



Gary's privately operated public school a success

One year ago Banneker Elementary School in Gary, Ind., became the first public school in the nation to be operated by an educational service company. The company, Behavioral Research Laboratories of Palo Alto, Calif., is under a contract in which the cost to the taxpayers depends on the children's progress.

Last week the superintendent of schools in Gary issued a report on the results of the first year of the project. During that time, 396 of 546 children in the program in grades two through six made average or better gains in reading, mathematics or both. Some 176 of them made gains of a year and a half or more. In addition, 72 of 80 kindergarten children in the program scored at or above national academic readiness norms.

The report was based on studies by the school system, parents, faculty and administrators; an independent evaluation by the Center for Urban Redevelopment in Education; an outside audit by Price Waterhouse and Co., and appraisals by educators and observers such as the Rand Corp., and the Office of Economic Opportunity.

Under the four-year contract BRL is attempting to bring the achievement levels of Banneker students up to or above national norms in all basic curriculum areas, with early emphasis on the fundamental skills of reading and mathematics. To do this they brought in Donald G. Kendrick, a 34-year-old black computer expert as school manager for the all-black, inner city school. He hired 25 of the 34 teachers previously assigned to Banneker and 28 learning supervisors (mostly parents of Banneker children). The school now has an ungraded, student-centered, programmed approach with team teaching. The technique allows experienced teachers to work primarily on specific teaching tasks while interested parents,

as teacher aides, handle such things as play periods.

BRL is obligated in its first two years to refund per-pupil costs only on sixth graders who do not meet the norms in both reading and math. But after three years of instruction, it must refund money for all below-norm pupils who have attended Banneker for three consecutive years. The Price Waterhouse audit for the first year says BRL was due \$662,982 out of a potential maximum of \$737,671.

New teaching methods, and parental interest and monetary incentive are all involved in the success. Those involved are optimistic. Banneker was the next to lowest achieving elementary school in Gary prior to this new program, points out Gordon L. McAndrew, superintendent of schools. Says George H. Stern, president of BRL, "the program's first year's results demonstrate enormous effort by teachers, parents, students, administrators and all others in Gary concerned with the welfare of the public schools."

Alfonso D. Holliday, president of the board of school trustees last year when the program was initiated, said, "the basic educational reason for this contract is the gross underachievement of our children. . . . We must be willing to be pioneers and no longer say our children can't learn." □

A question of survival for Grand Tour of planets

The likelihood of the National Aeronautics and Space Administration launching a Grand Tour of the outer planets in the latter part of this decade now looks dim—at least for a "tour" as originally envisioned.

NASA officials began referring to the program last year as "exploration of the outer planets." There is some scientific rationale for the demise of the grand scheme, but the major problem is one of money.

Originally, sophisticated spacecraft called TOPS (Thermoelectric Outer Planet Spacecraft), having self-monitoring and self-repair capabilities (SN: 1/30/71, p. 77), would have been launched to Jupiter in 1976, to Jupiter, Saturn and Pluto in 1977, and to Jupiter, Uranus and Neptune in 1979—for a total of five launches. Making use of the unique alignment of the outer planets in the late 1970's the spacecraft would swing by one planet, using its gravitational force to be propelled on to another planet. This would cut the flight to Pluto, for example, from 30 to 9 years.

Last year NASA requested \$30 million for the start of the program. Congress authorized only \$20 million, and NASA spent \$15 million. To begin the Grand

Tour in 1976 with TOPS, NASA would need about \$80 million in the 1973 fiscal year budget. But unless the budget situation changes within the next three months, NASA will be asking for less than \$30 million. This would definitely cancel a start in 1976; it could also mean that a spacecraft less sophisticated—somewhere between a Pioneer and the TOPS—will be used, cutting the scientific payload capabilities from 200 pounds to 135 pounds, and reducing the bits of data returned by about half to two-thirds. The program would cost about half as much as the Grand Tour with TOPS (estimated to be about \$900 million). The hybrid craft would fly by only one or two of the planets, or perhaps orbit one.

Grand Tour has many competitors for funds. Within the Office of Space Science and Applications it must compete with programs of equal scientific interest in physics and astronomy: the High-Energy Astronomical Observatories (HEAO), other planetary programs such as the Viking Mars landers, and earth applications programs such as Earth Resources Satellites. As if this were not enough, the entire OSSA budget—usually a half to a third that of manned space flight—must now compete with the shuttle program. And with the prospects of the NASA budget being at the same level, or less, than last year's \$3.3 billion—something has to give. □

Luna 19 in moon orbit

The Soviet Union launched another moon probe last week, Luna 19. Luna 18, launched Sept. 2, failed (SN: 9/18/71, p. 188). As usual, the Soviets have made no official announcement about the purpose of the new probe, which went into an orbit of 140 kilometers on Oct. 3. The inclination to the lunar equator is 40 degrees, 35 minutes. Some speculation was that Luna 19 might try to find Lunokhod I; the Russians have said nothing about their moon robot for nearly three weeks, but they previously had said it was having mechanical problems. □

Karth leaves space group

Rep. Joseph E. Karth (D-Minn.), chairman of the House Subcommittee on Space Science and Applications, moved this week to the House Ways and Means committee—filling the vacancy created by the death of Rep. John C. Watts (D-Ky.). Karth is generally credited with obtaining a better balance between manned and unmanned space science programs. Although there are several possibilities, Rep. Thomas N. Downing (D-Va.) will most likely succeed Karth to the space science chairmanship. □