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A Study of Terminal and Advanced High School Science Courses in the State of Iowa

Presented Before the Iowa Academy of Science, April 21, 22, 1967

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Information for the study was obtained through the use of the facilities of the Iowa Educational Information



Gates

Center at The University of Iowa and through direct correspondence with the schools. Terminal science courses are those courses for non-college bound students, in addition to general science, biology, chemistry, earth science, and physics. Advanced science courses are those in addition to these same courses which are for science-prone students who plan to enter college.

It is perhaps not surprising to see that the average class enrollment was 11 students, with a total of 378 in the state. The schools studied have an average enrollment of 297 students. It was also found that the average number of students enrolled in terminal and advanced science courses represented an average of 3.5 per cent of the total school enrollment.

The schools reported that most of the students could be classified as low-ability or high-ability, with a minimum number of students of average ability.

For the high-ability student, 87 per cent of the schools required three years of mathematics and/or science as a prerequisite for the advanced courses. For the low-ability student, no course prerequisite was required for the terminal science courses. In looking at the status of the students, the greatest majority were seniors, numbering 210, followed by juniors, 91, and sophomores with 77 enrolled.

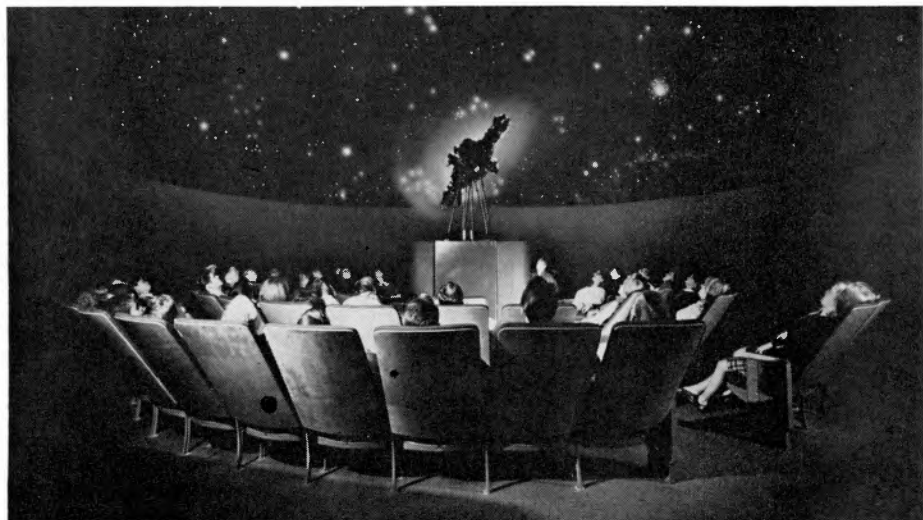
Advanced Science was the most commonly used course title, selected by ten schools. Science Seminar was used by three schools, followed by one each of: Special Studies in Biology, Senior Science, Aero-Space Science, Advanced Physical Science, Science III, Science IV, Advanced Electronics, and Advanced Physics. Applied Science, Consumer Science, Remedial Science, Science Problems, Vocational Science, and Practical Science were used as course titles for the low-ability groups.

A great number of teachers involved with the high-ability student felt that their objective was to apply the material previously learned in other science courses by giving the student an opportunity to pursue his own interests on an individual research or project basis. Those teachers with the low-ability groups saw their

role as a reviewer of basic concepts, inasmuch as this would probably be the student's last science course.

The author is anxious to gather further information and data about these

types of courses in Iowa. Correspondence from teachers or administrators who know of courses that are being taught and were not presented in this study will be welcome.



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