

New Patterns Set for "School of Tomorrow"

► PROMISING STUDENTS in America's "school of tomorrow" should be allowed to devote as much as 40% of their school time to creative, independent work and study.

The suggestion comes from the Commission on the Experimental Study of the Utilization of the Staff in the Secondary School. Their summary report, based on a five-year survey, calls for drastic revamping of present schools.

"Few high school graduates have achieved adequately the skill of independent study, nor has much happened to make them feel that they should," the Commission believes.

Under the new plan, opportunities for independent study would vary with each student's age and ability, and the stage of the transitional program in each high school.

Also stressed is the need for revising size of classes to make some much larger and some much smaller.

The theory is that 40% of the student's day should be spent in classes ranging from 100 to 300 members. These large group classes would be conducted by a teacher especially competent in some phase of the work at hand, or would feature film or TV programs.

Small group discussions would be held in classes of 15 or less.

Other recommendations are:

More staff help to keep professional teachers from wasting time on routine tasks. New design standards and equipment for outmoded schools.

More emphasis on individual student needs by dividing into stages or steps rather than years or grades.

Offsetting individual differences in teachers through "team teaching" and differing work loads, with salaries adjusted accordingly. Top-rated teachers would earn as much as \$15,000 to \$20,000 annually.

Wiser use of available funds—reduction of interscholastic competitive events is cited as an example.

The Commission's report, published by Rand McNally and Co. as "Focus on Change: Guide to Better Schools," (\$1.25) includes a how-to-do-it chapter listing specific steps schools should take now.

The work was sponsored by the National Association of Secondary-School Principals, and financed by the Ford Foundation and the Fund for Advancement of Education.

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Fighting the Starlings

(continued from p. 343)

exhaust gas to kill the starlings, for, like the canaries once used to warn miners of dangerous carbon monoxide levels, they are extremely sensitive to noxious gases. Still, few are in favor of killing a bird if it can be chased away instead.

The Fish and Wildlife Service, now engaged in something of a crash program, is hoping to find a debirding scheme that can keep starlings off buildings as well as runways.

Between 20 and 30 different methods of outsmarting the "blizzard of birds" that comes into the city to roost have been tried,

and nearly every one has been a colossal flop.

Roman candles, balloons and loud noises work in isolated cases. Recordings of starlings in distress, eagle screams and rifle shots do also. But after a few days, the birds usually treat the objects or noise as part of the fascinating city din.

Electricians have even rigged up ultraviolet lights designed to give the birds a ghostly appearance. The starlings were supposed to frighten each other, but instead, they soaked up the light as if it were sunshine.

Plaster-of-Paris cats with mirrors attached, stuffed owls and rubber snakes have been set up on roosting ledges and trees. After a short time, the birds admire themselves in the mirrors, ignore the snakes and perch on the owls. They have even disdained roosting boxes in parks heated with bright lamps. Apparently they prefer a drafty ledge.

About the most that can be said for the failures is that they at least provide a list of things that will not work.

In most cases recorded starling distress calls have been an unsuccessful scare device. Experts believe, however, that they have not been used to the best advantage. The calls should be played, they state, at the beginning of the season, before roosting areas are established.

One technique that has been successful is the electrical hotfoot, accomplished by stringing two wires along perches. Another is that of mounting metal or wooden runners at a 45-degree angle to the perching surface, a trick that makes the birds slide right off the roost. Applying a greasy substance also does the job. It leaves the building in a sticky mess, but at least the birds object to the feel of the grease on their feet.

All of these successful methods are expensive.

For all the trouble the starlings cause, they have their good points. They eat various insect pests, such as Japanese beetles, and can sing like meadowlarks if they care to do so. Supposedly, they can imitate 44 different birds.

But their normal voice reflects the way most Americans feel about them—"fee-u."

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Questions

GENERAL SCIENCE—How large was the money allocation for research and development in reporting colleges in 1958? p. 340.

PUBLIC SAFETY—How far are sharks able to smell blood? p. 338.

SPACE—What are two disadvantages of a high-altitude 24-hour satellite? p. 339.

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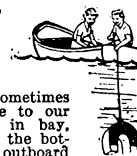
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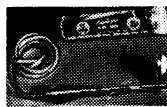
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