Little Ivan Gets Twice The Science

Russian students get a far heavier dose of scientific education than do Americans, a University of Arizona physicist said last night.

Dr. John W. Robson, member of the UA physics department, compared Russian and American education at a meeting of the Young Democrats of Greater Tucson.

He was joined on the platform by Dr. James E. McDonald, senior physicist at the UA Institute of Atmospheric Physics, who commented on the American educational system.

"Every Russian student gets about twice as much physics as do our best students—if our students search for it," Robson said. His talk was based on reports of the Soviet system.

The Russians scatter courses in physics over five years of school. There are 10 grades in the Russian public school system. There is an extensive program of nursery and kindergarten schools, and the Russians start their children in the first grade perhaps a year or two later than Americans do.

During those 10 years, the Russian student will get "half again" as much science and mathematics as will the American. He will put 42 per cent of his time in on these subjects.

But at the same time, he will also spend 50 per cent of his time on a heavily Marxist-pointed course of humanities studies. "The main difference seems to be that the Russian spends far less time than do our children on such courses as basket weaving," Robson said.

The Russian child gets a grade every day as the result of severe testing. He keeps the records himself and takes them home weekly for his parents to sign. Exams are given four times a year.

"The Russians don't automatically go from one grade to another," Robson said.

Their grading system consists of five numbered grades, "1" being the highest.

To pass from one grade to another, the child must have 80 per cent of his grades at least as high as a "3" and must have no failing "3" grades.

This means that a high percentage of students drop out of school—averaging 5 per cent a year.

In Russia, only 12.5 per cent of those who start school finish the 10th grade. Here, the figure would be 85 to 90 per cent, Robson said.

After high school, the Russian student must face a battery of tests before he is admitted to college. Only 45 per cent will be admitted, but almost all of these graduates from college.

Robson said the Russians have had an intensive program of training teachers. Today, the ratio in Russia is of 1 teacher to 27 students, compared with 1 teacher to 27 students here.

"Teachers are looked up to in Russia. They occupy a much higher position on the social ladder than here," Robson said.

McDonald said that it is not a question of our emulating the Russians. There is hardly any difference between the Dutch, French, or Irish education system and that of the Russians.

The fact is that the American public school system has fallen behind that of other major countries in recent decades, he said.

There is unanimous concern among university professors of failure of the public schools, he added, and this is countered by an almost unanimous rejection of criticism by the educators.

"All college professors are concerned about the prevailing lack of ability to think quantitatively," McDonald said. "The simple things are not understood by the entering freshman."

"The citizens must demand more intellectual content in school. Educators have said that parents don't want this. But when has the public asked the schools to dilute the content?"

He said that the written policy covering Arizona education sets the goal as helping the child to adjust to the environment, rather than to master the subject matter.

Pair Faces Sentence In Brutal Attack

Two transients pleaded guilty in Superior Court yesterday to reduced assault charges resulting from a brutal attack on an elderly drugstore owner last month.

William J. Benton, 22, San Diego, and Duane L. Stickney, 27, Minneapolis, entered the pleas on aggravated assault charges. They pleaded innocent earlier this month to degrees of assault with