| TITLE | Public High School Graduation Requirements. Bulletin, OERI. |
| :---: | :---: |
| INSTITUTION | Center ${ }^{\text {for }}$ Education statistics (OERI/ED), |
|  | Washington; DC. |
| REPORT MO | CS-86-225b |
| PUB DATE | Sep 86 |
| NOTE | 18p; Tables and appended survey contain small |
|  | print. |
| PUB TYPE | Reports ${ }^{\text {a }}$ Research/Technical (143) |
|  | Tests/Evaluation Instruments (160) -- Statistical Data (110) |
| EDRS PRICE | MF01/PCO1 Plus Postage. |
| DESCRIPTORS | *İademic Standards; *Creditsi Educationai Trends; |
|  | *Graduation Requirementsi *⿴igh School Graduates; |
|  | High Schoolsi Eimprovement Programs pationaj |
|  | Surveysi Pubiic Schools; school Activitiess school |
|  | Districts |
| IDENTIFIERS | Fast Response Survey System; National Commission on |
|  | Excellence in Education |


#### Abstract

A national sample of puolic rchool_districts was surveyed to determine high school graduation requirements existing ia the 1981-82 and 1984-85 school-years. Expectations-for 1987-88 were also surveyed. The office of Educational Research and improvement's Center for Statistics conducted the survey through its Fast Response Survey System. School district activities to improve learning were also surveyed. Results indicated that the number of required credits has increased between 1981-82 and 1984-85 from 19.7 to 20.3. However, even though the school districts plan to increase their requirements to 21.0 by 1987-88; they wili stili be lower than the recommendations of the National Comission ōn excellence in zaucation. The commisision recommends three credits in mathematics, yet results indicated requirements of 1-6; i-9; and 2-4 for 1981-82, 1984-85; añ 1987-88; respectiveiq. Three credits are also recommended for science, yet the results showed requirements of $1.5,1.8$, and 2.0 for the respective school years under study. In general, reguirements have also increased in English; social studies and foreign language.-The number of hours per day spent in credit classes varied according to geographic region: Requirements for homework and grading policies were reported, as well as the availability and evaluation of programs to improve achievement. The survey questionnaire is appended. (GDC)


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## Center for Statistics

Contact: Hélen Ashwick<br>(202) 357-6761<br>Public high School Gradjation Requirements

September 1986

Since 1981-82, school districts have slightly increased the number of credits required for high school graduation--both overall and in science and mathematics. Moreover, districts plan to increase their requirements even more by the 1987-88 school year. Neverthsless, graduation requirements in the Nation's school districts will still be lower in general than the recummendations of the National Commission on Excellence in Education (NCEE). These are some of the findings of a recent survey of school districts conducted by the Center for Statistics (CS) through its Fast Respnnse Survey System (FRSS).

## Background

In 1982 the FRSS conducted a survey of school districts for the National Commission on Excellence in Education on academic requirements in high schools. This, along with many other studies, provided data used by the Commission for its publication A Nation At Risk. The Commission portrayed American education in crisis and recommended that "State and local high school graduation requirements be strengthened and that, at a minimum, all students seeking a diploma be required to lay the foundations in the Five New Basics." ${ }^{1}$

The response to A Nation At Risk (and other studies critical of the state of American education) was swift. Within a year, the Commission had compiled two volumes of State and local educational reforms: Meeting the Challense and The Nation Responds: However, information on local initiatives in these reports pertains only to selected examples and was not intended to be representative of activity at the local level. This FRSS survey was designed to provide a national picture of local activities regarding academic requirements and initiatives to improve learning. Information was requested with respect to three points in time: 1982, 1985, and expectations regarding 1988.

## Credits Required for Graduation

On the average, seniors graduating from high school in 1984-85 were required to have completed 20.3 credits (table 1). This is an increase of 0.6 credits from 1981=82, when district requirements averaged 19.7. By 1987-88, ${ }^{3}$ district requirements are expected to increase to 21.0 . The increase in requirements can also be seen in the distributions of required credits. The
proportion of districts with relatively low requirements has been decreasing. In 1982; for example, 14 percent of the districts required fewer than 18 crecits; by 1985 the proportion had dropped to 9 percent and by 1988 it is expected to decrease to 3 parcent. Conversely, the proportion of districts with high requirements has been increasing: from 8 percent requiring 23 or more credits in 1982, to 12 percent in 1985, to 20 percent in 1988 (not shown in tables).

Public schosi districts were fairly homogeneous on average credit requirements regaraiess of district size or metropolitan status. ${ }^{4}$ For example, students graduating from rural districts in 1985 were required to complete 20.2 credits, on the average, while those in urban districts needed 20.5 (table 1). Requirements by district size and metropolitan status were also rather homogeneous in 1982, and this is also expected to be true in 1988. Regional differences, however, are evident for all 3 years. For example, in 1985, districts in the West and Southwest required about two more credits than those in other regions ( 21.6 credits in West and Southwest districts compared with 19.6 to 19.9 credits in districts in othēr regions). Similar differences occurred in 1982 and are expected to occur in 1988 (table 1).

In addition, a few districts had or will have additional requirements for college-bound or honor students: 3 percent in 1982, 6 percent in 1985, and 8 percent in 1988. On the average, college-bound students in these districts were required to take about 1.5 more credits for graduation (not shown in tables).

## Basic Course Requirements

Although mathematics and science requirements have increased since 1982, there still is a substantial gap between district requirements and the Commission's recommendations. In 1985 district requirements averaged 1.9 credits in mathematics and 1.8 credits in science, soméwhat more than the 1.6 and 1.5 needed in 1982 (tablee 2). However, the Commission's recommendation of 3 credits in each subject was met or exceeded by relatively few distriets: 15 percent in mathematies and 9 percent in science (not shown in tables). ${ }^{5}$. By 1988 mathematics and science requirements are expected to increase to 2.3 and 2.0 credits, on the average. The proportion of districts meeting the Commission's recommendations will increase as well: 32 percent in mathematics and 16 percent in science.

Requirements in English and social studies also have increased slightly. Seniors graduating in 1985 averaged 3.8 credits in English or language arts, and 2.8 credits in social studies or history (table 3): By 1988 these requirements are expected to average 3.9 and 2.9 credits, very close to the Commission's recommendations of 4 and 3.

Relatively few districts have requirements in foreign language, although the number who do so is increasing. In 1982, 2 percent required some foreign language; this propcirtion increased to 5 percent in 1985 and will increase to 11 percent in 1988 . Similarly, almost no districts asquired computer science courses in 1982 . By 1985, 9 percent required graduating seniors to have taken a computer science course, and by 1988, 22 percent will have a similar requirement (not shown in tables). Across all districts; the average nember of required credits in either of these subjects is quite small--ranging from 0 to 0.2 eredits. However, in districts
with requirements, the average required credits have remained stable and will continue that way: 0.7 credics in computer science and 1.4 credits in Eoreign language, on the average (not shown in tables).

## Time Spent in School

In 1985, high school students attended school for 178 days ${ }^{6}$ and took an average of 6.1 credit classes per dāy (täblē 4). Since thē àverage class period was 51 minutes long, high school stưdents took credit classes for 309 minutes (or $5: 1$ hours) per day--a yearly average of 916 hours. The amount of time spent in credit classes each day increased slightly since 1982, when districts reported 5 hours per day. ${ }^{7}$

There were regional differences in the number of hours spent in credit classes per day in 1985 (table 4). Students in North Atlantic districts attended credit classes 4.5 hours per day, on the average, while those in the West and Southwest averaged 5.6 hours. Credit class time in the Great Lakes and Plains and in the Southeast fell in between (averaging 5.1 and 5.3 hours).

## Homework Requirements

One-third of the districts had formal policies in 1985 requiring the regular assignment of homework (table 5). This figure represents an increase since 1982 when about 23 percént had such requirements. The differences among districts; however, remained the same- Large districts ( 10,000 or more students) and urban districts had formal homework policies more frequently than small districts (less than 2,500 students) and rural districts (tảble 5). In addition, such policies were more prevalent in the North Atlantic region than in other regions.

## Grading Policies

In 57 percent of the districts, teachers were required to follow a district-wide grading policy (table 5). Administrators in 78 percent of these districts described their policies as based on an absolute scale (i.e., according to a fixed standard), while 15 percent said the scale was relative to class performance (i.e., on a curve). The remaining districts used other criteria (not shown in tables). . District-wide policies were more prevalent in the Southeast than in other regions, and less prevalent in süburbān than in rural districts (table 5).

## Activities $\mathbf{t o}$ Improve Achievement

Administrators were also asked whether certain policies, programs, or practices designed to improve achievement were used in their districts; whether they had been instituted or augmented since 1981-82; and for an evaluation of effectiveness.

## Program Availability

Each of the following programs or activities was in operation in at least 60 percent of the districts at the time of the survey. The second percentage given is the percentage for programs instituted subsequent to 1981-82.

- Programs to improve student attendance ( 90 percent, 47 percent);
o Curriculum reform ( 86 percent; 65 percent);
o Practices to substantially reduce classroom disruption ( 85 percent, 54 percent);
o Minimum grade requirements for participation in extracurricular activities (81 percent, 29 percent); ${ }^{10}$
- Gifted and talented or advanced placement programs 75 percent, 47 percent):
- Recommendations for changes in textbooks ( 73 percent, $4 \overline{8}$ percent);
o Introduction of new initiatives in mathematics, science, or technology ( 72 percent, 66 percent);
o Study skills instruction (69 percent, 51 percent);
- Requirements for inservice training in effective classroom management (69 percent, 54 percent); and
o Policies requiring students to have more writing experience ( 63 percent, 66 percent).
Somewhāt fewer districts (about 40 percent) had reduced the average class size, provided special diplomas or other academic recognition (other than honor roll), or required competency tests for graduation: Only 4 percent provided special academic high schools.

All the educational enhancement activities (with the exception of minimum grade requirements for participation in extracurricular activities) followed à similar pattern with regard to the time they were introduced and whether or not they were later augmented. Some districtis (between 5 and 29 percent) had instituted these activities in 1981-82 or before and had not augmented them since: Somewhat more (between 20 and 37 percent) had established the programs or policies by 1981-82, but had also augmented them subsequently. ${ }^{11}$ The largest group (between 47 and 66 percent) had initiated the activities since $1981-82$ (table 6 ).

## Differences in Availability by District Characteristics

Availability of these programs, policies, and practices to improve learning differed markedly by district size, metropolitan status, 12 and region. About two-thirds of these activities were more prevalent in urban districts and large districts than in rural districts and small districts (tables 7 and 8). However, proportionately more rural than urban districts and more
smali than large districts required minimum grades before students could participate in extracurricular activities. Study skills instruction and practices to reduce classroom disruption were equally prevalent in large and small districts, and in urban and rural districts. Recommendations for textbook changes showed no differencēs rēlated to size. Two other activities showed no differences related to metropolitan status: reductions in average class size and provision of special diplomas or other academic recognition.

Gifted and talented programs were available more frequently in the North Atlantic and Southeast than in other regions (table 9). The Southeast also had the highest proportis i of districts awarding special diplomas and requiring inservice training in effective classroom management. Instruction in study skills was more prevalent in North Atlantic districts. The North Atlantic region and West and Southwest region led the other regions with requirements for more student writing. Reductions in class size, competency test requirements for graduation, and inservice training requirements in effective classroom management were available least frequently in the Great Lakes and Plains.

## Program Evaluation

Administrators generally believed that the programs, policies, and practices had a moderately positive éfect on learning (table 6): On a 5 -point scale ranging from "-2" (strong negative effect) to " $+2^{n}$ (strong positive effect); average evaluations ranged fromi 0.9 (minimum grade requirements for participation in extracurricular activities) to 1.4 (requirements for more student writing; curriculum reform; initiatives in mathematics, science, and technology; and specialized academic high schools).

## Survey Background

In August 1985; the survey form (a copy of which is attached) was mailed to a stratified national probability sample of 565 districts representing the estimated total of 11,248 districts with high schools in the Nation. Data collection was completed in October 1985 with a 99 percent response rate. The data were adjusted for questionnaire nonresponse and weighted to national totals. All statements of comparison made in the text are significant at the 90 percent confidence lēvel or better. Standard errors for sélected items are presented in table 10 as a general guide to the precision of numbers in the tables.

The survey was performed under contract with Westat, Inc., using the Fast Response Surve System (FRSS). Westat's Project Director was Elizabeth Farris, and the Survey Manager was Judy McNeil Thorne. Douglas Wright was the CS Project Officer for this survey. FRSS was established by the Center for Statistics to quickly collect small quantities of data needed for education planning and policy formulation, and to do so with minimum burden on respondents.

## For More Information

For more information about this survey or the Fast Responsè Survey System, contact Helen Ashwick, Office for Educational Research and Improvement, Center for Statistics, 555 New Jérsey Avenue, NW., Washington, D.C. 20208, telephone (202) 357-6761.

## Notes

${ }^{\text {IU.S. Department of }}$ Education, the National Commission on Excellence in Education, $A$ Nation At Risk: The Imperative for Education Reform. Washington, D.C. U.S. Government Printing Office, 1983. The Commission recommended the following graduation requirements: 4 years of English, 3 years of mathematics, 3 years of science, 3 years of social studies, and one-half year of computer science.
${ }^{2}$ A credit was defined as à class scheduled for a minimum of 200 minutes per week (275 minutes for a laboratory class) for 36 weeks. All credits have been converted to a 4 -year base:
${ }^{3}$ For convenience, school years are abbreviated as 1982, 1985, and 1988.
${ }^{4}$ Because of the similarity of requirements among the districts, thē variances for these estimates are small, and rèlatively small differences are statistically significant. Only differences of more than $\mathbf{I}$ credit for total requirements are discussed.
${ }^{5}$ Credits have been rounded. All districts with more than 2.5 credits in mathematics or science have been included in these percents.
${ }^{6}$ Eleven percent of the districts reported that they had increased the number of school days since 1982 (not shown in tables).
${ }^{7}$ Data from the 1982 FRSS survey. Because of small variances; the difference of 10.3 minutes per day is statistically significant. Across a school year, this difference amounts to $\mathbf{3 0 . 3}$ more hours of credit classes.
${ }^{8}$ Data from the 1982 FRSS survey.
${ }^{9}$ Based on the number of districts that had the program at the time of the survey.
$10_{\text {I }}$ should be noted that the item on questionnaire did not specify a minum grade requirement, e.g., "C" average.
${ }^{11}$ For two activities (specialized academic high schools and special diploma or other academic recognition), the percent of districts that had instituted the activity in 1981-82 or earlie: and changed it subsequently was about the same as the percent that had introduced the activity early but had not changed it since.

12 These analyses focus exclusively on differences between large and small districts, and between urban and rural districts.

Table 1.- Mean number of credits required for graduation, by year and district characteristics: United States, 1985
$\left.\begin{array}{c|ccc}\hline \begin{array}{c}\text { District } \\ \text { characteristic }\end{array} & & \text { Schooi year }\end{array}\right]$

NOTE:-A credit was defined as à classs scheduled for a minimum of 200 minutēs per week ( 275 minutes for a laboratory class) for 36 weeks. All credits have been converted to a 4-year bāae.

Table 2.-Moan muber or mathematics and science credits required for graduation, by year and district characteristics: United States; 1985

| District characteristic | Mathematics |  |  | Science |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |       <br> $1981-82$ $1984-85$ $1987-88$ $1981-82$ $1984-85$ $1987-88$ |  |  |  |  |  |
|  |  |  |  |  |  |  |
| All districts with <br> $\begin{array}{llllllll}\text { high schoris ........... } & 1 . \overline{6} & 1.9 & 2 . \overline{3} & 1.5 & 1.8 & 2.0\end{array}$ |  |  |  |  |  |  |
| District size |  |  |  |  |  |  |
| Lese than 2,500 .......... | 1.7 | 1.9 | 2.3 | 1.6 | 1.8 | 2.0 |
| 2,500-9,999 ............. | 1.6 | 1.8 | 2.3 | 1.4 | 1.6 | 2.0 |
| 10,000 or more ............ | 1.7 | 2.0 | 2.4 | 1.4 | 1.7 | 2.1 |
| Region |  |  |  |  |  |  |
| North Atlantic -a.o.o...:- | 1.7 | 1.9 | 2.4 | 1.5 | 1.7 | 2.2 |
| Grant Lakes and Plains ... | 1.4 | 1.7 | 2.0 | 1.4 | $1 . \overline{6}$ | $1 . \overline{8}$ |
| Southeast : | 1.8 | 2.2 | 2.6 | 1.6 | $1 . \overline{8}$ | 2.2 |
| Weat and Southwest | 1.8 | 2.1 | 2.5 | 1.7 | 2.0 | 2.2 |
| Motropoiitan status |  |  |  |  |  |  |
|  | 1.7 | 1.9 | 2.3 | 1.6 | $1 . \overline{8}$ | 2.1 |
| Suaburban | 1.6 | 1.8 | 2.3 | 1.4 | 1.6 | 2.0 |
| Uxiban ....................... | 1.7 | 2.1 | 2.5 | 1.4 | 1.7 | 2.1 |

Mows.-A credit was defined as a class scheduled for a minimum of 200 minutes per week (275 mimutes for a laboratory class) for 36 weeks. All credits have been converted to a 4-year base.

Table 3 --Man mumber of miglish and social stüdies credits required for graduation, by year and district characteristics: United States, 1985


NOTE. =( 275 咅inutes for à laboratory class) for 36 weeks. All credits have been converted to a 4-year base.

Tabie 4.--Man nuber of school days per year; credit ciasses per day, minutes per credit ciass, and minutes of credit ciases per day; by district characteristices: United States, 1985

|  | Mean number |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| District charactaristic | School daye per year | Credit classes per day ${ }^{1}$ | Minutes per credit class | Minutes of creait classes per day ${ }^{2}$ |
| All districts with high schools ............ | 178.0 | 6.1 | 51:1 | 308.6 |
| District size |  |  |  |  |
| Lease than 2,500 ........... | 177.5 | 6.1 | 51.0 | 313.0 |
| 2,500-9,999 ............ | 179.0 | $\overline{5} . \overline{8}$ | 50.9 | 295.1 |
| 10,000 or more .f.e.t.e.... | 179.1 | 5.9 | 53.2 | 311.4 |
| Region |  |  |  |  |
| North Atiantic ............ | 180.2 | 6.0 | 44.8 | 267.2 |
| Great Lakes and Plains ... | 177.8 | 6.0 | 51.2 | 305.1 |
| Southeast ..... | 177.9 | 5.8 | 54.9 | 319.8 |
| Went and Southrest o.-.e.-: | 176.7 | 6.3 | $5 \overline{3.2}$ | 336.3 |
| Matropolitin status |  |  |  |  |
| - - |  |  |  |  |
| Bural ....................... | 177.4 | 6.1 | $\overline{51 .} \overline{8}$ | 315.7 |
| Suburban ................... | 179.0 | 5.9 | 49.7 | 295.4 |
| Urban .......日.i.o.tobor.e. | 179.0 | 5.9 | 51.2 | 298.9 |

$I_{\text {raken }}$ by more than 50 percent of students.
${ }^{2}$ calculated from the sumber of credit class periods per day and the average muber of minutes per period.

Table 5. - Districts with policies requiring the regular assignent of homework and with dístérict-wide grading policies, by district characteristics: United States; 1985

| Distàict characteristic | Percent of districts with |  |
| :---: | :---: | :---: |
|  | Policies requiring the regular assigrment of of homework | District-wide grading policies |
| All districts with hīgh schools ............ | 34 | 57 |
| District size |  |  |
| Less than 2,500 | 30 | 58 |
| 2,500-9,999 ............ | 41 | 55 |
| 10,000 or more ........... | 51 | 56 |
| Region |  |  |
| North Atlantic . . . . . . . . . | 53 | 51 |
| Great Lajkes and Plains ... | 28 | 53 |
| Southeast ....... | 35 | 78 |
| West and Southwest | 30 | 57 |
| Metropolitan status |  |  |
| Rural | 27 | 61 |
| Suburban | 44 | 49 |
|  | 57 | 62 |



|  |  |  |
| :--- | :--- | :--- | :--- | :--- |

i Baced on muber of districte that hed the progro in 1984-85: Percente ney not add to 100 because of rounding.


Table 7.-Availability of prograns, policies, and practices to inprove academic achievement, by district size: United States; 1985


Table 8.--Availability of prograss; policies; and practices to improve academic achievement; by metropolitan status: United States, 1985

|  |  |
| :--- | :--- |
| Progran, practice, or policy |  |

Table 9.--Availability of programs, policies, and practices to improve academic achievement, by region: United States; 1985



Man mater of subject ervite required for gradretion in 1985-85:


Minen numer of:




|  | 84.5 | 1.7 |
| :---: | :---: | :---: |
|  | 74.6 | 1.8 |
| Pequiremate for students to hwo more writing experimnce; all districts | 63.1 | 2.0 |
|  | 39.0 | 1.9 |
| Currienlue seform, ali distriets | 83.8 | 2.5 |
|  | 81:5 | 4.3 |
|  | 50.5 | 7.0 |

 inprove acedente echiovent:

| Study nlille insturetom; all districer | 1.2 | . 03 |
| :---: | :---: | :---: |
|  | 1.4 | . 04 |
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