1972

Project ASSIST: A Status Report

Robert E. Yager
University of Iowa

Follow this and additional works at: https://scholarworks.uni.edu/istj

Part of the Science and Mathematics Education Commons

Let us know how access to this document benefits you

Copyright © Copyright 1972 by the Iowa Academy of Science

Recommended Citation
Available at: https://scholarworks.uni.edu/istj/vol9/iss4/2

This Article is brought to you for free and open access by the Iowa Academy of Science at UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.
Project ASSIST is functional at the present time. The Student Program phase is the most advanced. A full-time state coordinator has been employed as well as a full-time secretary and three graduate assistants. Nearly two hundred students were involved during the summer of 1972 for a period of at least six weeks. During the 1972-73 academic year another one hundred students will be active. Symposia on the campuses at UNI, ISU, and U. of I. have been coordinated with the program of the Iowa Junior Academy of Science. Such programs are also a part of the ASSIST model. Growth of the Student Program thrust has been possible largely because of support from the Iowa Division of the American Cancer Society, other health oriented agencies, service clubs such as Lions and Kiwanis, civic agencies such as Jaycees, and various private industries. It is hoped that the next year will result in regional activities and a significantly expanded number of students involved.

Several model programs also exist as a part of the teacher education thrust. Iowa-UPSTEP is perhaps the most significant effort with the formulation of a model pre-service program. This program has been possible because of a separate grant from the National Science Foundation which provides the impetus for the five year formative phase. It is hoped that Iowa-UPSTEP can be expanded into a statewide network with involvement and input on the part of all twenty-eight colleges with pre-service programs.

The in-service area also has some models to exemplify the ASSIST effort. The Ottumwa Center has been selected for an in-service series both for a vertical thrust (elementary, junior high, and senior high) and new curriculum developments in the area of environmental studies. Weekly meetings are planned for the year as well as four full days as a part of the regular in-service series for the school. Another elementary program is in operation at Marion and an environmental project is being conducted at College Community Schools in Cedar Rapids.

Community awareness programs include special programs for Service Clubs, parent-teacher groups, and community action projects. Since staff is a problem in this area of concern, services are available in order of specific requests.

Central to the idea of Project ASSIST is the Regional Center concept. Sixteen center-most representing the area school boundaries—have been established and a local staff has been
identified. ASSIST Centers include Bettendorf, Burlington, Cedar Rapids, Council Bluffs, Creston, Decorah, Denison, Des Moines, Dubuque, Fort Dodge, Marshalltown, Mason City, Ottumwa, Sioux City, Spencer, and Waterloo.

Final negotiations have been completed with the National Science Foundation for enlarged support for the Academic Year Institute centered at the University of Iowa. The number of supervisor-interns will increase from ten to sixteen with a person identified in each region with released time for ASSIST involvement. A preliminary goal will be to identify community leaders, teachers, and interested students for future efforts. Preliminary assessment is planned for the 1972-73 academic year. This effort will be supported by the University of Iowa, cooperating school districts, and existing grants when assessment funds have been provided. The 1973-74 effort will focus on a statewide formalized needs assessment with several new instructional program models in trial stages.

Hopefully, Project ASSIST will be a major force in educational improvement in Iowa. More involvement of community, industrial, and school groups is needed. Unless national funding changes radically during the next year, additional direct support from the National Science Foundation can be expected. At the same time, much is possible from within Iowa where people and resources are used in such a cooperative venture. That's what Project ASSIST is all about!

UNIVERSITY OF WISCONSIN NEWS

A fetus with a genetic disorder can now be detected in time for the mother to decide whether or not she wants to bear the child, claims Dr. Gloria Sarto of the University of Wisconsin-Madison.

Speaking at a University of Wisconsin conference on "The Fetus and Newborn in High Risk Pregnancy," Dr. Sarto said that by studying fluids obtained from the amnion, the sac in which a fetus is immersed, doctors can now determine a number of genetic disorders.

After an amniotic fluid sample is obtained, the cells are cultured in the laboratory. A diagnosis, however, may take up to six weeks. "The best time to obtain an amniotic fluid sample is around the 14th week of pregnancy," Dr. Sarto said. This allows ample time for a diagnosis, so that if the fetus is found to be abnormal, a mother can choose to end her pregnancy before she is too far along. "Sampling is a relatively simple procedure," Dr. Sarto explained. "The patient can leave about 30 minutes after the sample is taken." She warned, however, that there are physical risks involved. An infection or hemorrhage possibly could kill or abort the fetus. But of the approximately 300 amnion samples known to have been taken in this country for genetic reasons and analyzed for a risk factor, only one or two spontaneous abortions have occurred. "This is no greater abortion rate than what would be expected in the population generally," Dr. Sarto said.

Dr. Sarto's group at University Hospitals has performed 40-50 tests for genetic risk detection. People who seek the tests usually have had a child with a genetic defect or a family member who is affected with an inherited disorder. "Women over 40 also seek examination," said Dr. Sarto, adding that they have a greater chance of having a mongoloid child. Although women over 35 account for only 13.5 per cent of all pregnancies, over 50 per cent of all mongoloid infants came from mothers in this group.

Dr. Sarto described one of her patients. The women was 43 and had been pregnant six times. Her first son was mongoloid and is institutionalized. A second mongoloid son died in infancy. Her third and fourth pregnancies ended in spontaneous abortions and her fourth and fifth produced normal females. She was tested and her baby predicted to be normal. Delivery proved this diagnosis correct.

"More work must be done to detect a large number of inherited disorders, which cannot yet be determined by amniotic fluid studies," Dr. Sarto said. She also hopes a way will be found to shorten the time it takes to analyze the cells from the fluid.

"The ultimate goal of those involved in genetic risk detection," Dr. Sarto believes, "is that high-risk parents will seek preconceptional genetic counseling so that hopefully even the first affected offspring can be avoided."