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Project ASSIST: A Plan of Action

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A plan of action to improve mathematics, social science, and science education has emerged as a result of over two years of meetings and planning conferences with school personnel representing all academic levels of education in Iowa. In addition, a seven-week Leadership Development Conference (LDC) was held this summer at The University of Iowa involving the regional coordinators and many of their "team" chairmen representing one of the various emphases of Project ASSIST, i.e., in-service and pre-service programs, community involvement, assessment, and student programs. Seventeen coordinators and over thirty program chairmen participated in the LDC.

The primary goal of the LDC was to develop an effective Project ASSIST team. To this end, a communication network was established within and among the various regions of the state as well as between the regional centers and the Project ASSIST headquarters.

Included and among the various improvement efforts planned during the summer of 1973 for the 1973-74 academic year in mathematics, social science, and science are the following:

A. In-Service -

Workshops - ISCS Level III; ERIC-CHESS (INFORMS); MACOS; Metric System for Elementary Teachers; Inquiry Learning; Use of an Outdoor Education Site; Use of Manipulatives in Mathematics; Environmental Quality Analysis (Cedar River and Des Moines River Surveys); Individualized Instruction; SCIS Implementation; Cardboard Carpentry; PACE Chemistry; Model Rocketry; Establishing Elementary Interest Centers; Kids, Cameras, and Communities; Simulation Games; K-12 Curriculum Articulation; Maintaining Living Materials; Elementary Exposition and Curriculum Seminar for Mathematics, Social Studies and Science.

Minicourses - Interdisciplinary Environmental Awareness (utilizing interdisciplinary teams); Inquiry Teaching in the Elementary School; Techniques Involved in Environmental Analysis; Investigation of Learning Theories.

Extension Courses - ISCS: Levels I, II, and III. Exploration of Learning Theories - an applied laboratory approach; Oceanography for Inland Teachers; Piaget and the Classroom; Directed Study in Elementary Science; ESS in the Elementary School; SCIS in the Elementary School; Conservation Education.

B. Student Programs - Twenty-one student activities for the Fall semester have been planned in conjunction with the Iowa Junior Academy of Science. (If you have not received a student activity brochure and would desire one, please notify your regional student program chairman or Dr. Edward L. Pizzini, Director of Student Programs, 459 Physics Building, The University of Iowa, Iowa City, Iowa 52242.)

C. Community Involvement Programs - Community development of outdoor education centers; Community Council on Environmental Awareness - a "total" community program involving educators, social and civic groups, local and state governmental agencies; extensive survey of job opportunities in region to determine curricula relevancy; Student-Community Involvement Project - will involve students and community leaders in future development of a specified area; retrieval of local resource individuals by students to be placed in a local "talent bank"; community relations seminars - emphasis will be placed on student research into "real" problems.

The pre-service area also has some models to exemplify the ASSIST effort. A meeting with UNITEC representatives during the leadership conference this summer resulted in a willingness to explore new avenues of student-teacher arrangements. In addition, Iowa UPSTEP teacher-student teams that worked together for five weeks developing teaching modules is another exemplary effort in the pre-service emphasis. The information from the twenty-seven colleges and universities in Iowa regarding input into the statewide talent bank and their respective undergraduate programs is presently being tablulated and reviewed. Those institutions of higher learning that express an interest in forming a consortium to explore new patterns of student-teaching arrangements and other items of common concern, will be meeting in the very near future.

Of course, a major on-going project is the needs assessment thrust of Project ASSIST.

Final plans are presently being made for the data-gathering phase. The information obtained from students, educators, and the lay public should help us better plan the educational pursuits that will prepare students of today to live successfully in the world of tomorrow.

SOME CRITERIA FOR OPEN EVALUATION

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Most teachers have felt a faster heart beat at one time or another when their principal enters the room to "observe them teach." Both know that an evaluation report will soon be written and distributed to the district office, eventually finding its way to the board of education. The report may even affect the employment status of the teacher. The reaction of the teacher would seem to indicate "mistrust" of the evaluation. In fact, since 1965, there has been a growing mistrust of evaluation. Why? Specifically, why do teachers mistrust evaluation to the degree that they avoid it in their teaching and professional careers as well. The reasons are important. (1) Too often evaluation occurs without a clear definition of what it is that is being evaluated (i.e., What is Good Teaching?). (2) The standards for a competent performance are based upon "impressions" rather than objective (and available) criteria. (3) The results of the evaluation activity too often are interpreted by other people without the benefit of the original descriptions of the evaluation situation. To be "trusted", evaluation must be careful to recognize potential pitfalls and prevent them from occurring.

Basically, evaluation relies upon the testing instruments whose functions are to sample performances of a specified population. This sampling provides the evidence for determining an individual's standing relative to his group, for estimating the competency of his performance, and even for judging the influence that an event, such as public instruction, has exerted on him. Therefore, evidence for evaluation should be collected in a manner that provides reliable information.

Good evaluation, then, is dependent upon a number of important variables. First, the sampling procedure used to collect the information must be systematically planned and analyzed for errors. If the population in question is suppose to represent a cross section of Iowans, then standing at the bank entrance on a Monday morning at 10:00 A.M. is highly unlikely to provide a true sectional picture of Iowans. Second, the instrument itself must be constructed in a clear, easily comprehended format using simple-to-understand English. Directions must be comprehensive and brief. Too often, instruments are constructed so that only the wizzard with a good crystal ball can produce a response. By discarding incorrectly completed instruments, the nature of the population sampled changes. These variations in procedures cause in the information collected to become "biased."

A third major factor in evaluation is the identification of the performances to be sampled. Here, performance refers to those specific verbal and non-verbal responses which are associated with competency. For example, if creativity were being evaluated, what items should be included in the instrument? How would you collect the data in terms of the instrument? Would you have the population use a "pencil and paper" test? Would you interview them? Would you observe them with some type of check list?

Evaluation then, starts with a definition of what is to be evaluated. Expectations which are considered to be a demonstration of competency for the target of evaluation must also be specified. These expectations and definitions must be made public in an unbiased or objective evaluation. The standards or criterion must be made available to anyone who intends to utilize the findings of the evaluation instrument. "What does it mean" is often not asked by parents who have just found out that their child has an I.Q. of 110. Of what significance is it that a teacher can ask questions that elicit observation and classification behavior from pupils? Here, the original definitions and expectations must be utilized to provide meaningful interpretation.

One common solution has been to construct and implement evaluation instruments using "objective test items." Here, items are identified as "objective" rather than "subjective," implying that the written, multiple-choice items are free of subjective judgments. This assumption is not acceptable. An objective test of a student's performance is simply a set of responses by different students to the same "test stimuli." Each performance is then judged using the same set of "test standards" (or answers). The