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TRENDS IN SECONDARY SCIENCE ENROLLMENTS IN IOWA

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Enrollment data were collected from the district administration for the five reported years starting with the 1968-69 school year. The data for the 1973-74 school year were collected at the school level. Collection at the school level should provide a more representative data bank for the academic programs.

All the science offerings were grouped into the following seven categories: biology, chemistry, earth science, enrichment science, general science, physical science, and physics. It is interesting to note that in the 1968-69 data collection only 19 different courses were reported. In the succeeding years, 25, 56, 71, 74, and 96 were reported respectively. In 1973-74 students were offered over five times as many courses as they were in 1968-69.

In grades 9-12 the number of students in 1968-69 was about 193,300 and in 1973-74 about 196,500. This is about a two-percent increase in high school students.

During the five-year span from 1968-69 to 1972-73 student enrollments in science increased for school sizes 1, 3, and 5.* During this same time student enrollments in science decreased for school sizes 2, 4, 6, and 7. There was an overall decrease of about 2,600 student enrollments during these five years.

An analysis of Table 1 helps to illuminate the trend taking place in secondary science. Using the data from the table one can say that *an increase in student enrollments has taken place in all areas except physics*. The total increase is a bit greater than 23,000 student enrollments.

The number of course offerings has increased over five times since

* School size is gauged by the total number of pupils enrolled, grades K-12, from the school district: Size 1—150-499; Size 2—500-749; Size 3—750-999; Size 4—1,000-1,499; Size 5—1,500-1,999; Size 6—2,000-2,999; Size 7—3,000-up. Among the 451 community, consolidated, and independent school districts in Iowa, enrollments range from 151 students in the smallest district to 41,989 students in the largest one.

1968-69, but many of these "new" offerings are courses with only half credit or less. For the year 1970-71, 1,579 student enrollments should be subtracted from the 111,760, which gives 110,181 total student enrollments. A correction factor of about -3,500 should be used with the 1971-72 data of 116,278 total enrollments. This gives a total enrollment of about 113,000, which is very similar to the 1968-69 figure. The correction estimate for 1972-73 would be 5,200. Using a calculated correction factor of 7,400 for the 73-74 data one still arrives at an increase of about 16,000 student enrollments.

In summary, one can say that the variety of course offerings has increased greatly during the past six academic school years. The data indicate that school districts with over 1,000 students in grades K-12, during 1968-69 through 1972-73, suffered greater student enrollment decreases than the smaller three district sizes. Student enrollments in science have increased for the 1973-74 academic year. Data for the number of students enrolled in different courses within different school sizes have not been finalized. However, preliminary data indicate about 16,000 more enrollments in science now than in 1968-69. Physics and chemistry enrollments are not changing greatly. New course offerings in biology, physical sciences, and other interest areas have helped to attract students to science.

TABLE 1

TOTAL SCIENCE ENROLLMENT FOR IOWA PUBLIC SCHOOLS
IN SEVEN AREAS OF SCIENCE IN THE 1968-69 THROUGH
1973-74 ACADEMIC YEARS

<i>Year</i>	<i>Biology</i>	<i>Chemistry</i>	<i>Physics</i>	<i>Earth Science</i>	<i>Physical Science</i>	<i>Enrichment Science</i>	<i>General Science</i>	<i>Total</i>
68-69	43,623	15,997	7,538	10,759	19,946	1,245	14,248	113,356
69-70	46,268	16,044	7,406	8,307	22,042	6,368	15,239	121,674
70-71	44,596	15,467	7,618	9,401	22,239	576	11,863	111,760
71-72	48,662	15,496	7,086	9,651	19,668	1,418	14,297	116,278
72-73	44,934	14,524	6,932	10,480	19,363	1,228	13,331	110,792
73-74	54,249	16,800	7,378	14,110	23,296	3,793	16,938	136,564

TABLE 2

TOTAL SCIENCE ENROLLMENTS FOR IOWA PUBLIC
SCHOOLS FOR DIFFERENT SCHOOL SIZES IN THE 1968-69
THROUGH 1972-73 ACADEMIC YEARS

Year	School Size						
	1	2	3	4	5	6	7
1968-69	9,299	14,992	9,509	13,986	7,229	16,728	41,613
1969-70	9,783	16,161	10,791	14,672	6,757	19,315	44,195
1970-71	9,657	13,577	11,397	13,496	7,602	14,381	41,650
1971-72	9,727	13,271	11,900	13,003	9,210	15,408	43,759
1972-73	10,174	12,192	12,398	12,304	8,226	15,502	39,996

YOU SCREAM, I SCREAM

*Artificial food colors and flavors found in such food as ice cream
may be a cause of hyperactivity in children.—WSJ news item.*

You think the kids go hyper
When their sweet tooth's gratified—
You ought to see the action
When the goodies are denied!
—E. V. Girard

FUTURE SHOCK

I danced a dance to the tambourine,
I marched a march to the drum,
But what will I do when the trumpet sounds,
Will I know when the Kingdom's come?
—Doris A. Simonis