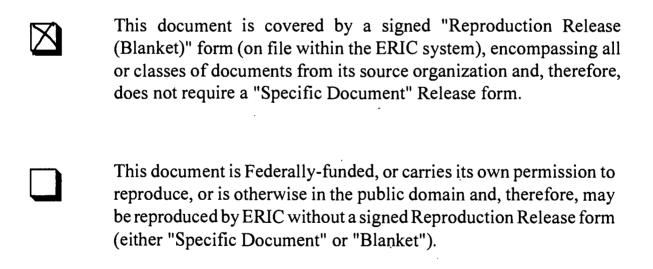
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